Table of Contents

As filed with the Securities and Exchange Commission on December 29, 2005.

Registration No. 333-

SECURITIES AND EXCHANGE COMMISSION
Washington, D.C. 20549

Form S-1
REGISTRATION STATEMENT
UNDER
THE SECURITIES ACT OF 1933

Vanda Pharmaceuticals Inc.
(Exact Name of Registrant as Specified in its Charter)

Delaware	2834	03-0491827
(State or Other Jurisdiction of Incorporation or Organization)	*(Primary Standard Industrial Classification Code Number)*	*(I.R.S. Employer Identification Number)*

9620 Medical Center Drive
Suite 201
Rockville, Maryland 20850
(301) 294-9300
(Address, including zip code, and telephone number, including area code, of registrant's principal executive offices)

Mihael H. Polymeropoulos, M.D.
Chief Executive Officer
9620 Medical Center Drive
Suite 201
Rockville, Maryland 20850
(301) 294-9300
(Name, address, including zip code, and telephone number, including area code, of agent for service)

Copies to:

Jay K. Hachigian, Esq.	**Richard D. Truesdell, Jr., Esq.**
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Waltham, MA 02451	
(781) 890-8800	

Approximate date of commencement of proposed sale to the public: As soon as practicable after the effective date of this registration statement.

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, as amended, check the following box. o

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 this form is a post-effective amendment filed pursuant to Rule 462(d) 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 _____

CALCULATION OF REGISTRATION FEE

Title of Each Class of Securities to be Registered	Proposed Maximum Aggregate Offering Price(1),(2)	Amount of Registration Fee
Common Stock, $0.01 par value	$75,000,000	$8,025.00

(1) Estimated solely for the purpose of calculating the registration fee pursuant to Rule 457(o) under the Securities Act of 1933, as amended.

(2) Includes offering price of shares that the underwriters have the option to purchase to cover over-allotments, if any.

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 this Registration Statement shall become effective on such date as the Commission, acting pursuant to said Section 8(a), may determine.

Table of Contents

The information in this prospectus is not complete and may be changed. We 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 we are not soliciting an offer to buy these securities in any state where the offer or sale is not permitted.

Subject to completion, dated , 2006

Prospectus

shares

Common shares

This is our initial public offering of common shares. We are offering shares. The estimated initial public offering price is between $ and $ per share.

Currently, no public market exists for our common shares. We will apply to list our common shares on the Nasdaq National Market under the symbol VNDA.

	Per share	Total
Initial public offering price	$	$
Underwriting discounts and commissions	$	$
Proceeds to us, before expenses	$	$

We have granted the underwriters an option for a period of 30 days to purchase up to additional common shares.

Investing in our common shares involves a high degree of risk. See "Risk factors" beginning on page 8.

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

JPMorgan **Banc of America Securities LLC**

Thomas Weisel Partners LLC

, 2006

Table of contents

You should rely only on the information contained in this prospectus. We have not authorized anyone to provide you with information different from that contained in this prospectus. We are offering to sell, and are seeking offers to buy, shares of common stock only in jurisdictions where offers and sales are permitted. The information contained in this prospectus is accurate only as of the date of this prospectus, regardless of the time of delivery of this prospectus or of any sale of the common stock.

For investors outside the United States: Neither we nor any of the underwriters have done anything that would permit this offering or possession or distribution of this prospectus in any jurisdiction where action for that purpose is required, other than in the United States. You are required to inform yourselves about and to observe any restrictions relating to this offering and the distribution of this prospectus.

"Vanda" is a trademark of Vanda Pharmaceuticals Inc. This prospectus may also include other registered and unregistered trademarks of Vanda Pharmaceuticals Inc. and other persons.

Unless the context otherwise requires, we use the terms "Vanda," the "company," "we," "us" and "our" in this prospectus to refer to Vanda Pharmaceuticals Inc.

Prospectus summary

This summary highlights the most important features of this offering and the information contained elsewhere in this prospectus. This summary is not complete and does not contain all of the information that you should consider before investing in our common stock. You should read the entire prospectus carefully, especially the risks of investing in our common stock discussed under "Risk Factors" and our consolidated financial statements and related notes included in this prospectus.

Vanda Pharmaceuticals Inc.

We are a biopharmaceutical company focused on the development and commercialization of our portfolio of clinical-stage, small molecule product candidates for central nervous system disorders. We believe that each of these product candidates will be a differentiated new therapy that addresses a large market with significant unmet medical needs. Our product portfolio includes:

- iloperidone, an atypical antipsychotic for the treatment of schizophrenia and bipolar disorder, which we are currently evaluating in a pivotal Phase III trial for schizophrenia that we anticipate will be completed in the first half of 2007
- VEC-162, a melatonin agonist for the treatment of insomnia and depression, which is entering a Phase III trial for insomnia and is also ready for Phase II trials for depression
- VSF-173, a compound for the treatment of excessive daytime sleepiness, for which we expect to begin a Phase II trial in the second half of 2006

We hold exclusive, worldwide rights to these molecules and plan to develop a focused U.S. sales force for the commercialization of iloperidone and VSF-173. Given the large size of the prescribing physician base for insomnia and depression, we plan to partner with a global pharmaceutical company for the development and commercialization of VEC-162 worldwide.

Our founder and Chief Executive Officer, Mihael H. Polymeropoulos, M.D., commenced our operations early in 2003 after leading the Pharmacogenetics Department at Novartis AG. In acquiring and developing our compounds we have relied upon our deep expertise in pharmacogenetics and pharmacogenomics, or collectively, PG. PG is the scientific discipline that examines both genetic variations among people that influence response to a particular drug, and the multiple pathways through which drugs affect people. We believe that the combination of our PG and drug development expertise will provide us with preferential access to compounds discovered by other pharmaceutical companies, and may allow us to identify new uses for these compounds. These capabilities should also enable us to shorten the time it takes to commercialize a drug when compared to traditional approaches.

Iloperidone for Schizophrenia and Bipolar Disorder. We are developing iloperidone, an oral small molecule, for the treatment of schizophrenia and bipolar disorder. Today, schizophrenia patients are primarily treated with drugs known as "atypical" antipsychotics. While these drugs offer only modest and unpredictable efficacy and induce serious side effects, resulting in poor patient compliance, they achieved worldwide sales in excess of $13 billion in 2004. There remains a high degree of dissatisfaction with atypical antipsychotics among patients and physicians. A recent study conducted by the National Institute of Mental Health and published in *The New England Journal of Medicine* found that 74% of patients taking antipsychotics

discontinued treatment within 18 months. Given the safety and efficacy shortcomings of current drugs, we believe that iloperidone may be an attractive and differentiated alternative.

In three short-term and three long-term trials comprising over 2,000 patients, iloperidone differentiated itself from currently available atypical antipsychotics by demonstrating a number of reduced side effects. These reduced side effects included low weight gain, no induction of diabetes, low extrapyramidal symptoms (involuntary body movements), including no akathisia (inability to sit still), no hyperprolactinemia (an elevated secretion of the hormone prolactin which can lead to sexual dysfunction, breast development and milk secretion in men and women), low incidence of sleepiness and low negative effects on cognition relative to placebo.

We are also differentiating iloperidone through the development of a four-week injectable depot formulation. We believe this depot formulation will help address the patient compliance and discontinuation problems commonly associated with atypical antipsychotics and will become a compelling complement to our oral formulation. The depot formulation has successfully completed a Phase I/IIa trial.

We are further differentiating iloperidone through the application of our PG expertise, by identifying genetic markers that may enable physicians to tailor their prescribing of iloperidone to certain patients. We have discovered that patients with a common genetic mutation, estimated to occur in approximately 70% of the population, may be more likely to experience better treatment results with iloperidone than other patients. We have also discovered that patients with an uncommon genetic attribute are at an elevated risk of QTc interval prolongation (a measurement of specific electrical activity in the heart as captured on an electrocardiogram, corrected for heart rate) while taking iloperidone. Our market research indicates that physicians treating schizophrenia patients would welcome a test that could provide this information and may prescribe iloperidone more frequently as a result.

We initiated a pivotal Phase III trial in November 2005 to evaluate iloperidone for the treatment of patients with schizophrenia. The trial is a randomized, double-blind, placebo- and active-controlled Phase III trial of approximately 600 patients with schizophrenia. Based on discussions with the United States Food and Drug Administration, or FDA, we believe that if this trial is successful our data and documentation on oral iloperidone will be sufficient to support the filing of a New Drug Application, or NDA, with the FDA. We expect the pivotal Phase III trial to be completed in the first half of 2007.

In addition to schizophrenia, we believe iloperidone may be effective in treating bipolar disorder. Most of the approved atypical antipsychotics have received approval for bipolar disorder subsequent to commercialization for the treatment of schizophrenia. Iloperidone is ready for an initial Phase II trial in bipolar disorder.

We expect to build our own sales force to market iloperidone directly to psychiatrists and other target physicians in the U.S. This medical community is relatively small and we believe that we can cost-effectively develop such a sales force. Outside of the U.S., we expect to find commercial partners for iloperidone.

VEC-162 for Insomnia and Depression. VEC-162 is an oral small molecule melatonin agonist entering Phase III trials for the treatment of insomnia. The market for sleep disorder drugs is large and growing, with over $3.5 billion of worldwide sales in 2004. Industry sources estimate that of the 73 million U.S. adults who suffer from some form of insomnia, only approximately 11 million currently receive treatment.

We believe VEC-162 may offer several benefits when compared to currently approved insomnia therapies. Unlike many approved therapies, VEC-162 appears to offer a benefit in both sleep onset, or time to fall asleep, and sleep maintenance, or ability to stay asleep. VEC-162 appears to be safe, with no significant side effects or effects on next-day performance. We believe that VEC-162 is also unlikely to be classified as a Schedule IV controlled substance by the United States Drug Enforcement Agency (DEA) because its mechanism of action has been shown not to have potential for abuse. In addition, because it appears to modulate the sleep/ wake cycle, we believe that VEC-162 may be the first drug to address the underlying cause of sleeplessness in circadian rhythm sleep disorders, or CRSD, which comprise approximately 25% of the market for sleep disorders. These sleep disorders are those, such as jet lag, where the circadian rhythm, or the rhythmic output of the human biological clock governed by melatonin and other hormones, is out of alignment with a person's daily activities or lifestyle.

We recently completed a randomized, double-blind, multi-center, placebo-controlled Phase II trial evaluating the effect of VEC-162 on sleep in healthy volunteers with induced transient insomnia. The drug demonstrated statistically significant improvement in several parameters used to measure the efficacy of insomnia therapies, including reduced duration of wake after sleep onset, or WASO, improved sleep efficiency and shortened time to persistent sleep. In addition, VEC-162 demonstrated a statistically significant shift in patients' circadian rhythm and a placebo-like side effect profile.

In addition to insomnia, we believe that VEC-162 may be effective in treating depression. VEC-162 has properties similar to agomelatine, an off-patent melatonin agonist, which in a Phase III trial demonstrated more rapid efficacy and reduced side effects when compared to a market-leading antidepressant. VEC-162 is ready for Phase II trials in depression, having demonstrated an antidepressant effect in animal models and having completed several Phase I trials.

VSF-173 for Excessive Daytime Sleepiness. VSF-173 is an oral small molecule that has demonstrated effects on animal sleep/ wake patterns and gene expression suggestive of a stimulant effect. As a result of these observations and safety data from previous human trials, we are planning to initiate a Phase II trial of VSF-173 in excessive daytime sleepiness in late 2006. Excessive daytime sleepiness is a rapidly growing market which is estimated to be approximately $440 million worldwide and is currently treated primarily by stimulants.

Strategy

Our goal is to create a leading biopharmaceutical company focused on developing and commercializing products that address critical unmet medical needs through the application of our drug development and PG expertise. The key elements of our strategy to accomplish this goal are to:

- pursue the clinical development of our current product candidates
- develop a focused commercialization capability in the United States
- enter into strategic partnerships to extend our commercial reach
- apply our PG expertise to differentiate our products
- expand our product portfolio through the acquisition of additional clinical compounds

Risks associated with our business

Our business is subject to numerous risks, as more fully described in the section entitled "Risk factors" immediately following this prospectus summary. We may be unable, for many reasons,

including those that are beyond our control, to implement our current business strategy. Those reasons could include delays in obtaining, or a failure to obtain, regulatory approval for our product candidates and failure to maintain and to protect our intellectual property. We have a limited operating history and have incurred net losses from our inception. We expect to continue to generate operating losses for the next several years. We will need to obtain additional capital to fund our continuing research and development activities. All of our product candidates are in development and none have been approved by the FDA for commercial sale. Even if we succeed in developing and commercializing one or more of our product candidates, we may never generate sufficient revenue to achieve and then sustain profitability.

Corporate information

We were incorporated in Delaware in November 2002. Our principal executive offices are located at 9620 Medical Center Drive, Rockville, Maryland, 20850 and our telephone number is (301) 294-9300. Our website address is www.vandapharma.com. The information on, or that can be accessed through, our website is not part of this prospectus.

The offering

Common stock we are offering:	shares
Common stock to be outstanding after this offering:	shares

Use of proceeds

We expect to use the net proceeds of this offering for working capital and for other general corporate purposes, including the funding of our clinical development efforts. See "Use of Proceeds."

Proposed Nasdaq National Market symbol: VNDA

The number of shares of common stock to be outstanding after the offering is based on 150,739 shares of common stock outstanding as of September 30, 2005, and the assumed conversion of 40,081,308 shares of Preferred Stock outstanding on September 30, 2005 into Common Stock in connection with the closing of this offering. Except where we state otherwise, the number of shares of common stock to be outstanding after this offering does not take into account:

- 3,783,490 shares of common stock issuable upon the exercise of stock options outstanding as of September 30, 2005, each with an exercise price of $0.10 per share
- 166,660 shares of common stock issuable upon exercise of outstanding warrants as of September 30, 2005 with an exercise price of $0.40 per share
- an additional 1,565,485 shares reserved as of September 30, 2005 for future stock option grants and purchases under our equity compensation plans. See note 10 of the notes to our consolidated financial statements
- the sale of an additional 12,195,129 shares of Series B Preferred Stock to certain existing stockholders on December 9, 2005

Finally, except, where we state otherwise, the information we present in this prospectus reflects:

- *the conversion of all our outstanding preferred stock as of September 30, 2005 into 40,081,308 shares of common stock which will occur immediately prior to this offering*
- *the adoption of our restated certificate of incorporation and restated bylaws to be effective upon the completion of this offering*
- *no exercise of the underwriter's over-allotment option*

Summary consolidated financial data

The following tables summarize our consolidated financial data. The summary consolidated financial data is derived from our audited financial statements for the period from March 13, 2003 (inception) through December 31, 2003, and the year ended December 31, 2004. Data are also included from our unaudited financial statements for the nine-month periods ended September 30, 2004 and 2005. This data should be read together with our financial statements and related notes, "Selected Financial Data," and "Management's Discussion and Analysis of Financial Condition and Results of Operations" included elsewhere in this prospectus. The pro forma balance sheet data contained in the following tables reflects the conversion of all outstanding shares of our preferred stock into common stock upon completion of this offering. The pro forma as adjusted balance sheet data contained in the following tables reflects the pro forma balance sheet data at September 30, 2005, adjusted for the sale of shares of our common stock in this offering at an assumed initial public offering price of $ per share (the mid-point of the price range set forth on the cover page of this prospectus), after deducting the estimated underwriting discounts, commissions and offering expenses payable by us, and the automatic conversion of all preferred stock into common stock upon completion of this offering.

	Period from March 13, 2003 (inception) to December 31, 2003	Year ended December 31, 2004	Nine months ended September 30,	
			2004	2005
			(unaudited	(unaudited
Statements of operations data				
Revenue	$ 47,565	$ 33,980	$ 33,980	$ —
Operating expenses:				
Research and development	2,010,532	7,442,983	5,033,488	11,641,565
General and administrative	1,052,659	2,119,394	1,267,485	5,587,147
Total operating expenses	3,063,191	9,562,377	6,300,973	17,228,712
Loss from operations	(3,015,626)	(9,528,397)	(6,266,993)	(17,228,712)
Interest and other income, net	44,805	59,060	12,956	188,288
Net loss before tax expense	(2,970,821)	(9,469,337)	(6,254,037)	(17,040,424)
Tax expense	—	4,949	3,733	—
Net loss	(2,970,821)	(9,474,286)	(6,257,770)	(17,040,424)
Beneficial conversion feature— deemed dividend to preferred stockholders(1)	—	—	—	(18,500,005)
Net loss attributable to common stockholders	$ (2,970,821)	$ (9,474,286)	$ (6,257,770)	$ (35,540,429)
Net loss per share applicable to common stockholders, basic and diluted	$ (297.08)	$ (947.43)	$ (625.78)	$ (934.93)

	Period from March 13, 2003 (inception) to December 31, 2003	Year ended December 31, 2004	Nine months ended September 30, 2004 (unaudited	Nine months ended September 30, 2005 (unaudited
Pro Forma net loss per share applicable to common stockholders, basic and diluted		$ (0.68)		$ (1.41)
Shares used in computing net loss per share, basic and diluted	10,000	10,000	10,000	38,014
Shares used in computing pro forma net loss per share, basic and diluted		13,913,995		25,264,356

(1) In September 2005, we completed the sale of an additional 15,040,654 shares of Series B Preferred Stock for proceeds of approximately $18.5 million. After evaluating the fair value of the common stock obtainable upon conversion by the stockholders, we determined that the issuance of the Series B Preferred Stock sold in September 2005 resulted in a beneficial conversion feature of approximately $18.5 million which was fully accreted in September 2005 and is recorded as a deemed dividend to preferred stockholders for the nine-month period ended September 30, 2005.

September 30, 2005	Actual (unaudited	Pro forma (unaudited	Pro forma as adjusted) (unaudited
Balance sheet data			
Cash, restricted cash and cash equivalents	$ 22,264,920	$ 22,264,920	
Working capital	20,145,973	20,145,973	
Total assets	24,288,683	24,288,683	
Total liabilities	2,801,722	2,801,722	
Convertible preferred stock	46,808,569	—	
Deficit accumulated during the development stage	(29,485,531)	(29,485,531)	
Total stockholders' equity	21,486,961	21,486,961	

Risk factors

Investing in our common stock involves a high degree of risk. You should consider carefully the risks and uncertainties described below, together with all of the other information in this prospectus, including the consolidated financial statements and the related notes appearing at the end of this prospectus, before deciding to invest in shares of our common stock. If any of the following risks actually occurs, our business, financial condition, results of operations and future prospects would likely be materially and adversely affected. In that event, the market price of our common stock could decline and you could lose all or part of your investment.

Risks related to our business and industry

Our success is dependent on the success of our three product candidates in clinical development: iloperidone, VEC-162 and VSF-173. If any of these product candidates are determined to be unsafe or ineffective in humans, our business will be materially harmed.

We are uncertain whether any of our current product candidates in clinical development will prove effective and safe in humans or meet applicable regulatory standards. To date, the data supporting our product candidates is derived solely from laboratory and pre-clinical studies and limited clinical trials. However, for each of our product candidates we must provide the FDA and similar foreign regulatory authorities with more extensive clinical data for a defined indication of the product candidate before these regulatory authorities can approve the product candidate for commercial sale. Frequently, product candidates that have shown promising results in early clinical trials have suffered significant setbacks in later clinical trials. Future clinical trials involving our product candidates may reveal that those candidates are ineffective, are unacceptably toxic, have other undesirable side effects or are otherwise unfit for future development. It is impossible to predict when or if any of our product candidates will prove effective or safe in humans or will receive regulatory approval. If we are unable to discover and develop products that are effective and safe in humans, our business will be materially harmed.

Any failure or delay in completing clinical trials for our product candidates could severely harm our business.

Pre-clinical studies and clinical trials required to demonstrate the safety and efficacy of our product candidates are time-consuming and expensive and together take several years to complete. To date we have not completed the clinical testing of any of our product candidates. The completion of clinical trials for our product candidates may be delayed by many factors, including:

- our inability to manufacture or obtain from third parties materials sufficient for use in pre-clinical studies and clinical trials
- delays in patient enrollment and variability in the number and types of patients available for clinical trials
- difficulty in maintaining contact with patients after treatment, resulting in incomplete data
- poor effectiveness of product candidates during clinical trials

- unforeseen safety issues or side effects
- governmental or regulatory delays and changes in regulatory requirements and guidelines

It is possible that none of our product candidates will complete clinical trials in any of the markets in which we intend to sell those product candidates. Accordingly, we may not receive the regulatory approvals needed to market our product candidates in any markets. Any failure or delay in commencing or completing clinical trials or obtaining regulatory approvals for our product candidates would severely harm our business.

We face heavy government regulation, and FDA regulatory approval of our products is uncertain.

The research, testing, manufacturing and marketing of drug products such as those that we are developing are subject to extensive regulation by federal, state and local government authorities, including the FDA. To obtain regulatory approval of a product, we must demonstrate to the satisfaction of the applicable regulatory agency that, among other things, the product is safe and effective for its intended use. In addition, we must show that the manufacturing facilities used to produce the products are in compliance with current Good Manufacturing Practices regulations, or cGMP.

The process of obtaining FDA and other required regulatory approvals and clearances will require us to expend substantial time and capital. Despite the time and expense expended, regulatory approval is never guaranteed. The number of pre-clinical and clinical tests that will be required for FDA approval varies depending on the drug candidate, the disease or condition that the drug candidate is in development for, and the regulations applicable to that particular drug candidate. The FDA can delay, limit or deny approval of a drug candidate for many reasons, including that:

- a drug candidate may not be safe or effective
- they may interpret data from pre-clinical and clinical testing in different ways than we do
- they may not approve our manufacturing process
- they may change their approval policies or adopt new regulations

For example, if certain of our methods for analyzing our trial data are not approved by the FDA, we may fail to obtain regulatory approval for our product candidates. We will be using a “mixed-method repeated measures” or “MMRM” statistical model to analyze data from our pivotal Phase III trial for iloperidone, as we believe that this model will reduce certain biases that can be associated with other statistical models. We have discussed the use of this statistical model with the FDA in an August 2005 guidance meeting, and they have agreed that the model is valid. However, to our knowledge, the MMRM statistical model has not been previously used as the primary basis for judging efficacy in a pivotal trial by the FDA. If the FDA does not approve of our findings based on the MMRM model, our clinical trial for iloperidone may not be successful.

Moreover, if and when our products do obtain such approval or clearances, the marketing, distribution and manufacture of such products would remain subject to extensive ongoing

regulatory requirements. Failure to comply with applicable regulatory requirements could result in:

- warning letters
- fines
- civil penalties
- injunctions
- recall or seizure of products
- total or partial suspension of production
- refusal of the government to grant approvals
- withdrawal of approvals and criminal prosecution

Any delay or failure by us to obtain regulatory approvals for our product candidates could diminish competitive advantages that we may attain and would adversely affect the marketing of our products. We have not received regulatory approval to market any of our product candidates in any jurisdiction.

Even if we do receive regulatory approval for our drug candidates, the FDA may impose limitations on the indicated uses for which our products may be marketed, subsequently withdraw approval or take other actions against us or our products that are adverse to our business. The FDA generally approves products for particular indications. An approval for a more limited indication reduces the size of the potential market for the product. Product approvals, once granted, may be withdrawn if problems occur after initial marketing.

We also are subject to numerous federal, state and local laws, regulations and recommendations relating to safe working conditions, laboratory and manufacturing practices, the environment and the use and disposal of hazardous substances used in connection with our discovery, research and development work. In addition, we cannot predict the extent of government regulations or the impact of new governmental regulations that might significantly harm the discovery, development, production and marketing of our products. We may be required to incur significant costs to comply with current or future laws or regulations, and we may be adversely affected by the cost of such compliance.

We intend to seek regulatory approvals for our products in foreign jurisdictions, but we may not obtain any such approvals.

We intend to market our products outside the United States, either alone or with a commercial partner. In order to market our products in foreign jurisdictions, we may be required to obtain separate regulatory approvals and comply with numerous and varying regulatory requirements. The approval procedure varies among countries and jurisdictions and can involve additional testing, and the time required to obtain approval may differ from that required to obtain FDA approval. We have no experience with obtaining any such foreign approvals. Additionally, the foreign regulatory approval process may include all of the risks associated with obtaining FDA approval. For all of these reasons, we may not obtain foreign regulatory approvals on a timely basis, if at all. Approval by the FDA does not ensure approval by regulatory authorities in other countries or jurisdictions, and approval by one foreign regulatory authority does not ensure approval by regulatory authorities in other foreign countries or jurisdictions or by the FDA. We may not be able to file for regulatory approvals and may not receive necessary approvals to commercialize our products in any market. The failure to obtain these approvals could materially adversely affect our business, financial condition and results of operations.

Our product candidates may cause undesirable side effects or have other properties that could delay or prevent their regulatory approval or limit their marketability.

Undesirable side effects caused by our product candidates could interrupt, delay or halt clinical trials and could result in the denial of regulatory approval by the FDA or other regulatory authorities for any or all targeted indications, and in turn prevent us from commercializing our product candidates and generating revenues from their sale. For example, like many other drugs in its class, iloperidone is associated with a prolongation of the heart's QTc interval, which is a measurement of specific electrical activity in the heart as captured on an electrocardiogram, corrected for heart rate. A QTc interval that is significantly prolonged may result in an abnormal heart rhythm with adverse consequences including fainting, dizziness, loss of consciousness and death. No patient in any of iloperidone's clinical trials was observed to have an interval that exceeded a 500 millisecond threshold of particular concern to the FDA. We will continue to assess the side effect profile of iloperidone and our other product candidates in our ongoing clinical development program.

In addition, if any of our product candidates receive marketing approval and we or others later identify undesirable side effects caused by the product, we could face one or more of the following:

- regulatory authorities may require the addition of labeling statements, such as a "black box" warning or a contraindication
- regulatory authorities may withdraw their approval of the product
- we may be required to change the way the product is administered, conduct additional clinical trials or change the labeling of the product
- our reputation may suffer

Any of these events could prevent us from achieving or maintaining market acceptance of the affected product or could substantially increase the costs and expenses of commercializing the product candidate, which in turn could delay or prevent us from generating significant revenues from its sale.

Our product candidates may never achieve market acceptance even if we obtain regulatory approvals.

Even if we receive regulatory approvals for the sale of our product candidates, the commercial success of these products will depend on, among other things, their acceptance by physicians, patients, third-party payors and other members of the medical community as a therapeutic and cost-effective alternative to competing products and treatments. The degree of market acceptance of any of our product candidates will depend on a number of factors, including the demonstration of its safety and efficacy, its cost-effectiveness, its potential advantages over other therapies, the reimbursement policies of government and third-party payors with respect to the product candidate, and the effectiveness of our marketing and distribution capabilities. If our product candidates fail to gain market acceptance, we may be unable to earn sufficient revenue to continue our business. If our product candidates do not become widely accepted by physicians, patients, third-party payors and other members of the medical community, it is unlikely that we will ever become profitable.

If we fail to obtain the capital necessary to fund our research and development activities, we may be unable to continue operations or we may be forced to share our rights to commercialize our product candidates with third parties on terms that may not be attractive to us.

Based on our current operating plans, and assuming the sale of shares of our common stock in this offering at an initial public offering price of $ per share (the mid-point of the price range set forth on the cover page of this prospectus), we believe that the proceeds from this offering, together with our existing cash, restricted cash and cash equivalents, will be sufficient to meet our anticipated operating needs until mid-2007, and after that time we will require additional capital. We believe that if we sell the shares of our common stock in this offering at an initial public offering price of $ per share ($1.00 lower than the mid-point of the price range set forth on the cover page), the resultant reduction in proceeds we receive from the offering would cause us to require additional capital earlier, in . In addition, in budgeting for our activities following this offering, we have relied on a number of assumptions, including assumptions that we will enroll approximately 600 patients in our pivotal Phase III iloperidone trial and approximately 300 patients in our VEC-162 pivotal Phase III trial for insomnia, that we will not engage in further business development activities, that we will not expend funds on the depot formulation of, or bipolar indication for, iloperidone or on a Phase II trial of VEC-162 for depression, that we will be able to continue the manufacturing of our product candidates at commercially reasonable prices, that we will be able to retain our key personnel, and that we will not incur any significant contingent liabilities. We may need to raise additional funds more quickly if one or more of our assumptions prove to be incorrect or if we choose to expand our product development efforts more rapidly than we presently anticipate, and we may decide to raise additional funds even before we need them if the conditions for raising capital are favorable. We may seek to sell additional equity or debt securities or obtain a bank credit facility. The sale of additional equity or debt securities, if convertible, could result in dilution to our stockholders. The incurrence of indebtedness would result in increased fixed obligations and could also result in covenants that would restrict our operations.

We cannot assure you that additional funds will be available when we need them on terms that are acceptable to us, or at all. If we are unable to secure sufficient capital to fund our research and development activities we may not be able to continue operations or we may have to enter into strategic collaborations that could require us to share commercial rights to our products to a greater extent or at earlier stages in the drug development process than we currently intend. Collaborations that are consummated by us prior to proof-of-efficacy and safety of a product candidate could impair our ability to realize value from that product candidate.

We have incurred operating losses in each year since our inception and expect to continue to incur substantial and increasing losses for the foreseeable future.

We have a limited operating history. We have not generated any revenue from product sales to date and we cannot estimate the extent of our future losses. We do not currently have any products that have been approved for commercial sale and we may never generate revenue from selling products or achieve profitability. We expect to continue to incur substantial and increasing losses for the foreseeable future, particularly as we increase our research and development, clinical trial and administrative activity. As a result, we are uncertain when or if we will achieve profitability and, if so, whether we will be able to sustain it. We have been

engaged in identifying and developing compounds and product candidates since March 2003. As of September 30, 2005, we have accumulated net losses of approximately $29.5 million. Our ability to achieve revenue and profitability is dependent on our ability to complete the development of our product candidates, conduct clinical trials, obtain necessary regulatory approvals, and have our products manufactured and marketed. We cannot assure you that we will be profitable even if we successfully commercialize our products. Failure to become and remain profitable may adversely affect the market price of our common stock and our ability to raise capital and continue operations.

If our contract research organizations do not successfully carry out their duties or if we lose our relationships with contract research organizations, our drug development efforts could be delayed.

We are dependent on contract research organizations, third-party vendors and investigators for pre-clinical testing and clinical trials related to our drug discovery and development efforts and we will likely continue to depend on them to assist in our future discovery and development efforts. These parties are not our employees and we cannot control the amount or timing of resources that they devote to our programs. If they fail to devote sufficient time and resources to our drug development programs or if their performance is substandard, it will delay the approval of our products. The parties with which we contract for execution of our clinical trials play a significant role in the conduct of the trials and the subsequent collection and analysis of data. Their failure to meet their obligations could adversely affect clinical development of our products. Moreover, these parties may also have relationships with other commercial entities, some of which may compete with us. If they assist our competitors it could harm our competitive position.

If we lose our relationship with any one or more of these parties, we could experience a significant delay in both identifying another comparable provider and then contracting for its services. We may be unable to retain an alternative provider on reasonable terms, if at all. Even if we locate an alternative provider, it is likely that this provider may need additional time to respond to our needs and may not provide the same type or level of service as the original provider. In addition, any provider that we retain will be subject to current Good Laboratory Practices, or cGLP, and similar foreign standards and we do not have control over compliance with these regulations by these providers. Consequently, if these practices and standards are not adhered to by these providers, the development and commercialization of our product candidates could be delayed.

Materials necessary to manufacture our product candidates may not be available on commercially reasonable terms, or at all, which may delay the development, regulatory approval and commercialization of our product candidates.

We rely on the manufacturers of our product candidates to purchase from third-party suppliers the materials necessary to produce the compounds for our clinical trials. Suppliers may not sell these materials to our manufacturers at the time we need them or on commercially reasonable terms. We do not have any control over the process or timing of the acquisition of these materials by our manufacturers. Moreover, we currently do not have any agreements for the commercial production of these materials. If our manufacturers are unable to obtain these materials for our clinical trials, product testing and potential regulatory approval of our product candidates would be delayed, significantly affecting our ability to develop our product candidates. If our manufacturers or we are unable to purchase these materials after

regulatory approval has been obtained for our product candidates, the commercial launch of our product candidates would be delayed or there would be a shortage in supply, which would materially affect our ability to generate revenues from the sale of our product candidates.

We rely on a limited number of manufacturers for our product candidates and our business will be seriously harmed if these manufacturers are not able to satisfy our demand and alternative sources are not available.

We do not have an in-house manufacturing capability and depend completely on a small number of third-party manufacturers and active pharmaceutical ingredient formulators for the manufacture of our products. We do not have long-term agreements with any of these third parties, and if they are unable or unwilling to perform for any reason, we may not be able to locate alternative acceptable manufacturers or formulators or enter into favorable agreements with them. Any inability to acquire sufficient quantities of our compounds in a timely manner from these third parties could delay clinical trials and prevent us from developing our product candidates in a cost-effective manner or on a timely basis. In addition, manufacturers of our compounds are subject to cGMP and similar foreign standards and we do not have control over compliance with these regulations by our manufacturers. If one of our contract manufacturers fails to maintain compliance, the production of our product candidates could be interrupted, resulting in delays and additional costs. In addition, if the facilities of such manufacturers do not pass a pre-approval plant inspection, the FDA will not grant pre-market approval of our products.

Our manufacturing strategy presents the following additional risks:

- the manufacturing processes for VEC-162 and VSF-173 have not been tested in quantities needed for continued clinical trials or commercial sales, and delays in scale-up to commercial quantities could delay clinical trials, regulatory submissions and commercialization of our compounds
- because most of our third-party manufacturers and formulators are located outside of the United States, there may be difficulties in importing our compounds or their components into the United States as a result of, among other things, FDA import inspections, incomplete or inaccurate import documentation or defective packaging
- because of the complex nature of our compounds, our manufacturers may not be able to successfully manufacture our compounds in a cost effective and/or timely manner

We face substantial competition which may result in others developing or commercializing products before or more successfully than we do.

Our future success will depend on our ability to demonstrate and maintain a competitive advantage with respect to our product candidates and our ability to identify and develop additional products through the application of our PG expertise. Large, fully integrated pharmaceutical companies, either alone or together with collaborative partners, have substantially greater financial resources and have significantly greater experience than we do in:

- developing products
- undertaking pre-clinical testing and clinical trials
- obtaining FDA and other regulatory approvals of products
- manufacturing and marketing products

These companies may invest heavily and quickly to discover and develop novel products that could make our products obsolete. Accordingly, our competitors may succeed in obtaining patent protection, receiving FDA approval or commercializing superior products or other competing products before we do.

We are also aware of other companies that may currently be engaged in the discovery and development of products and other therapies that will compete with the product candidates that we are developing. In addition, we expect to compete against current market-leading products in the markets that we are targeting.

We have no experience selling, marketing or distributing products and no internal capability to do so.

At present, we have no sales or marketing personnel. In order to commercialize any of our product candidates, we must either acquire or internally develop sales, marketing and distribution capabilities, or enter into collaborations with partners to perform these services for us. We may not be able to establish sales and distribution partnerships on acceptable terms or at all, and if we do enter into a distribution arrangement, our success will be dependent upon the performance of our partner. In the event that we attempt to acquire or develop our own in-house sales, marketing and distribution capabilities, factors that may inhibit our efforts to commercialize our products without strategic partners or licensees include:

- our inability to recruit and retain adequate numbers of effective sales and marketing personnel
- the inability of sales personnel to obtain access to or persuade adequate numbers of physicians to prescribe our products
- the lack of complementary products to be offered by our sales personnel, which may put us at a competitive disadvantage against companies with broader product lines
- unforeseen costs associated with creating our own sales and marketing team or with entering into a partnering agreement with an independent sales and marketing organization

We will need to increase the size of our organization, and we may experience difficulties in managing our growth.

As of September 30, 2005, we had 30 full-time employees. We will need to continue to expand our managerial, operational, financial and other resources in order to manage and fund our operations, continue our development activities and commercialize our product candidates. Our current personnel, systems and facilities are not adequate to support this future growth. To manage our growth, we must:

- manage our clinical trials effectively
- manage our internal development efforts effectively
- improve our operational, financial, accounting and management controls, reporting systems and procedures
- attract and retain sufficient numbers of talented employees

We may be unable to successfully implement these tasks on a larger scale and, accordingly, may not achieve our development and commercialization goals.

If we cannot identify, or enter into licensing arrangements for, new product candidates, our ability to develop a diverse product portfolio may be limited.

A component of our business strategy is acquiring rights to develop and commercialize compounds discovered or developed by other pharmaceutical and biotechnology companies for which we may find effective uses and markets by using our unique PG expertise. Competition for the acquisition of these compounds is intense. If we are not able to identify opportunities to acquire rights to commercialize additional products, we may not be able to develop a diverse portfolio of products and our business may be harmed. Additionally, it may take substantial human and financial resources to secure commercial rights to promising product candidates. Moreover, if other firms develop PG capabilities, we may face increased competition in identifying and acquiring additional product candidates.

If we lose key scientists or management personnel, or if we fail to recruit additional highly skilled personnel, it will impair our ability to identify, develop and commercialize product candidates.

We are highly dependent on principal members of our management team and scientific staff, including our Chief Executive Officer, Mihael H. Polymeropoulos, M.D. These executives each have significant pharmaceutical industry experience. The loss of any such executives, including Dr. Polymeropoulos, or any other principal member of our management team or scientific staff, would impair our ability to identify, develop and market new products.

Product liability lawsuits could divert our resources, result in substantial liabilities and reduce the commercial potential of our products.

The risk that we may be sued on product liability claims is inherent in the development of pharmaceutical products. For example, we face a risk of product liability exposure related to the testing of our product candidates in clinical trials and will face even greater risks upon any commercialization by us of our product candidates. We believe that we may be at a greater risk of product liability claims relative to other pharmaceutical companies because our compounds are intended to treat behavioral disorders, and it is possible that we may be held liable for the behavior and actions of patients who use our compounds. These lawsuits may divert our management from pursuing our business strategy and may be costly to defend. In addition, if we are held liable in any of these lawsuits, we may incur substantial liabilities and may be forced to limit or forego further commercialization of one or more of our products. Although we maintain general liability and product liability insurance, this insurance may not fully cover potential liabilities. In addition, inability to obtain or maintain sufficient insurance coverage at an acceptable cost or otherwise to protect against potential product liability claims could prevent or inhibit the commercial production and sale of our products.

Legislative or regulatory reform of the healthcare system in the U.S. and foreign jurisdictions may affect our ability to sell our products profitably.

The continuing efforts of the U.S. and foreign governments, insurance companies, managed care organizations and other payors of health care services to contain or reduce health care costs may adversely affect our ability to set prices for our products which we believe are fair, and our ability to generate revenues and achieve and maintain profitability.

Specifically, in both the United States and some foreign jurisdictions there have been a number of legislative and regulatory proposals to change the healthcare system in ways that could

affect our ability to sell our products profitably. In the United States, the Medicare Prescription Drug Improvement and Modernization Act of 2003 reforms the way Medicare will cover and reimburse for pharmaceutical products. This legislation could decrease the coverage and price that we may receive for our products. Other third-party payors are increasingly challenging the prices charged for medical products and services. It will be time-consuming and expensive for us to go through the process of seeking reimbursement from Medicare and private payors. Our products may not be considered cost effective, and coverage and reimbursement may not be available or sufficient to allow us to sell our products on a competitive and profitable basis. Further federal and state proposals and healthcare reforms are likely which could limit the prices that can be charged for the drugs we develop and may further limit our commercial opportunity. Our results of operations could be materially adversely affected by the Medicare prescription drug coverage legislation, by the possible effect of this legislation on amounts that private insurers will pay and by other healthcare reforms that may be enacted or adopted in the future.

In some foreign countries, including major markets in the European Union and Japan, the pricing of prescription pharmaceuticals is subject to governmental control. In these countries, pricing negotiations with governmental authorities can take six to twelve months or longer after the receipt of regulatory marketing approval for a product. To obtain reimbursement or pricing approval in some countries, we may be required to conduct a clinical trial that compares the cost-effectiveness of our product candidate to other available therapies. If reimbursement of our products is unavailable or limited in scope or amount or if pricing is set at unsatisfactory levels, our business could be materially harmed.

Our quarterly operating results may fluctuate significantly.

We expect our operating results to be subject to quarterly fluctuations. The revenues we generate, if any, and our operating results will be affected by numerous factors, including:

- our addition or termination of development programs
- variations in the level of expenses related to our existing three product candidates or future development programs
- our execution of collaborative, licensing or other arrangements, and the timing of payments we may make or receive under these arrangements
- any intellectual property infringement lawsuit in which we may become involved
- regulatory developments affecting our product candidates or those of our competitors

If our quarterly operating results fall below the expectations of investors or securities analysts, the price of our common stock could decline substantially. Furthermore, any quarterly fluctuations in our operating results may, in turn, cause the price of our stock to fluctuate substantially. We believe that quarterly comparisons of our financial results are not necessarily meaningful and should not be relied upon as an indication of our future performance.

Risks related to intellectual property and other legal matters

Our rights to develop and commercialize our product candidates are subject in part to the terms and conditions of licenses or sublicenses granted to us by other pharmaceutical companies. With respect to VEC-162 and VSF-173, these terms and conditions include options in favor of these pharmaceutical companies to reacquire rights to commercialize and develop these product candidates in certain circumstances.

Iloperidone is based in part on patents and other intellectual property owned by Sanofi-Aventis and Novartis. Titan Pharmaceuticals, Inc. holds an exclusive license from Sanofi-Aventis to the intellectual property owned by Sanofi-Aventis, and Titan has sublicensed its rights under such license on an exclusive basis to Novartis. We have acquired exclusive rights to this intellectual property through a further sublicense from Novartis. Our rights with respect to this intellectual property to develop and commercialize iloperidone may terminate, in whole or in part, if we fail to meet certain milestones contained in our sublicense agreement with Novartis. We may also lose our rights to develop and commercialize iloperidone if we fail to pay royalties to Novartis, if we fail to comply with certain requirements in the sublicense regarding our financial condition, or if we fail to comply with certain restrictions regarding our other development activities. Finally, our rights to develop and commercialize iloperidone may be impaired if we do not cure breaches by Novartis and Titan of similar obligations contained in these sublicense and license agreements. In the event of an early termination of our sublicense agreement, all rights licensed and developed by us under this agreement may be extinguished, which would have a material adverse effect on our business.

VEC-162 is based in part on patents and other intellectual property that we have licensed on an exclusive basis from Bristol-Myers Squibb (BMS). Following the completion of our Phase III program for VEC-162, and in the event that we have not entered into a development and commercialization agreement with a third party covering significant markets, BMS has retained an option to reacquire the rights it has licensed to us to develop and commercialize VEC-162, subject to BMS' payment of pre-determined royalties and milestone payments to us. Additionally, BMS may terminate our license if we fail to meet certain milestones or if we otherwise breach our royalty or other obligations in the agreement. In the event that BMS terminates our license due to our breach, all of our material rights to VEC-162 (including intellectual property we develop with respect to VEC-162) will revert back to BMS. Any termination or reversion of our rights to develop or commercialize VEC-162, including any reacquisition by BMS of our rights, may have a material adverse effect on our business.

VSF-173 is based in part on patents and other intellectual property that we have licensed on an exclusive basis from Novartis. Novartis has the option to reacquire rights to co-develop and exclusively commercialize VSF-173 following the completion of the Phase II clinical trials, and an additional option to reacquire exclusive commercialization rights following the completion of the Phase III clinical trials, subject in each case to Novartis' payment of pre-determined royalties and other payments to us. In the event that Novartis chooses not to exercise either of these options and we decide to enter into a partnering arrangement to help us commercialize VSF-173, Novartis has a right of first refusal to negotiate such an agreement with us, as well as a right to submit a last matching counteroffer regarding such an agreement. In addition, our rights with respect to VSF-173 may terminate, in whole or in part, if we fail to meet certain development and commercialization milestones described in our license agreement, if we fail to make royalty or milestone payments or if we do not comply with requirements in our license agreement regarding our financial condition. In the event of an early termination of our license agreement, all rights licensed and developed by us under this agreement may revert

back to Novartis. Any termination or reversion of our rights to develop or commercialize VSF-173, including any reacquisition by Novartis of our rights, may have a material adverse effect on our business.

If our efforts to protect the proprietary nature of the intellectual property related to our products are not adequate, we may not be able to compete effectively in our markets.

In addition to the rights we have licensed from Novartis and BMS relating to our product candidates, we rely upon intellectual property we own relating to our products, including patents, patent applications and trade secrets. As of September 30, 2005 we owned 10 pending patent applications in the United States and one pending Patent Cooperation Treaty application, which permits the pursuit of patents outside of the United States, relating to our product candidates in clinical development. Our patent applications may be challenged or fail to result in issued patents and our existing or future patents may be too narrow to prevent third parties from developing or designing around these patents. In addition, we rely on trade secret protection and confidentiality agreements to protect certain proprietary know-how that is not patentable, for processes for which patents are difficult to enforce and for any other elements of our drug development processes that involve proprietary know-how, information and technology that is not covered by patent applications. While we require all of our employees, consultants, advisors and any third parties who have access to our proprietary know-how, information and technology to enter into confidentiality agreements, we cannot be certain that this know-how, information and technology will not be disclosed or that competitors will not otherwise gain access to our trade secrets or independently develop substantially equivalent information and techniques. Further, the laws of some foreign countries do not protect proprietary rights to the same extent as the laws of the United States. As a result, we may encounter significant problems in protecting and defending our intellectual property both in the United States and abroad. If we are unable to prevent material disclosure of the intellectual property related to our technologies to third parties, we will not be able to establish or maintain a competitive advantage in our market.

If we do not obtain protection under the Hatch-Waxman Act and similar foreign legislation to extend our patents and to obtain market exclusivity for our product candidates, our business will be materially harmed.

The United States Drug Price Competition and Patent Term Restoration Act of 1984, more commonly known as the “Hatch-Waxman Act,” provides for an extension of patent protection for drug compounds for a period of up to five years to compensate for time spent in development. Assuming we gain a five-year extension for each of our current product candidates in clinical development, and that we continue to have rights under our sublicense and license agreements with respect to these product candidates, we would have exclusive rights to iloperidone’s United States NCE patent until 2016, to VEC-162’s United States NCE patent until 2022 and to VSF-173’s United States NCE patent until 2019. In Europe, similar legislative enactments allow patent protection in the European Union to be extended for up to five years through the grant of a Supplementary Protection Certificate. Assuming we gain such a five-year extension for each of our current product candidates in clinical development, and that we continue to have rights under our sublicense and license agreements with respect to these product candidates, we would have exclusive rights to iloperidone’s European NCE patents until 2015, to VEC-162’s European NCE patents until 2022 and to VSF-173’s European NCE patents until 2017. Additionally, a recent directive in the European Union provides that companies who receive regulatory approval for a new compound will have a 10-year period of

market exclusivity for that compound (with the possibility of a further one-year extension) in most EU countries, beginning on the date of such European regulatory approval, regardless of when the European NCE patent covering such compound expires. A generic version of the approved drug may not be marketed or sold during such market exclusivity period. This directive may be of particular importance with respect to iloperidone, since the European NCE patent for iloperidone will likely expire prior to the end of this 10-year period of market exclusivity. However, there is no assurance that we will receive the extensions of our patents or other exclusive rights available under the Hatch-Waxman Act or similar foreign legislation. If we fail to receive such extensions and exclusive rights, our ability to prevent competitors from manufacturing, marketing and selling generic versions of our products will be materially harmed.

Litigation or third-party claims of intellectual property infringement could require us to divert resources and may prevent or delay our drug discovery and development efforts.

Our commercial success depends in part on our not infringing the patents and proprietary rights of third parties. Third parties may assert that we are employing their proprietary technology without authorization. In addition, third parties may obtain patents in the future and claim that use of our technologies infringes upon these patents. Furthermore, parties making claims against us may obtain injunctive or other equitable relief, which could effectively block our ability to develop and commercialize one or more of our product candidates. Defense of these claims, regardless of their merit, would divert substantial financial and employee resources from our business. In the event of a successful claim of infringement against us, we may have to pay substantial damages, obtain one or more licenses from third parties or pay royalties. In addition, even in the absence of litigation, we may need to obtain additional licenses from third parties to advance our research or allow commercialization of our product candidates. We may fail to obtain any of these licenses at a reasonable cost or on reasonable terms, if at all. In that event, we would be unable to develop and commercialize further one or more of our product candidates.

In addition, in the future we could be required to initiate litigation to enforce our proprietary rights against infringement by third parties. Prosecution of these claims to enforce our rights against others could divert substantial financial and employee resources from our business. If we fail to enforce our proprietary rights against others, our business will be harmed.

If we use hazardous and biological materials in a manner that causes injury or violates applicable law, we may be liable for damages.

Our research and development activities involve the controlled use of potentially hazardous substances, including toxic chemical and biological materials. In addition, our operations produce hazardous waste products. Federal, state and local laws and regulations govern the use, manufacture, storage, handling and disposal of these hazardous materials. While we believe that we are currently in compliance with these laws and regulations, continued compliance may be expensive, and current and future environmental regulations may impair our research, development and manufacturing efforts. In addition, if we fail to comply with these laws and regulations at any point in the future, we may be subject to criminal sanctions and substantial civil liabilities and could be required to suspend or modify our operations.

Even if we continue to comply with all applicable laws and regulations regarding hazardous materials, we cannot eliminate the risk of accidental contamination or discharge and our resultant liability for any injuries or other damages caused by these accidents. Although we

maintain general liability insurance, this insurance may not fully cover potential liabilities for these damages, and the amount of uninsured liabilities may exceed our financial resources and materially harm our business. In addition, our inability to obtain or maintain sufficient insurance coverage at an acceptable cost or otherwise to protect against potential environmental claims could prevent or inhibit the commercial production and sale of our products.

Risks related to this offering

Our stock price may be extremely volatile and you may not be able to resell your shares at or above the initial public offering price.

Prior to this offering, there has been no public market for our common stock. Negotiations between the underwriters and us will determine the initial public offering price. This price may not be indicative of future market prices. In addition, the stock market has from time to time experienced significant price and volume fluctuations, and the market prices of the securities of life sciences companies without product revenues, such as ours, have been highly volatile.

The following factors, in addition to the other risk factors described in this section, may also have a significant impact on the market price of our common stock:

- publicity regarding actual or potential testing or trial results or the outcome of regulatory review relating to products under development by us or our competitors
- regulatory developments in the United States and foreign countries
- developments concerning any collaboration we may undertake
- announcements of patent issuances or denials, technological innovations or new commercial products by us or our competitors
- economic and other external factors beyond our control

As a result of these factors, after this offering you might be unable to resell your shares at or above the initial public offering price.

An active trading market for our common stock may not develop.

Prior to this offering, there has been no public market for our common stock. Although we anticipate that our common stock will be approved for listing on The Nasdaq National Market, an active trading market for our shares may never develop or be sustained following this offering. The initial public offering price for our common stock will be determined through negotiations with the underwriters. This initial public offering price may vary from the market price of our common stock after the offering. Investors may not be able to sell their common stock at or above the initial public offering price.

A substantial number of shares of our common stock could be sold into the public market shortly after this offering, which could depress our stock price.

The market price of our common stock could decline as a result of sales by our existing stockholders of shares of common stock in the market after this offering or the perception that these sales could occur. Once a trading market develops for our common stock, many of our stockholders will have an opportunity to sell their stock for the first time. These factors could also make it difficult for us to raise additional capital by selling stock. Please see the section entitled “Shares eligible for future sale” for more information regarding these factors.

You will incur immediate and substantial dilution in the pro forma as adjusted net tangible book value of the stock you purchase.

We estimate that the initial public offering price of our common stock will be $ per share. This amount is substantially higher than the pro forma as adjusted net tangible book value that our outstanding common stock will have immediately after this offering. Accordingly, if you purchase shares of our common stock at the assumed initial public offering price, you will incur immediate and substantial dilution of $ per share. If the holders of outstanding options or warrants exercise those options or warrants, you will suffer further dilution.

Our management will have broad discretion over the use of the proceeds we receive in this offering and might not apply the proceeds in ways that increase the value of your investment.

Our management will have broad discretion to use the net proceeds from this offering, and you will be relying on the judgment of our management regarding the application of these proceeds. They might not apply the net proceeds of this offering in ways that increase the value of your investment. We expect to use the net proceeds from this offering for general corporate purposes, including working capital and capital expenditures, further clinical development of our current product candidates and possible investments in, or acquisitions of, new product candidates. We have not allocated these net proceeds for any specific purposes. Our management might not be able to yield any return on the investment and use of these net proceeds. You will not have the opportunity to influence our decisions on how to use the proceeds.

If securities or industry analysts do not publish research or reports or publish unfavorable research about our business, our stock price and trading volume could decline.

The trading market for our common stock will depend in part on the research and reports that securities or industry analysts publish about us or our business. We do not currently have and may never obtain research coverage by securities and industry analysts. If no securities or industry analysts commence coverage of our company, the trading price for our stock would be negatively affected. In the event we obtain securities or industry analyst coverage, if one or more of the analysts who covers us downgrades our stock, our stock price would likely decline. If one or more of these analysts ceases to cover us or fails to publish regular reports on us, interest in the purchase of our stock could decrease, which could cause our stock price or trading volume to decline.

We will incur increased costs as a result of being a public company.

As a public company, we will incur significant legal, accounting, reporting and other expenses that we did not incur as a private company. We expect these rules and regulations to increase our legal and financial compliance costs and to make some activities more time-consuming and costly. We also expect these new rules and regulations may make it more difficult and more expensive for us to obtain director and officer liability insurance and we may be required to accept reduced policy limits and coverage or incur substantially higher costs to obtain the same or similar coverage. As a result, we may experience more difficulty attracting and retaining qualified individuals to serve on our board of directors or as executive officers. We cannot predict or estimate the amount of additional costs we may incur as a result of these requirements or the timing of such costs.

Existing stockholders significantly influence us and could delay or prevent an acquisition by a third party.

Upon completion of this offering, executive officers, key employees and directors and their affiliates will beneficially own, in the aggregate, approximately % of our outstanding common stock. As a result, these stockholders will be able to exercise significant influence over all matters requiring stockholder approval, including the election of directors and approval of significant corporate transactions, which could have the effect of delaying or preventing a third party from acquiring control over us. For information regarding the ownership of our outstanding stock by our executive officers and directors and their affiliates, please see "Principal stockholders."

Anti-takeover provisions in our charter and bylaws, and in Delaware law, could prevent or delay a change in control of our company.

We are a Delaware corporation and the anti-takeover provisions of the Delaware General Corporation Law may discourage, delay or prevent a change in control by prohibiting us from engaging in a business combination with an interested stockholder for a period of three years after the person becomes an interested stockholder, even if a change of control would be beneficial to our existing stockholders. For more information, see "Description of capital stock—Anti-takeover effects of provisions of our amended and restated certificate of incorporation, bylaws and Delaware law." In addition, our amended and restated certificate of incorporation and by laws may discourage, delay or prevent a change in our management or control over us that stockholders may consider favorable. Our amended and restated certificate of incorporation and bylaws, which will be in effect as of the closing of this offering:

- authorize the issuance of "blank check" preferred stock that could be issued by our board of directors to thwart a takeover attempt
- do not provide for cumulative voting in the election of directors, which would allow holders of less than a majority of the stock to elect some directors
- establish a classified board of directors, as a result of which the successors to the directors whose terms have expired will be elected to serve from the time of election and qualification until the third annual meeting following their election
- require that directors only be removed from office for cause
- provide that vacancies on the board of directors, including newly-created directorships, may be filled only by a majority vote of directors then in office
- limit who may call special meetings of stockholders
- prohibit stockholder action by written consent, requiring all actions to be taken at a meeting of the stockholders
- establish advance notice requirements for nominating candidates for election to the board of directors or for proposing matters that can be acted upon by stockholders at stockholder meetings

For information regarding these and other provisions, please see "Description of capital stock."

Completion of this offering may limit our ability to use our net operating loss carryforwards.

As of September 30, 2005, we had substantial federal and state net operating loss carryforwards. Under the provisions of the Internal Revenue Code, substantial changes in our ownership may limit the amount of net operating loss carryforwards that can be utilized annually in the future to offset taxable income. We believe that, as a result of this offering, it is possible that a change in our ownership will be deemed to have occurred. If such a change in our ownership occurs, our ability to use our net operating loss carryforwards in any fiscal year may be significantly limited under these provisions.

Forward-looking statements

This prospectus includes “forward-looking statements,” as defined by federal securities laws, with respect to our financial condition, results of operations and business, and our expectations or beliefs concerning future events, including increases in operating margins. Words such as, but not limited to, “believe,” “expect,” “anticipate,” “estimate,” “intend,” “plan,” “targets,” “likely,” “will,” “would,” “could,” and similar expressions or phrases identify forward-looking statements.

All forward-looking statements involve risks and uncertainties. The occurrence of the events described, and the achievement of the expected results, depend on many events, some or all of which are not predictable or within our control. Actual results may differ materially from expected results. Factors that may cause actual results to differ from expected results include, among others:

- a failure of our product candidates to be demonstrably safe and effective
- a failure to obtain regulatory approval for our products or to comply with ongoing regulatory requirements
- a lack of acceptance of our product candidates in the marketplace, or a failure to become or remain profitable
- our inability to obtain the capital necessary to fund our research and development activities
- our failure to identify or obtain rights to new product candidates
- a failure to develop or obtain sales, marketing and distribution resources and expertise or to otherwise manage our growth
- a loss of any of our key scientists or management personnel
- losses incurred from product liability claims made against us
- a loss of rights to develop and commercialize our products under our license and sublicense agreements
- the increased expenses and administrative workload associated with being a public company

All future written and verbal forward-looking statements attributable to us or any person acting on our behalf are expressly qualified in their entirety by the cautionary statements contained or referred to in this section. We undertake no obligation, and specifically decline any obligation, to update or revise publicly any forward-looking statements, whether as a result of new information, future events or otherwise. In light of these risks, uncertainties and assumptions, the forward-looking events discussed in this prospectus might not occur.

See the section entitled “Risk factors” for a more complete discussion of these and other risks and uncertainties. The risk factors described in this prospectus are not necessarily all of the important factors that could cause actual results to differ materially from those expressed in any of our forward-looking statements. Other unknown or unpredictable factors also could affect our results. Consequently, there can be no assurance that the actual results or developments anticipated by us will be realized or, even if substantially realized, that they will have the expected consequences to, or effects on, us. Given these uncertainties, prospective investors are cautioned not to place undue reliance on such forward-looking statements.

Use of proceeds

We estimate that we will receive approximately $ million in net proceeds from the sale of our common stock in this offering, based on an assumed initial public offering price of $ per share (the midpoint of the initial public offering price range) and after deducting the estimated underwriting discounts and commissions and estimated offering expenses payable by us. A $1.00 increase (decrease) in the assumed initial public offering price of $ per share would increase (decrease) the net proceeds to us from this offering by $ million, assuming the number of shares offered by us, as set forth on the cover page of this prospectus, remains the same and after deducting the estimated underwriting discounts and commissions and estimated offering expenses payable by us. Our net proceeds will increase by approximately $ million if the underwriters' over-allotment option is exercised in full.

We currently intend to use $ million of the estimated net proceeds from this offering for research, pre-clinical development and clinical trials. The balance of such net proceeds will be used for general corporate purposes, including working capital and the acquisition of pharmaceutical products and businesses that are complementary to our own. Currently, we have no specific plans or commitments with respect to any acquisition. We cannot assure you that we will complete any acquisitions or that, if completed, any acquisition will be successful.

The amount and timing of our actual expenditures will depend on numerous factors, including the progress of our research and development activities and clinical trials, the number and breadth of our product development programs, our ability to establish and maintain corporate collaborations and other arrangements and the amount of cash, if any, generated by our operations.

We will retain broad discretion in the allocation and use of the remaining net proceeds of this offering. Pending application of the net proceeds, as described above, we intend to invest any remaining proceeds in short-term, investment-grade, interest-bearing securities.

Dividend policy

We have never declared or paid any dividends on our capital stock. We currently intend to retain any future earnings to finance our research and development efforts, the further development of our PG expertise and the expansion of our business and do not intend to declare or pay cash dividends on our common stock in the foreseeable future. Any future determination to pay dividends will be at the discretion of our board of directors and will depend upon results of operations, financial condition, contractual restrictions, restrictions imposed by applicable law and other factors our board of directors deems relevant.

Capitalization

The following table sets forth the following information:

- our actual capitalization as of September 30, 2005
- our pro forma capitalization after giving effect to the conversion of all outstanding shares of preferred stock into common stock upon the completion of this offering
- our pro forma as adjusted capitalization to reflect our receipt of the estimated net proceeds from our sale of shares of common stock in this offering, after deducting the underwriting discounts and commissions and estimated offering expenses, the filing of a new certificate of incorporation after the closing of this offering and the application of our proceeds from this offering

This table excludes the following shares:

- 5,348,975 shares of common stock available as of September 30, 2005 for issuance under our Management Equity Plan and agreements entered into pursuant to such Plan
- 12,195,129 shares of Series B Preferred Stock issued on December 9, 2005
- 166,660 shares of common stock available for issuance upon the exercise of outstanding warrants

See “Management— Employee benefit plans,” and Note 10 of “Notes to consolidated financial statements” for a description of our equity plans.

	Actual	September 30, 2005 pro forma	Pro forma as adjusted
Convertible Preferred stock, $0.001 par value; 40,081,308 shares authorized, 40,081,308 shares issued and outstanding; 40,081,308 shares authorized, no shares outstanding on a pro forma basis; shares authorized, no shares outstanding on a pro forma as adjusted basis, respectively	$ 46,808,569	$ —	
Stockholders’ equity:			
Common stock, $0.001 par value; 50,000,000 shares authorized, 150,739 shares issued and outstanding; 50,000,000 shares authorized, 40,232,047 shares issued and outstanding on a pro forma basis, and shares issued and outstanding on a pro forma as adjusted basis, respectively	$ 151	$ 40,232	
Additional paid-in capital(1)	$ 18,049,479	$ 64,817,967	
Deferred compensation	(13,862,408)	(13,862,408)	
Accumulated deficit	(29,485,531)	(29,485,531)	
Total stockholders’ equity(1)	21,486,961	21,486,961	
Total capitalization(1)	21,486,961	21,486,961	

(1) A $1.00 increase (decrease) in the assumed initial public offering price of $ per share would increase (decrease) each of additional paid-in capital, total stockholders’ equity and total capitalization by $ million, assuming the number of shares offered by us, as set forth on the cover page of this prospectus, remains the same and after deducting the estimated underwriting discounts and commissions and estimated offering expenses payable by us.

Dilution

If you invest in our common stock in this offering, your interest will be diluted to the extent of the difference between the public offering price per share of our common stock and the pro forma net tangible book value per share of our common stock after this offering.

As of September 30, 2005, our net tangible book value was approximately $21.5 million, or $142.54 per share of common stock. Our net tangible book value per share represents the amount of our total tangible assets reduced by the amount of our total liabilities, divided by the number of shares of our common stock outstanding as of September 30, 2005, before giving effect to any conversion of our preferred stock into common stock. Our pro forma net tangible book value as of September 30, 2005 was approximately $21.5 million, or $0.53 per share of common stock. Our pro forma net tangible book value per share represents the amount to our total tangible assets reduced by the amount of our total liabilities, divided by the total number of shares of our common stock outstanding as of September 30, 2005, after giving effect to the conversion of our preferred stock into common stock upon completion of this offering. After giving effect to our sale in this offering of shares of our common stock at an assumed initial public offering price of $ per share (the midpoint of the price range set forth on the cover page of this prospectus) and after deducting estimated underwriting discounts and commissions and estimated offering expenses payable by us, our pro forma net tangible book value as of September 30, 2005 would have been $ million, or $ per share of our common stock. This represents an immediate increase of net tangible book value of $ per share to our existing stockholders and an immediate dilution of $ per share to investors purchasing shares in this offering.

The following table illustrates this per share dilution:

Assumed initial public offering price per share		$
Net tangible book value per share applicable to common stockholders as of September 30, 2005	$ 142.54	
Pro forma net tangible book value per share applicable to common stockholders as of September 30, 2005	0.53	
Increase in pro forma net tangible book value per share attributable to investors purchasing shares in this offering		
Pro forma net tangible book value per share after giving effect to this offering		
Dilution in pro forma net tangible book value per share to investors purchasing shares in this offering		$

A $1.00 increase (decrease) in the assumed initial public offering price of $ per share would increase (decrease) our pro forma net tangible book value per share after this offering by $ per share and the dilution in pro forma net tangible book value per share to investors in this offering by $ per share, assuming that the number of shares offered by us, as set forth on the cover page of this prospectus, remains the same and after deducting the estimated underwriting discounts and commissions and estimated offering expenses payable by us.

If the underwriters exercise their option to purchase additional shares of our common stock in full in this offering, the pro forma net tangible book value per share after the offering would be $ per share, the increase in pro forma net tangible book value per share to existing

stockholders would be $ per share and the dilution to new investors purchasing shares in this offering would be $ per share.

The following table presents on a pro forma basis as of September 30, 2005, after giving effect to the conversion of all outstanding shares of preferred stock into common stock upon completion of this offering, the differences between the existing stockholders and the purchasers of shares in the offering with respect to the number of shares purchased from us, the total consideration paid and the average price paid per share:

	Shares purchased		Total consideration		Average price per share
	Number	Percent	Amount	Percent	
Existing stockholders	40,232,047	%	$ 47,018,083	%	$ 1.17
New investors(1)		%		%	
Total	—	100.0%	$ —	100.0%	$

(1) A $1.00 increase (decrease) in the assumed initial public offering price of $ per share would increase (decrease) the amount of total consideration to $.

The discussion and the tables above assume no exercise of stock options or warrants outstanding on September 30, 2005 and no issuance of shares reserved for future issuance under our equity compensation plans. In addition, the numbers set forth in the table above reflect the conversion of all shares of our outstanding preferred stock into shares of common stock upon completion of this offering. As of September 30, 2005, there were:

- 3,783,490 shares of common stock issuable upon exercise of outstanding options, each with an exercise price of $0.10 per share
- 166,660 shares of common stock issuable upon exercise of outstanding warrants with an exercise price of $0.40 per share
- an additional 1,565,485 shares reserved for future stock option grants and purchases under our existing equity compensation plans

If the underwriters' over-allotment option is exercised in full, the following will occur:

- the percentage of shares of common stock held by existing stockholders will decrease to approximately % of the total number of shares of our common stock outstanding after this offering
- the number of shares held by new investors will be increased to or approximately % of the total number of shares of our common stock outstanding after this offering

Selected consolidated financial data

The consolidated statements of operations data for the period of March 13, 2003 (inception) to December 31, 2003 and the year ended December 31, 2004 and the consolidated balance sheet data at December 31, 2003 and 2004 are derived from our audited consolidated financial statements included in this prospectus. The consolidated statements of operations data for the nine months ended September 30, 2004 and 2005, and the consolidated balance sheet data at September 30, 2004 and September 30, 2005, are each derived from our unaudited consolidated financial statements included in this prospectus. The unaudited consolidated financial statements include, in the opinion of management, all adjustments, consisting of only recurring adjustments, that management considers necessary for the fair presentation of the financial information set forth in those statements. The historical results are not necessarily indicative of the results to be expected in future periods.

The following data should be read together with our consolidated financial statements and accompanying notes and the section entitled “Management’s discussion and analysis of financial condition and results of operations” included in this prospectus.

	Period from March 13, 2003 (inception) to December 31, 2003	Year ended December 31, 2004	Nine months ended September 30,	
			2004	2005
			(unaudited	(unaudited
Statements of operations data				
Revenue	$ 47,565	$ 33,980	$ 33,980	$ —
Operating expenses:				
Research and development	2,010,532	7,442,983	5,033,488	11,641,565
General and administrative	1,052,659	2,119,394	1,267,485	5,587,147
Total operating expenses	3,063,191	9,562,377	6,300,973	17,228,712
Loss from operations	(3,015,626)	(9,528,397)	(6,266,993)	(17,228,712)
Interest and other income, net	44,805	59,060	12,956	188,288
Net loss before tax expense	(2,970,821)	(9,469,337)	(6,254,037)	(17,040,424)
Tax expense	—	4,949	3,733	—
Net Loss	(2,970,821)	(9,474,286)	(6,257,770)	(17,040,424)
Beneficial conversion feature— deemed dividend to preferred stockholders(1)	—	—	—	(18,500,005)
Net loss attributable to common stockholders	$ (2,970,821)	$ (9,474,286)	$ (6,257,770)	$ (35,540,429)
Net loss per share applicable to common stockholders, basic and diluted	$ (297.08)	$ (947.43)	$ (625.78)	$ (934.93)
Shares used in computing net loss per share, basic and diluted	10,000	10,000	10,000	38,014

(1) In September 2005, we completed the sale of an additional 15,040,654 shares of Series B Preferred Stock for proceeds of approximately $18.5 million. After evaluating the fair value of our common stock obtainable upon conversion by the stockholders, we determined that the issuance of the Series B Preferred Stock sold in September 2005 resulted in a beneficial

conversion feature of approximately $18.5 million which was fully accreted in September 2005 and is recorded as a deemed dividend to preferred stockholders for the nine-month period ended September 30, 2005.

	As of December 31,		As of September 30, 2005
	2003	2004	(unaudited)
Balance sheet data			
Cash, restricted cash and cash equivalents	$ 7,165,722	$ 16,259,770	$ 22,264,920
Working capital	6,204,248	14,827,621	20,145,973
Total assets	8,385,913	17,752,241	24,288,683
Total liabilities	1,378,880	1,808,654	2,801,722
Convertible preferred stock	9,963,541	28,308,564	46,808,569
Deficit accumulated during the development stage	(2,970,821)	(12,445,107)	(29,485,531)
Total stockholders' equity	7,007,033	15,943,587	21,486,961

Management's discussion and analysis of financial condition and results of operations

You should read the following discussion and analysis of our financial condition and results of operations together with "Selected Financial Data" and our consolidated financial statements and related notes appearing at the end of this prospectus. Some of the information contained in this discussion and analysis or set forth elsewhere in this prospectus include historical information and other information with respect to our plans and strategy for our business and contain forward-looking statements that involve risk, uncertainties and assumptions. Our actual results may differ materially from those anticipated in these forward-looking statements as a result of certain factors, including but not limited to those set forth under the "Risk factors" section of this prospectus and elsewhere in this prospectus.

Overview

Since we began our operations in March 2003, we have devoted substantially all of our resources to the in-licensing and clinical development of small molecule therapeutics for various central nervous system disorders. Our lead product candidate, iloperidone, is an atypical antipsychotic for the treatment of schizophrenia and bipolar disorder and is in a pivotal Phase III trial for schizophrenia. Our second product candidate, VEC-162, is a melatonin agonist for the treatment of insomnia and depression which is entering a pivotal Phase III trial for insomnia. VEC-162 is also ready for Phase II trials for the treatment of depression. Our third product candidate, VSF-173, is a compound for the treatment of excessive daytime sleepiness and is ready for a Phase II trial.

We expect to complete our pivotal Phase III trial for iloperidone in the first half of 2007. If this trial is successful, we will file an NDA for approval with the FDA later that year. We recently generated positive efficacy and safety data in a Phase II trial of VEC-162 for insomnia and expect to begin a Phase III trial early in 2006. We also expect to begin a Phase II trial of VSF-173 for excessive daytime sleepiness in the second half of 2006. Assuming successful outcomes of our clinical trials and approval by the FDA, we expect to commercialize iloperidone and VSF-173 with our own sales force in the U.S. and expect to commercialize VEC-162 through a strategic partnership with a global pharmaceutical company.

Based on our current operating plans, and assuming the sale of shares of our common stock in this offering at an initial public offering price of $ per share (the mid-point of the price range set forth on the cover page of this prospectus), we believe that the proceeds from this offering, together with our existing cash, restricted cash and cash equivalents, will be sufficient to meet our anticipated operating needs until mid-2007, and after that time we will require additional capital. We believe that if we sell the shares of our common stock in this offering at an initial public offering price of $ per share ($1.00 lower than the mid-point of the price range set forth on the cover page), the resultant reduction in proceeds we receive from the offering would cause us to require additional capital earlier, in . In addition, in budgeting for our activities following this offering, we have relied on a number of assumptions, including assumptions that we will enroll approximately 600 patients in our pivotal Phase III iloperidone trial and approximately 300 patients in our VEC-162 pivotal Phase III trial for insomnia, that we will not engage in further business development activities, that we will not expend funds on the depot formulation of, or bipolar indication for, iloperidone or on a Phase II trial of VEC-162 for depression, that we will be able to continue the manufacturing of our product candidates at commercially reasonable prices, that we will

be able to retain our key personnel, and that we will not incur any significant contingent liabilities. We may need to raise additional funds more quickly if one or more of our assumptions prove to be incorrect or if we choose to expand our product development efforts more rapidly than we presently anticipate, and we may decide to raise additional funds even before we need them if the conditions for raising capital are favorable. We may seek to sell additional equity or debt securities or obtain a bank credit facility. The sale of additional equity or debt securities, if convertible, could result in dilution to our stockholders. The incurrence of indebtedness would result in increased fixed obligations and could also result in covenants that would restrict our operations.

In March and June 2004 we entered into separate license agreements with Novartis and Bristol-Myers Squibb for the exclusive rights to develop and commercialize our three compounds in clinical development. In consideration for these rights, we paid a $500,000 non-refundable fee for each of the compounds. We are also obligated to make additional payments upon the achievement of specific clinical and commercial milestones, as well as the payment of product royalties based on the net sales of the licensed products. The amount, timing and likelihood of these potential payments will depend on the occurrence of future events that may or may not occur, such as the approval by the FDA for the sale of one or more of our product candidates.

Revenues. We have generated some revenue under research and development contracts that were derived principally from consulting agreements we entered into during our start-up phase to defray research costs. We completed our obligations under these agreements and no longer seek such arrangements.

We have not generated any other operating revenue since our inception. Any revenue that we may receive in the near future is expected to consist primarily of license fees, milestone payments and research and development reimbursement payments to be received from partners. If our development efforts result in clinical success, regulatory approval and successful commercialization of our products, we could generate revenue from sales of our products and from receipt of royalties on sales of licensed products.

Research and development expenses. We expect our research and development expenses to increase as we continue to develop our product candidates. These expenses consist primarily of fees paid to third-party professional service providers in connection with the services they provide for our clinical trials, costs of contract manufacturing services, costs of materials used in clinical trials and research and development, depreciation of capital resources used to develop our products, and all related facilities costs. We expense research and development costs as incurred, including payments made to date under our license agreements. We believe that significant investment in product development is a competitive necessity and plan to continue these investments in order to realize the potential of our product candidates and PG expertise. From inception through September 30, 2005, we incurred research and development expenses in the aggregate of approximately $21.1 million, including stock-based compensation expenses of approximately $660,000. We expect to incur licensing costs in the future that could be substantial, as we continue our efforts to evaluate potential in-license product candidates.

The following table summarizes our product development initiatives for the period from March 13, 2003 (inception) to December 31, 2003, the year ended December 31, 2004 and for the nine months ended September 30, 2004 and 2005. Included in this table is the research and development expense recognized in connection with our product candidates in clinical development. Included in "Other product candidates" are the costs directly related to research initiatives for all other product candidates. The numbers in this table have not been audited.

	March 13, 2003 (inception) to December 31, 2003(2)	Year ended December 31, 2004	Nine months ended September 30, 2004	Nine months ended September 30, 2005	March 13, 2003 (inception) to September 30, 2005
Direct Project Costs(1)					
Iloperidone		$ 1,123,000	$ 711,000	$ 4,423,000	$ 5,546,000
VEC-162		3,221,000	1,851,000	5,057,000	8,278,000
VSF-173		568,000	531,000	707,000	1,275,000
Other Product Candidates		1,037,000	945,000	608,000	1,645,000
Total Direct Product Costs		5,949,000	4,038,000	10,795,000	16,744,000
Indirect Project Costs(1)					
Facility(3)		259,000	199,000	185,000	444,000
Depreciation	$ 69,000	345,000	140,000	281,000	695,000
Other Indirect Overhead	1,942,000	890,000	656,000	380,000	3,212,000
Total Indirect Expenses	2,011,000	1,494,000	995,000	846,000	4,351,000
Total Research & Development Expenses	$ 2,011,000	$ 7,443,000	$ 5,033,000	$ 11,641,000	$ 21,095,000

(1) Many of our research and development costs are not attributable to any individual project because we share resources across several development projects. We record direct costs, including personnel costs and related benefits and stock-based compensation, on a project-by-project basis. We record indirect costs that support a number of our research and development activities in the aggregate.

(2) In 2003, there were no active development programs in process for our product candidates listed in the table.

(3) In 2003, all facility-related costs were allocated to general and administrative expenses.

We have allocated $ million of the proceeds of this offering for research and development, including pre-clinical development and clinical trials. Conducting clinical trials is a time-consuming and expensive process. Currently, iloperidone is in a pivotal Phase III trial, and VEC-162 is anticipated to begin pivotal Phase III trials early in 2006. VSF-173 may enter Phase II clinical trials in late 2006. The commencement and rate of completion of clinical trials for our products may be delayed by many factors, including, but not limited to:

- lack of efficacy during the clinical trials
- unforeseen safety issues
- slower-than-expected rate of patient recruitment
- manufacturing delays
- government or regulatory delays

In addition, we may encounter regulatory delays or rejections as a result of many factors, including results that do not support our claims, perceived defects in the design of clinical trials and changes in regulatory policy during the period of product development. Our business, financial condition and results of operations may be adversely affected by any delays in, or termination of, our clinical trials or a determination by the FDA that the results of our trials are inadequate to justify regulatory approval. As part of our commercialization strategy, we may seek to establish collaborative relationships for some of our products in order to help us develop and market some of these product candidates. There can be no assurance that we will be successful in doing so. As a result of these risks and uncertainties, we are unable to estimate the specific timing and future costs of our clinical development programs or the timing of material cash inflows, if any, from our product candidates.

General and administrative expenses. General and administrative expenses consist primarily of salaries and other related costs for personnel serving executive, finance, accounting, information technology and human resource functions. Other costs include facility costs not otherwise included in research and development expense and professional fees for legal and accounting services. We expect that our general and administrative expenses will increase as we add personnel and become subject to the reporting obligations applicable to public companies. From inception through September 30, 2005, we incurred expenses in the aggregate of approximately $8.8 million, including stock-based compensation expenses of approximately $3.4 million, on general and administrative expenses.

Stock-based compensation. We have recorded deferred stock-based compensation expense in connection with the grant of stock options to employees. Deferred stock-based compensation for options granted to employees is the difference between the fair value for financial reporting purposes of our common stock on the date such options were granted and their exercise price. We recorded deferred stock-based compensation and additional paid-in capital of approximately $281,000 in the aggregate and approximately $13.1 million in the aggregate in the year ended December 31, 2004 and the nine months ended September 30, 2005, respectively, related to stock options granted to employees. These amounts were recorded as a component of stockholders' equity and are being amortized as charges to operations over the vesting periods of the options. We recorded amortization of deferred stock-based compensation of approximately $23,000 and approximately $567,000 for the year ended December 31, 2004 and the nine month period ended September 30, 2005, respectively. For options granted to employees through September 30, 2005, we expect to record additional amortization of deferred stock-based compensation in the following approximate amounts: $828,000 during the remainder of 2005, $3.3 million in 2006, $3.3 million in 2007, $3.3 million in 2008 and $2.0 million in 2009.

In August 2004, we approved a modification to an employee's stock option awards at time of employment termination. The modification was to accelerate a portion of the unvested stock options so the shares could be immediately exercisable. According to FASB Interpretation No. 44, *"Accounting for Certain Transactions involving Stock Compensation"* (FIN 44), the result of such a modification is to remeasure the stock options that were modified. The remeasurement of the stock options resulted in an immediate charge of approximately $15,000, which was included in general and administrative expense for the year ended December 31, 2004.

In February 2005, the board of directors approved a modification to all outstanding granted stock option awards, repricing the options from their original exercise price of $0.40 to $0.10. According to FIN 44, the result of such a modification is to account for the modified stock option awards as variable from the date of the modification to the date the awards are exercised, forfeited, or cancelled. For the nine month period ended September 30, 2005, we remeasured approximately 1.1 million outstanding stock options, resulting in an initial deferred stock compensation of approximately $1.6 million. Compensation expense relating to the remeasurement of modified stock options was approximately $3.5 million for the nine month period ended September 30, 2005, which includes approximately $3.0 million of immediate stock compensation charges for vested shares at the time of remeasurement for the nine month period ended September 30, 2005. We expect to record additional amortization of deferred stock-based compensation in the following approximate amounts: $204,000 during the remainder of 2005, $550,000 in 2006, $249,000 in 2007 and $64,000 in 2008.

According to EITF 00-23, *"Issues Related to the Accounting for Stock Compensation under APB Opinion No. 25 and FASB Interpretation No. 44, "* FASB Interpretation No. 28, *"Accounting for Stock Appreciation Rights and Other Variable Stock Option or Award Plans and interpretation of APB Opinions No. 15 and 25"* (FIN 28), is required for variable awards. FIN 28 specifies that compensation should be measured at the end of each period as the amount by which the quoted market value of the shares of the enterprises's stock covered by the grant exceeds the option price or value specified under the plan and that amount should be accrued as a charge to expense over the periods the employee performs the related services.

During the quarter ended December 31, 2005, the board of directors granted additional options to purchase up to 1.4 million shares of common stock to employees. We will record deferred stock-based compensation and additional paid-in capital of approximately $5.9 million in the fourth quarter of 2005 for options granted to employees, which will be amortized as charges to operations over the vesting periods for the options. For options granted to employees during the fourth quarter of 2005, we expect to record approximate additional amortization of deferred stock-based compensation in the following approximate amounts: $152,000 during the remainder of 2005, $1.5 million in 2006, 2007, and 2008 and $1.3 million in 2009.

The table below summarizes the amortization of deferred stock-based compensation to be expensed, including the fourth quarter of 2005 remeasurement of stock options modified in February 2005 and those stock options granted during the fourth quarter of 2005. This table does not reflect the possible modifications that may occur to the option grants for such events as accelerations, forfeitures, terminations or exercises (in thousands):

	Stock Base Compensation from March 31, 2003 (inception) to September 31, 2005	Total Future Stock Based Compensation	October to December 2005	2006	2007	2008	2009
Stock options granted through September 30, 2005 that were below fair value	$ 590	$ 12,795	$ 828	$ 3,336	$ 3,312	$ 3,289	$ 2,030
Modification to an employee's stock option awards	15	—	—	—	—	—	—
Remeasurement of stock options modified in February 2005	3,524	1,067	204	550	249	64	—
2005 fourth quarter remeasurement of stock options modified in February 2005	—	199	156	28	12	3	—
Stock options granted during fourth quarter of 2005 that were below fair value	—	5,864	152	1,466	1,466	1,466	1,314
Total amortization of deferred stock based compensation	$ 4,129	$ 19,925	$ 1,340	$ 5,380	$ 5,039	$ 4,822	$ 3,344

We believe that the adoption of FAS 123R in the beginning of 2006 will have an effect on the additional amortization of deferred stock-based compensation for future periods, but we do not know the specific impact of the adoption because we have not determined which transition method we will adopt.

Beneficial conversion feature. In September 2005, we completed the sale of an additional 15,040,654 shares of Series B Preferred Stock for proceeds of approximately $18.5 million. After evaluating the fair value of our common stock obtainable upon conversion by the stockholders, we determined that the issuance of the Series B Preferred Stock sold in September 2005 resulted in a beneficial conversion feature calculated in accordance with EITF Issue No. 98-5, *"Accounting for Convertible Securities with Beneficial Conversion Features or Contingently Adjustable Conversion Ratios,"* as interpreted by EITF Issue No. 00-27, *"Application of Issue No. 98-5 to Certain Convertible Instruments,"* of approximately $18.5 million which was fully accreted in September 2005 and is recorded as a deemed dividend to preferred stockholders for the nine-month period ended September 30, 2005.

In December 2005, we closed an additional private placement of 12,195,129 shares of Series B Preferred Stock for proceeds of approximately $15 million. We evaluated the fair value of our common stock obtainable upon conversion by the stockholders and determined that the issuance of such convertible securities results in a beneficial conversion feature of approximately $15 million. This amount will be recorded as a deemed dividend to preferred stockholders for the year ended December 31, 2005.

Interest and other income, net. Interest income consists of interest earned on our cash, restricted cash and cash equivalents and short-term investments. Interest expense consists of interest incurred on equipment debt. Other expense consists of cumulative foreign currency translation adjustments related to our wholly owned foreign subsidiary located in Singapore.

We have a limited history of operations. We anticipate that our quarterly results of operations will fluctuate for the foreseeable future due to several factors, including any possible payments made or received pursuant to licensing or collaboration agreements, progress of our research and development efforts, and the timing and outcome of clinical trials and related possible regulatory approvals. Our limited operating history makes predictions of future operations difficult or impossible. Since our inception, we have incurred significant losses. As of September 30, 2005, we had a deficit accumulated during the development stage of approximately $29.5 million. We anticipate incurring additional losses, which may increase, for the foreseeable future.

Results of operations

Nine months ended September 30, 2005 compared to nine months ended September 30, 2004

Revenues. Revenues decreased approximately $34,000 for the nine months ended September 30, 2005 to zero. Revenue earned in 2004 was derived principally from consulting agreements we entered into during our start-up phase under research and development contracts. We have completed its obligations under these agreements and will not recognize any related contract revenue in 2005.

Research and development expenses. Research and development expenses increased by approximately $6.6 million, or 131%, to approximately $11.6 million for the nine months ended September 30, 2005 compared to approximately $5.0 million for the nine months ended September 30, 2004. Research and development expense consists of direct costs which include salaries and related costs of research and development personnel, and the costs of consultants, materials and supplies associated with research and development projects, as well as clinical activities. Indirect research and development costs include facilities, depreciation, and other indirect overhead costs.

The following table discloses the components of research and development expenses reflecting all of our project expenses:

Research and development expenses	Nine months ended September 30, 2004	2005
Direct project costs:		
Personnel, benefits and related costs	$ 902,000	$ 1,539,000
Stock-based compensation	1,000	659,000
Contract R&D, consultants, materials and other costs	2,781,000	4,496,000
Clinical trials	354,000	4,101,000
Total direct costs	4,038,000	10,795,000
Indirect project costs	995,000	846,000
Total	$ 5,033,000	$ 11,641,000

Direct costs increased approximately $6.8 million as a result of approximate increases of $3.7 million, $3.2 million and $0.2 million, respectively, relating to clinical development activities for iloperidone, VEC-162 and VSF-173. During the nine months ended September 30, 2005, we conducted additional clinical development and manufacturing work on iloperidone as we prepared for its pivotal Phase III trial. We also conducted a Phase II clinical trial for VEC-162. Personnel, benefits and related costs increased approximately $637,000 for the nine months ended September 30, 2005 due to an increase in personnel to support the development and clinical trial activities for iloperidone and VEC-162. Stock-based compensation expense for the nine months ended September 30, 2005 was approximately $659,000.

Contract research and development, consulting, materials and other direct costs increased approximately $1.7 million for the nine months ended September 30, 2005, primarily due to regulatory and manufacturing-related development costs of approximately $4.5 million incurred in connection with the manufacturing of clinical supply materials for the iloperidone Phase III and the VEC-162 clinical trial programs. Prior to FDA approval of our products, manufacturing-related costs are included in research and development expense. Clinical trials expense increased approximately $3.7 million for the nine months ended September 30, 2005 due to the cost incurred as we prepared for our pivotal Phase III iloperidone clinical trial that began in the fourth quarter of 2005 and the costs related to the Phase II VEC-162 trial that was conducted in 2005. Indirect project costs also decreased by approximately $150,000 for the nine months ended September 30, 2005 due primarily to the elimination of contract manufacturing activities we previously conducted.

During the remainder of 2005, and thereafter, we expect research and development expenses to continue to increase substantially as we increase our research and development efforts and as our existing and future product candidates proceed through clinical trials.

General and administrative expenses. General and administrative expenses increased approximately $4.3 million, or 341%, to approximately $5.6 million for the nine months ended September 30, 2005 from approximately $1.3 million for the nine months ended September 30, 2004.

The following table discloses the components of our general and administrative expenses:

General and administrative expenses	Nine months ended September 30, 2004	2005
Salaries, benefits and related costs	$ 687,000	$ 946,000
Stock-based compensation	20,000	3,431,000
Legal and consulting expenses	230,000	680,000
Other expenses	330,000	530,000
Total	$ 1,267,000	$ 5,587,000

General and administrative expenses consist of professional fees, salaries and related costs for executive and other administrative personnel and facility costs. Salaries, benefits and related costs increased approximately $259,000 for the nine months ended September 30, 2005 due to an increase in personnel as we continued to develop the administrative structure to support the development and clinical trial activities for iloperidone, VEC-162 and our other product candidates. Stock-based compensation expense was approximately $3.4 million for the nine months ended September 30, 2005 and approximately $20,000 for the same period in 2004.

Legal and consulting costs increased approximately $450,000 for the nine months ended September 30, 2005 due primarily to a higher level of consulting activity in 2005 in support of business development and market research activities related to our lead product candidates. Other expenses increased approximately $200,000 for the nine months ended September 30, 2005, primarily due to insurance and taxes.

During the remainder of 2005, and thereafter, we expect our general and administrative expenses to increase substantially. These increased expenses are expected to be necessary to support our discovery and development efforts and our commercial development activities and to fulfill our reporting and other regulatory obligations applicable to public companies.

Interest and other income, net. Net interest income in the nine months ended September 30, 2005 was approximately $188,000 compared to net interest income of approximately $13,000 in the nine months ended September 30, 2004. Interest income was higher in 2005 due to higher average cash balances for the year and higher short-term interest rates which generated substantially higher interest income than in 2004.

Our interest income and expense for the nine months ended September 30, 2004 and the nine months ended September 30, 2005 are disclosed on the following table:

	Nine months ended September 30, 2004	2005
Interest income	$ 43,000	$ 209,000
Interest expense	(30,000)	(21,000)
Total, net	$ 13,000	$ 188,000

Year ended December 31, 2004 compared to period from March 13, 2003 (inception) to December 31, 2003

Revenues. We recorded revenues of approximately $34,000 and approximately $48,000 for 2004 and 2003, respectively. Revenue earned in 2004 and 2003 was derived principally from consulting agreements we entered into during our start-up phase under research and development contracts. We completed our obligations under these agreements and will not recognize any related contract revenue in 2005.

Research and development expenses. Research and development expenses increased approximately $5.4 million, or 270%, to approximately $7.4 million for the year ended December 31, 2004 compared to approximately $2.0 million for the period from March 13, 2003 (inception) to December 31, 2003.

The following table discloses the components of research and development expenses reflecting all of our project expenses:

Research and development expenses	Period from March 13, 2003 (inception) to December 31, 2003	Year ended December 31, 2004
Direct project costs:		
Personnel, benefits and related costs	$ —	$ 1,154,000
Stock-based compensation	—	2,000
Contract R&D, consultants, materials and other costs	—	3,877,000
Clinical trials	—	916,000
Total direct costs	—	5,949,000
Indirect project costs	2,011,000	1,494,000
Total	$ 2,011,000	$ 7,443,000

Direct costs increased approximately $5.9 million from zero as a result in the shift from contract development activities to the clinical development of iloperidone and VEC-162. Personnel, benefits and related costs increased approximately $1.2 million in 2005 due to an increase in personnel to support the development and clinical trial activities for iloperidone and VEC-162. Personnel costs associated with contract development activities were charged to indirect project costs for the period from March 13, 2003 (inception) to December 31, 2003.

Contract research and development, consulting, materials and other direct costs increased approximately $3.9 million primarily due to clinical manufacturing-related development costs incurred in connection with the manufacturing of clinical supply materials for iloperidone and VEC-162. Prior to FDA approval of our products, manufacturing-related costs are included in research and development expense. Clinical trials expense increased approximately $916,000 due to the cost incurred as we prepared for our iloperidone and VEC-162 clinical trials.

Indirect project costs also decreased by approximately $517,000, due primarily to the elimination of contract manufacturing activities we previously conducted.

General and administrative expenses. General and administrative expenses increased approximately $1.1 million, or 101%, to approximately $2.1 million for the year ended

December 31, 2004 compared to approximately $1.1 million for the period from March 13, 2003 (inception) to December 31, 2003.

The following table discloses the components of our general and administrative expenses:

General and administrative expenses	Period from March 13, 2003 (inception) to December 31, 2003	Year ended December 31, 2004
Salaries, benefits and related costs	$ 21,000	$ 854,000
Stock-based compensation	—	36,000
Legal and consulting expenses	620,000	690,000
Other expenses	412,000	539,000
Total	$ 1,053,000	$ 2,119,000

General and administrative expenses consist of professional fees, salaries and related costs for executive and other administrative personnel, and facility costs. Salaries, benefits and related costs increased approximately $833,000 in 2004 due to an increase in personnel as we continued to develop the administrative structure to support the development and clinical trial activities of our product candidates.

Legal and consulting costs and other expenses increased due primarily to a higher level of consulting activity in 2004 in support of the business development and market research activities related to our lead product candidates.

Interest and other income, net. Net interest income for the year ended December 31, 2004 was approximately $59,000 compared to net interest income of approximately $45,000 for the period from March 13, 2003 (inception) to December 31, 2003. The increase in interest income was attributable to higher average cash balances for the year ended December 31, 2004, and partially offset by an increase in interest expense attributable to an increase in our equipment term loan obligations.

Our interest income and expenses for 2004 and for the period from March 13, 2003 (inception) to December 31, 2003 are disclosed on the following table:

	Period from March 13, 2003 (inception) to December 31, 2003	Year ended December 31, 2004
Interest income	$ 53,000	$ 101,000
Interest expense	(8,000)	(42,000)
Total, net	$ 45,000	$ 59,000

Liquidity and capital resources

We have funded our operations through September 30, 2005 principally with the proceeds of approximately $47.0 million from preferred stock offerings:

Issue	Year	No. shares	Price per share	Approximate amount (in millions)
Preferred Stock, Series A	March, 2003	10,000,000	$ 1.00	$ 10.0
Preferred Stock, Series B	September, 2004	15,040,654	$ 1.23	$ 18.5
Preferred Stock, Series B	September, 2005	15,040,654	$ 1.23	$ 18.5
Total		40,081,308		$ 47.0

Each share of preferred stock is convertible into one share of our common stock.

In September 2005, we completed the sale of an additional 15,040,654 shares of Series B Preferred Stock for proceeds of approximately $18.5 million. After evaluating the fair value of the common stock obtainable upon conversion by the stockholders, we determined that the issuance of the Series B Preferred Stock sold in September 2005 resulted in a beneficial conversion feature of approximately $18.5 million which was fully accreted in September 2005 and is recorded as a deemed dividend to preferred stockholders for the nine-month period ended September 30, 2005.

On December 9, 2005 we completed the final closing of the Series B financing pursuant to which we sold an additional 12,195,129 shares of Series B Preferred Stock at $1.23 per share, or an aggregate purchase price of approximately $15.0 million. As a result, we will record a beneficial conversion charge in the form of deemed dividends of approximately $15.0 million during the fourth quarter of 2005.

In 2003, we entered into a $515,147 line of credit facility to finance the purchase of specified equipment based on lender-approved schedules. The interest rate was fixed at 9.3% per annum. We granted a security interest in the assets purchased under the credit line. During 2004, we had no draw downs under the line of credit. During 2004 and 2003, we repaid $156,446 and $45,010 on the line of credit, respectively. The total indebtedness relating to this line of credit was $470,137, $313,691, and $187,523 as of December 31, 2004 and 2003 and September 30, 2005, respectively.

Cash, restricted cash and cash equivalents

At September 30, 2005, cash, restricted cash and cash equivalents were approximately $22.3 million compared to approximately $16.3 million at December 31, 2004.

Our cash and cash equivalents are highly liquid investments with a maturity of 90 days or less at date of purchase and consist of time deposits, investments in money market funds with commercial banks and financial institutions, and commercial paper of high-quality corporate issuers. As of September 30, 2005, we did not hold any short-term investments other than cash, restricted cash and cash equivalents.

Also, we maintain cash balances with financial institutions in excess of insured limits. We do not anticipate any losses with respect to such cash balances.

Cash flow

Net cash used in operations was approximately $11.8 million and approximately $6.0 million for the nine months ended September 30, 2005 and 2004, respectively. The net loss for the nine months ended September 30, 2005 of approximately $17.0 million was offset primarily by non-cash charges for depreciation and amortization of approximately $316,000, stock-based compensation of approximately $4.1 million, an increase in accrued expenses of approximately $1.2 million principally related to clinical trial expenses, and other net changes in working capital. Net cash used in investing activities for the nine months ended September 30, 2005 was approximately $527,000 and consisted primarily of an investment of approximately $430,000 in restricted cash for a security deposit on our new leased corporate research and development facility. Net cash provided by financing activities for the nine months ended September 30, 2005 was approximately $18.3 million, consisting primarily of net proceeds from the issuance of Series B Preferred Stock of approximately $18.5 million, offset primarily by payments of equipment debt financing obligations of approximately $128,000.

Net cash used in operations was approximately $8.6 million and approximately $2.1 million for the year ended December 31, 2004 and the period from March 13, 2003 (inception) to December 31, 2003, respectively. The net loss for 2004 of approximately $9.5 million was partially offset by non-cash charges for depreciation and amortization of approximately $377,000, an increase in accounts payable and accrued liabilities of approximately $465,000 and other net changes in working capital. Net cash used from investing activities for the year ended December 31, 2004 was approximately $415,000 and consisted primarily of equipment purchases. Net cash from financing activities for 2004 was approximately $18.1 million, which consists primarily of net proceeds from the issuance of Series B Preferred Stock of approximately $18.3 million, offset by principal payments on notes payable and capital lease obligations of approximately $200,000.

Contractual obligations and commitments

The following table summarizes our major contractual obligations at September 30, 2005 and the effects such obligations are expected to have on our liquidity and cash flows in future periods.

Contractual obligations (in thousands)	Total	October to December 2005	2006	2007	2008	2009	2010	After 2010
Operating lease obligations	$ 6,043	$ 57	$ 731	$ 673	$ 567	$ 458	$ 471	$ 3,086
Short and long-term debt	212	65	147	—	—	—	—	—
Total contractual cash obligations	$ 6,255	$ 122	$ 878	$ 673	$ 567	$ 458	$ 471	$ 3,086

We entered into a five-year non-cancelable operating lease agreement for office and laboratory space in June 2003. The lease contains an option to renew for an additional five years on the same terms and conditions and contains a 3% rent escalation clause.

In August 2005, we entered into a ten-year and six-month non-cancelable operating lease agreement for office and laboratory space at a new facility, which is renewable for an additional five-year period at the end of the original term. The lease expires in June 2016.

We will take possession of the lease space in January 2006. The lease includes rent abatement and scheduled annual base rent increases of 3% over the term of the lease. The total amount of the base rent payments and rent abatement will be charged to expense on a straight-line method over the term of the lease (excluding renewal periods). In conjunction with a letter of credit, we collateralized the operating lease with a restricted cash deposit in the amount of $430,420 in September 2005, which is recorded as non-current restricted cash at September 30, 2005. Total leasehold improvements, net of landlord allowances, will be approximately $600,000 for our new office and laboratory facility.

In August 2005, we notified the landlord of our old lease space of our intention to exercise our sub-lease rights in order to enter into a lease for a larger office and laboratory facility. When we take possession of the new lease space in January 2006, we will vacate the current office and laboratory space. According to SFAS 146 *"Accounting for Costs Associated with Exit or Disposal Activities"*, a liability for costs that will continue to be incurred under a contract for its remaining term without economic benefit to the company shall be recognized and measured when the company ceases using the right conveyed by the lease agreement, reduced by estimated sublease rentals that could be reasonably obtained. We expect to incur a charge of approximately $260,000 in the first quarter of 2006 when we move from the current location to the new office and laboratory facility in January 2006. We have included in the table above operating lease obligations related to the old lease space of approximately $288,000, approximately $240,000 and approximately $122,000 for 2006, 2007 and 2008 respectively.

In April 2004, we entered into a capital lease obligation in order to finance certain capital equipment purchases of approximately $92,000. This capital lease had an interest rate of 7.5% and was payable in monthly installments of $3,312 through April 2006. In February 2005, we cancelled this capital lease obligation and settled the obligation in full.

We have entered into agreements with clinical research organizations and other outside contractors who will be responsible for conducting and monitoring our clinical trials for iloperidone and VEC-162. These contractual obligations are not reflected in the table above because we may terminate them without penalty.

In March and June 2004, we entered into separate licensing agreements with Bristol-Myers Squibb and Novartis, respectively, for the exclusive rights to develop and commercialize our three compounds in clinical development. In consideration for these rights, we paid a $500,000 non-refundable fee for each of the compounds. We are obligated to make additional payments under the conditions in the agreements upon the achievement of specified clinical, regulatory and commercial milestones. If the products are successfully commercialized we will be required to pay certain royalties based on net sales for each of the licensed products. The amount, timing and likelihood of these payments are unknown and will depend on the successful outcome of future clinical trials, regulatory filings, favorable FDA regulatory approvals and growth in product sales.

We expect to incur losses from operations for the foreseeable future. We expect to incur increasing research and development expenses, including expenses related to additions to personnel and clinical trials. We expect that our general and administrative expenses will increase in the future as we expand our business development, legal and accounting staff, add infrastructure and incur additional costs related to being a public company, including directors' and officers' insurance, investor relations programs and increased professional fees. Our future capital requirements will depend on a number of factors, including our continued progress of our research and development of product candidates, the timing and outcome of regulatory

approvals, payments received or made under potential collaborative agreements, the costs involved in preparing, filing, prosecuting, maintaining, defending and enforcing patent claims and other intellectual property rights, the acquisition of licenses to new products or compounds, the status of competitive products, the availability of financing and our or our potential partners' success in developing markets for our product candidates. Based on our current operating plans, and assuming the sale of shares of our common stock in this offering at an initial public offering price of $ per share (the mid-point of the price range set forth on the cover page of this prospectus), we believe that the proceeds from this offering, together with our existing cash, restricted cash and cash equivalents, will be sufficient to meet our anticipated operating needs until mid-2007, and after that time we will require additional capital. We believe that if we sell the shares of our common stock in this offering at an initial public offering price of $ per share ($1.00 lower than the mid-point of the price range set forth on the cover page), the resultant reduction in proceeds we receive from the offering would cause us to require additional capital earlier, in . Without the proceeds from this offering, we believe that our existing cash, restricted cash and cash equivalents will be sufficient to fund our operating expenses, debt repayments and capital expenditure until mid-2006 due to our existing clinical trial commitments.

Except for the equipment debt facility described above, we have no other lines of credit or other committed sources of capital. To the extent our capital resources are insufficient to meet future capital requirements, we will need to raise additional capital or incur indebtedness to fund our operations. We cannot assure you that additional debt or equity financing will be available on acceptable terms, if at all. If adequate funds are not available, we may be required to delay, reduce the scope of or eliminate our research and development programs, reduce our commercialization efforts or obtain funds through arrangements with collaborative partners or others that may require us to relinquish rights to certain product candidates that we might otherwise seek to develop or commercialize. Any future funding may dilute the ownership of our equity investors.

Quantitative and qualitative disclosures about market risk

Our exposure to market risk is currently confined to our cash, restricted cash and cash equivalents that have maturities of less than three months. We currently do not hedge interest rate exposure. We have not used derivative financial instruments for speculation or trading purposes. Because of the short-term maturities of our cash, restricted cash and cash equivalents, we do not believe that an increase in market rates would have any significant impact on the realized value of our investments, but may increase the interest expense associated with any long-term debt or long-term lease obligations.

Effects of inflation

Our most liquid assets are cash, restricted cash and cash equivalents. Because of their liquidity, these assets are not directly affected by inflation. We also believe that we have intangible assets in the value of our intellectual property. In accordance with generally accepted accounting principles, we have not capitalized the value of this intellectual property on our balance sheet. Due to the nature of this intellectual property, we believe that these intangible assets are not affected by inflation. Because we intend to retain and continue to use our equipment, furniture and fixtures and leasehold improvements, we believe that the incremental inflation related to replacement costs of such items will not materially affect our operations. However, the rate of inflation affects our expenses, such as those for employee

compensation and contract services, which could increase our level of expenses and the rate at which we use our resources.

Off balance sheet arrangements

We have no off balance sheet arrangements.

Recent accounting pronouncements

In December 2004, the FASB issued SFAS 123R, *"Share-Based Payment,"* a revision of SFAS 123, *"Accounting for Stock-based Compensation."* SFAS 123R requires public companies to recognize expense associated with share-based compensation arrangements, including employee stock options, using a fair value-based option pricing model, and eliminates the alternative to use APB 25's intrinsic value method of accounting for share-based payments. In April 2005, the SEC announced that the effective date to implement SFAS 123R has been delayed for certain public companies. Accordingly, we plan to begin recognizing the expense associated with our share-based payments, as determined using a fair value-based method, in our statement of operations beginning on January 1, 2006. Adoption of the expense provisions of SFAS 123R is expected to have a material impact on our results of operations. The standard generally allows two alternative transition methods for public companies: modified prospective application without restatement of prior interim periods in the year of adoption; and retroactive application with restatement of prior financial statements to include the same amounts that were previously included in pro forma disclosures. We have not determined which transition method we will adopt.

In order to provide implementation guidance related to SFAS 123R, the SEC issued Staff Accounting Bulletin ("SAB") No. 107, *"Share-Based Payment"* in March 2005. SAB 107 provides guidance on numerous issues such as valuation methods (including assumptions such as expected volatility and expected term), the classification of compensation expense, capitalization of compensation cost related to share-based payment arrangements, the accounting for income tax effects of share-based payment arrangements upon adoption of SFAS 123R, and disclosures in MD&A subsequent to adoption of SFAS 123R.

SFAS No. 154, *"Accounting Changes and Error Corrections— a replacement of APB Opinion No. 20 and FASB Statement No. 3"* was issued by the FASB in May 2005. This Statement replaces APB Opinion No. 20, *"Accounting Changes"*, and FASB Statement No. 3, *"Reporting Accounting Changes in Interim Financial Statements",* and changes the requirements for the accounting for and reporting of a change in accounting principle. SFAS No. 154 applies to all voluntary changes in accounting principle and requires retrospective application to prior periods' financial statements of changes in accounting principle, unless it is impracticable to determine either the period-specific effects or the cumulative effect of the change. This Statement also requires that a change in depreciation, amortization, or depletion method for long-lived, non-financial assets be accounted for as a change in accounting estimate affected by a change in accounting principle. This statement is effective for accounting changes and corrections of errors made in fiscal years beginning after December 15, 2005. SFAS No. 154 is not expected to have a material effect on our consolidated financial statements.

In June 2005, the FASB Staff issued FASB Staff Position 150-5 (FSP 150-5), *"Issuer's Accounting under FASB Statement No. 150 for Freestanding Warrants and Other Similar Instruments on Shares that are Redeemable."* FSP 150-5 addresses whether freestanding warrants and other similar instruments on shares that are redeemable, either puttable or mandatorily redeemable,

would be subject to the requirements of FASB Statement No. 150, *"Accounting for Certain Financial Instruments with Characteristics of Both Liabilities and Equity,"* regardless of the timing of the redemption feature or the redemption price. The FSP is effective after June 30, 2005. Adoption of the FSP did not have a material effect on our financial condition or results of operations.

Critical accounting policies

Our discussion and analysis of our financial condition and results of operations are based on our consolidated financial statements, which have been prepared in accordance with accounting principles generally accepted in the United States. The preparation of these financial statements requires us to make estimates and judgments that affect the reported amounts of assets, liabilities and expenses. On an ongoing basis, we evaluate our estimates and judgments, including those related to revenue recognition, accrued expenses, fair valuation of stock related to stock-based compensation and income taxes. We based our estimates on historical experience and on various other assumptions that we believe to be reasonable under the circumstances, the results of which form the basis for making judgments about the carrying values of assets and liabilities that are not readily apparent from other sources. Actual results may differ from these estimates under different assumptions or conditions.

We believe the following critical accounting policies affect our more significant judgments and estimates used in the preparation of our financial statements.

Revenue recognition. Contract revenue is recognized upon delivery of products to customers. Revenue earned under research and development contracts are recognized in accordance with the proportional performance method outlined in Staff Accounting Bulletin No. 104 whereby the extent of progress toward completion is measured on the cost-to-cost basis; however, revenue recognized at any point will not exceed the cash received. When the current estimates of total contract revenue and contract cost indicate a loss, a provision for the entire loss on the contract is made in the period which it becomes probable. We have generated some revenues earned under research and development contracts that were derived principally from consulting agreements we entered into during the company start-up phase to defray research costs.

We will use the substantive milestone payment method of revenue recognition when all milestones to be received under contractual arrangements are determined to be substantive, at-risk and the culmination of an earnings process. Substantive milestones are payments that are conditioned upon an event requiring substantive effort, when the amount of the milestone is reasonable relative to the time, effort and risk involved in achieving the milestone and when the milestones are reasonable relative to each other and the amount of any up-front payment. If these criteria are not met the timing of the recognition of revenue from the milestone payment may vary.

Accrued expenses. As part of the process of preparing financial statements we are required to estimate accrued expenses. This process involves identifying services that have been performed on our behalf and estimating the level of service performed and the associated cost incurred for such service as of each balance sheet date in our financial statements. Examples of estimated accrued expenses include professional service fees, such as lawyers and accountants, and contract service fees such as amounts paid to clinical monitors, data management organizations and investigators in conjunction with clinical trials, and fees paid to contract manufacturers in conjunction with the production of clinical materials. In connection with such

service fees, our estimates are most affected by our understanding of the status and timing of services provided relative to the actual levels of services incurred by such service providers. The majority of our service providers invoice us monthly in arrears for services performed. In the event that we do not identify certain costs that have begun to be incurred or we under- or over-estimate the level of services performed or the costs of such services, our reported expenses for such period would be too low or too high. The date on which certain services commence, the level of services performed on or before a given date and the cost of such services are often judgmental. We make these judgments based upon the facts and circumstances known to us in accordance with generally accepted accounting principles.

Stock-based compensation. We have elected to follow APB Opinion No. 25, Accounting for Stock Issued to Employees, and related interpretations, in accounting for our stock-based compensation plans, rather than the alternative fair value accounting method provided for under SFAS No. 123, Accounting for Stock-Based Compensation. In the notes to our financial statements we provide pro forma disclosures in accordance with SFAS No. 123 and related pronouncements. We account for transactions in which services are received in exchange for equity instruments based on the fair value of such services received from non-employees or of the equity instruments issued, whichever is more reliably measured, in accordance with SFAS No. 123 and EITF Issue No. 96-18, Accounting for Equity Instruments that Are Issued to Other than Employees for Acquiring, or in Conjunction with Selling, Goods or Services. The two factors which most affect charges or credits to operations related to stock-based compensation are the fair value of the common stock underlying stock options for which stock-based compensation is recorded and the volatility of such fair value. If our estimates of the fair value of these equity instruments are too high or too low, it would have the effect of overstating or understating expenses. Because shares of our common stock have not been publicly traded, market factors historically considered in valuing stock and stock option grants include comparative values of public companies discounted for the risk and limited liquidity provided for in the shares we are issuing, pricing of private sales of our convertible preferred stock and the effect of events that have occurred between the time of such grants, economic trends, perspective provided by investment banks and the comparative rights and preferences of the security being granted compared to the rights and preferences of our other outstanding equity.

Income taxes. As part of the process of preparing our financial statements we are required to estimate our income taxes in each of the jurisdictions in which we operate. We account for income taxes by the liability method in accordance with the provisions of SFAS No. 109, *"Accounting for Income Taxes".* Under this method, deferred income taxes are recognized for tax consequences in future years of differences between the tax bases of assets and liabilities and their financial reporting amounts at each year-end, based on enacted laws and statutory tax rates applicable to the periods in which the difference are expected to affect taxable income. Valuation allowances are provided if, based upon the weight of available evidence, it is more likely than not that some or all of the deferred tax assets will not be realized.

We have not recorded any tax provision or benefit for the years ended December 31, 2003 and 2004. We have provided a valuation allowance for the full amount of our net deferred tax assets since realization of any future benefit from deductible temporary differences and net operating loss carry forwards cannot be sufficiently assured at December 31, 2003 and 2004. At December 31, 2003 and 2004, we had federal net operating loss carryforwards of approximately $1.1 million and approximately $3.9 million, respectively, available to reduce future taxable income, which will begin to expire in 2023. Under the provisions of the Internal

Revenue Code, certain substantial changes in our ownership may result in a limitation on the amount of net operating loss carryforwards that can be used in future years.

Net loss per share. Net loss attributable to common stockholders per share is calculated in accordance with SFAS No. 128, *"Earnings per Share,"* and Staff Accounting Bulletin ("SAB") No. 98. Basic earnings per share ("EPS") is calculated by dividing the net income or loss attributable to common stockholders by the weighted average number of shares of common stock and Series A and Series B Preferred Stock outstanding for the period, reduced by the weighted average unvested common shares subject to repurchase. In accordance with Emerging Issues Task Force 03-06, "Participating Securities and the Two Class Method Under SFAS 128" ("EITF 03-06"), Series A and Series B Preferred Stock has been included in basic and diluted earnings per share as if the shares of Series A and Series B Preferred Stock were converted to common stock on a 1-for-1 basis.

Diluted EPS is computed by dividing the net income or loss attributable to common stockholders by the weighted average number of common stock equivalents outstanding for the period determined using the treasury-stock method. Common stock equivalents include stock options and warrants but only to the extent that their inclusion is dilutive. We incurred a net loss in all periods presented, causing inclusion of any potentially dilutive securities to have an anti-dilutive affect, resulting in dilutive loss per share attributable to common stockholders and basic loss per share attributable to common stockholders being equivalent. We did not have any common shares issued for nominal consideration as defined under the terms of SAB No. 98, which would be included in EPS calculations.

Business

Overview

We are a biopharmaceutical company focused on the development and commercialization of small molecule therapeutics, with exclusive worldwide commercial rights to three product candidates in clinical development for various central nervous system disorders. Our lead product candidate, iloperidone, is an atypical antipsychotic for the treatment of schizophrenia and bipolar disorder and is in a pivotal Phase III trial for schizophrenia. Our second product candidate, VEC-162, is a melatonin agonist for the treatment of insomnia and depression which is entering a pivotal Phase III trial for insomnia. VEC-162 is also ready for Phase II trials for the treatment of depression. Our third product candidate, VSF-173, is a compound for the treatment of excessive daytime sleepiness and is ready for a Phase II trial. Each of these product candidates benefits from new chemical entity (NCE) patent protection and may offer substantial advantages over currently approved therapies.

We expect to complete our pivotal Phase III trial for iloperidone in the first half of 2007. If this trial is successful, we will file a NDA for approval with the FDA later that year. We recently generated positive efficacy and safety data in a Phase II trial of VEC-162 for insomnia and expect to begin a pivotal Phase III trial early in 2006. We also expect to begin a Phase II trial of VSF-173 for excessive daytime sleepiness in the second half of 2006. Assuming successful outcomes of our clinical trials and approval by the FDA, we expect to commercialize iloperidone and VSF-173 with our own sales force in the U.S. and expect to commercialize VEC-162 through a strategic partnership with a global pharmaceutical company.

Our three product candidates target large prescription markets with significant unmet medical needs. Sales of schizophrenia drugs exceeded $14 billion worldwide in 2004, according to *World Review Analyst* by IMS, a leading pharmaceutical market research company. These sales were achieved despite the safety concerns, moderate efficacy and poor patient compliance that are associated with these drugs. We believe that iloperidone may address some of these shortcomings, based on its significantly reduced side effect profile observed in trials involving over 2,000 patients to date and based on further improvements to the product we plan to develop as part of our lifecycle management strategy. According to IMS, in 2004 the insomnia market exceeded $3.5 billion in worldwide sales and the depression market accounted for worldwide sales in excess of $20 billion. However, the approved drugs in both the insomnia and depression markets have sub-optimal safety profiles and demonstrate only moderate efficacy. We believe VEC-162 may represent a breakthrough in each of these markets, based on the product's efficacy, safety and novel mechanism of action. The excessive daytime sleepiness market was approximately $440 million in worldwide sales in 2004. Few available drugs exist to treat this condition, and each of the available drugs has limitations. We believe that VSF-173 may represent a safe and effective alternative treatment in this growing market.

Our team is comprised of experienced pharmaceutical industry executives, and our scientific team possesses deep expertise in clinical development and in pharmacogenetics and pharmacogenomics, or collectively, PG. PG is the scientific discipline that examines both genetic variations among people that influence response to a particular drug, and the multiple pathways through which drugs affect people. Our founder and Chief Executive Officer, Mihael H. Polymeropoulos, M.D., commenced our operations in early 2003 after leading the Pharmacogenetics Department at Novartis.

We believe that the combination of our clinical development expertise and our PG expertise will enable us to shorten our drug development timeline relative to traditional approaches of drug discovery and development, and to provide additional differentiation for our product candidates. We also believe that this combination will provide us with preferential access to compounds discovered by other pharmaceutical companies. In June 2004 we acquired from Novartis the exclusive worldwide commercial rights to iloperidone and VSF-173. Our team's expertise in clinical development and PG also allowed us access to VEC-162, which had originally been developed by Bristol-Myers Squibb Company (BMS). Based on its strong pre-clinical and clinical safety data, we acquired exclusive worldwide commercial rights to VEC-162 from BMS in March 2004.

Our strategy

Our goal is to create a leading biopharmaceutical company focused on developing and commercializing products that address critical unmet medical needs through the application of our drug development and PG expertise. The key elements of our strategy to accomplish this goal are to:

- *Pursue the clinical development of our current product candidates.* We believe that our ongoing pivotal Phase III trial for iloperidone will complete the development work required to file an NDA to market and sell the drug commercially. We also believe that the Phase III trial we plan to start in early 2006 for VEC-162 will be pivotal for regulatory approval of the compound. We intend to initiate a Phase II trial for VSF-173 in the second half of 2006. We have committed, and will continue to commit, substantial resources towards completing the development of, and obtaining regulatory approvals for, our product candidates.
- *Develop a focused commercialization capability in the United States.* Because the number of physicians accounting for the majority of prescriptions in the United States for schizophrenia and excessive daytime sleepiness is relatively small, we believe that we can cost-effectively develop our own sales force to market and sell iloperidone and VSF-173.
- *Enter into strategic partnerships to extend our commercial reach.* Given the large number of physicians treating insomnia and depression, we intend to enter into a global strategic partnership with a large pharmaceutical company to market, distribute and sell VEC-162. Additionally, we intend to seek commercial partners for iloperidone and VSF-173 outside of the United States.
- *Apply our PG expertise to differentiate our products.* We believe that our PG expertise will yield new insights into our product candidates. These insights may enable us to target our products to certain patient populations and to identify unexpected conditions for our product candidates to treat. We believe this expertise will enable us to differentiate and extend the lifecycle of each of our product candidates. This may also include the development of companion diagnostic tests to help physicians identify patient populations that will realize greater benefits from our compounds.
- *Expand our product portfolio through the acquisition of additional compounds.* We intend to continue to draw upon our clinical development and PG expertise to identify and pursue the acquisition of additional clinical-stage compounds.

Development programs

We have the following product candidates in clinical trials:

Product candidate	Target indications	Clinical status
Iloperidone (Oral)	Schizophrenia	In pivotal Phase III trial
	Bipolar Disorder	Ready for Phase II trial
Iloperidone (Depot)	Schizophrenia	Ready for Phase II trial
VEC-162	Insomnia	Entering pivotal Phase III trial
	Depression	Ready for Phase II trial
VSF-173	Excessive Daytime Sleepiness	Ready for Phase II trial

Iloperidone

We are developing iloperidone, an oral small molecule, for the treatment of schizophrenia and bipolar disorder. In three short-term and three long-term trials comprising over 2,000 patients, iloperidone demonstrated reduced side effects relative to current antipsychotic drugs. We are currently conducting a pivotal Phase III trial for iloperidone for schizophrenia in approximately 600 patients to confirm its efficacy, which has also been observed in previous trials. Based on our End of Phase IIb meeting with the FDA in September 2005, we believe we will be able to file an NDA for iloperidone for schizophrenia if we succeed in demonstrating its efficacy in this trial. If iloperidone obtains regulatory approval, we believe it will represent a differentiated new therapy for schizophrenia.

Therapeutic opportunity

Schizophrenia is a chronic, debilitating mental disorder characterized by hallucinations, delusions, racing thoughts and other psychotic symptoms (collectively referred to as “positive symptoms”), as well as moodiness, anhedonia (inability to feel pleasure), loss of interest, eating and sleep disturbances, and difficulty concentrating (collectively referred to as “negative symptoms”). Schizophrenia develops in late adolescence or early adulthood in approximately 1% of the world’s population. Genetic and environmental factors are believed to be responsible for the disease. Most schizophrenia patients today are treated with drugs known as “atypical” antipsychotics, which were first approved in the U.S. in the late 1980s. Atypical antipsychotics currently comprise over 90% of prescriptions for schizophrenia, having largely replaced “typical” antipsychotics, which were first introduced in the 1950s and are now generic. Atypical antipsychotics are generally regarded as having improved side effect profiles and efficacy in treating negative symptoms relative to typical antipsychotics. According to IMS, the global market for atypical antipsychotics exceeded $13 billion in 2004. Currently approved atypical antipsychotics include olanzapine (Zyprexa®, Eli Lilly and Company), risperidone (Risperdal®, Johnson & Johnson), quetiapine (Seroquel®, AstraZeneca PLC), aripiprazole (Abilify®, BMS), ziprasidone (Geodon®, Pfizer Inc.), and generic clozapine.

Limitations of current treatments

The treatment of schizophrenia remains challenging because currently approved antipsychotics often induce serious side effects and offer only modest efficacy. Side effects include weight gain, diabetes, extrapyramidal symptoms (involuntary bodily movements), hyperprolactinemia

(an elevated secretion of the hormone prolactin which can lead to sexual dysfunction and breast development and milk secretion in women and men), increased somnolence (sleepiness) and cognition difficulties. Additionally, nearly half of all patients on a single atypical antipsychotic fail to achieve a clinically meaningful response, which is defined as a 20% or greater reduction in symptoms. The side effect profile and modest efficacy of currently available antipsychotics result in poor patient compliance to their prescribed drug regimen. Consequently, there remains a high degree of dissatisfaction with atypical antipsychotics among physicians and patients. Research by LEK Consulting LLC, a leading consulting firm, supports this, showing that physicians employ a "trial-and-error" approach of prescribing a series of different atypical antipsychotics as they attempt to balance side effects and symptom management in each patient. In addition, the recent CATIE (Clinical Antipsychotic Trials of Interventional Effectiveness) study, conducted by the National Institute of Mental Health and reported in *The New England Journal of Medicine,* found that 74% of patients taking antipsychotics discontinued treatment within 18 months. The average time to discontinuation for these patients in the CATIE study was approximately 6 months.

Potential advantages of iloperidone

In addition to the efficacy observed in clinical trials to date, the experience with iloperidone thus far suggests that the compound may provide benefits to patients beyond those provided by currently available drugs:

- *Safety.* Short- and long-term safety trials have shown that patients who used iloperidone had reduced side effects relative to currently available antipsychotics, including low weight gain, no induction of diabetes, low extrapyramidal symptoms, including no akathisia (inability to sit still), no hyperprolactinemia, low incidence of sleepiness and low negative effects on cognition relative to placebo. Like many other atypical antipsychotics, iloperidone is associated with a prolongation of the heart's QTc interval, but in no instance did any patient taking iloperidone in a clinical trial have an interval exceeding a 500 millisecond threshold that the FDA has identified as being of particular concern. We believe that the safety profile of iloperidone may result in improved patient compliance with their treatment regimen.
- *Depot formulation.* We are developing a four-week injectable depot formulation for iloperidone, which we believe will be a compelling complement to our oral formulation for both physicians and patients. Novartis conducted a two-month Phase I/ IIa safety trial of this formulation in schizophrenia patients, in which it demonstrated the benefit of consistent release over a four-week time period with no greater side effects relative to oral dosing. Further development of this formulation will be an immediate priority for us following the completion of the ongoing pivotal Phase III trial of the oral formulation. The commercial potential for our depot formulation has been demonstrated by the success of the depot formulation for risperidone, Risperdal® Consta®, which achieved worldwide sales of $310 million in 2004, its first full year on the market. We believe that our four-week depot formulation for iloperidone will be an attractive alternative to Risperdal Consta, which is a two-week depot.

Additionally, we plan to continue to apply our PG expertise to develop tools that may allow physicians to avoid the "trial-and-error" approach to prescribing antipsychotic medications for their patients:

- *PG evaluation of iloperidone's efficacy.* In a retrospective analysis of prior clinical data, we discovered a statistically significant correlation suggesting that certain patients are both more likely to respond to iloperidone and to enjoy better treatment results relative to the general schizophrenia patient population. These patients have a common mutation, or single

nucleotide polymorphism (SNP), in a gene linked to central nervous system function, that is estimated to occur in approximately 70% of schizophrenia patients. We have developed a genetic test which we are using in our current pivotal Phase III trial to confirm this correlation. According to market research we conducted with LEK Consulting, physicians treating schizophrenia patients would enthusiastically welcome a genetic test that would enable them to identify likely responders to an antipsychotic, given the unpredictable efficacy and serious side effects currently associated with atypical antipsychotics, and be more likely to prescribe iloperidone.

- *PG evaluation of iloperidone's safety.* We have also discovered that patients with an uncommon SNP of a well understood gene affecting drug metabolism experience higher levels of iloperidone in their blood and are at an elevated risk of a QTc interval prolongation while taking iloperidone. This genetic attribute is estimated to occur in approximately 5-10% of schizophrenia patients. We believe that certain physicians may choose to test patients for this SNP if they have a concern about QTc interval prolongation with respect to a particular patient.

We intend to make one simple blood test for both markers available through national reference laboratories.

Overview of prior Phase III clinical trials

Novartis conducted three short-term (six-week) pivotal Phase III trials with iloperidone. In each of these trials, one or more dose levels of iloperidone achieved statistically significant superiority to placebo on the standard scales for measuring efficacy in schizophrenia, either the Positive and Negative Symptom Scale (PANSS) or Brief Psychiatric Rating Scale (BPRS). Each of these scales is a subjective test administered by a clinician measuring a patient across a range of potential schizophrenia symptoms. In only one of the three pivotal Phase III trials was the declared target dose demonstrated to have statistically significant efficacy better than placebo, which is required for the results of a trial to support an efficacy claim with the FDA. With the need to conduct at least one more Phase III trial to be able to file for approval, Novartis elected instead to discontinue the development of iloperidone.

The table below summarizes the efficacy results from the previous short-term pivotal Phase III trials:

Trial number	Number of patients	Doses(1)	PANSS scale improvement(2)	Significance vs. placebo(3)
ILP 3000	621	placebo	-4.6	n/a
		4 mg/day	-9.0	Not significant
		8 mg/day(4)	***-7.8***	***Not significant***
		12 mg/day(4)	***-9.9***	***p < 0.05***
ILP 3004	616	placebo	-3.5	n/a
		4-8 mg/day	-9.4	p< 0.02
		10-16 mg/day	***-11.1***	***p< 0.001***
ILP 3005	710	placebo	-7.6	n/a
		12-16 mg/day	***-11.0***	***Not significant***
		20-24 mg/day	-14.0	p< 0.01

(1) Declared dose (the dose for which a drug must show statistically significant improvement vs. placebo) is italicized and bolded.

(2) As patients improve, their PANSS scale score decreases. Baseline scores for enrollees in the trials were 94.5 (ILP 3000), 94.3 (ILP 3004) and 94.7 (ILP 3005).

(3) This is represented by p value, which measures likelihood that a difference between drug and placebo is due to random chance. A $p < 0.05$ means the chance that the difference is due to random chance is less than 5%, and is a commonly accepted threshold for denoting a meaningful difference between drug and placebo.

(4) Declared dose in this trial was a composite of 8 and 12 mg/day.

We have made several observations about these previous Phase III trials that suggest both reasons for their failure and ways in which we may improve the chances of success in our ongoing pivotal Phase III trial.

- *Patients who took the drug at our target dose improved significantly.* At the dose for which we intend to seek approval (24 mg/day), iloperidone achieved statistically significant efficacy in the ILP 3005 trial. This gives us confidence that we can replicate that success in our ongoing pivotal Phase III trial.
- *Low doses partially explain the mixed efficacy results of the ILP 3000 trial.* We believe that this trial failed principally because the doses of iloperidone administered were too low. This is supported by the efficacy of iloperidone that was observed at higher doses in the other pivotal trials.
- *Patient drop-outs explain the mixed efficacy results of the ILP 3005 trial.* An exceptionally high number of patients dropped out of this study early and before they had the chance of achieving therapeutic blood levels of the drug. While high drop-out rates are common in studies of schizophrenia drugs, two issues may have exacerbated the drop-out problem in this trial: first, the trial was primarily on an outpatient basis, which is unusual for clinical trials of antipsychotic therapies, and second, the patients in the trial had to take the drug in a four-pill, twice-daily regimen. Both factors had a negative effect on patient compliance and led to a very high drop-out rate. We retrospectively analyzed the data from the Novartis trials and determined that, overall, the drop-outs were not due to other problems with iloperidone, and we have further demonstrated that iloperidone achieved statistically significant efficacy among those patients who remained enrolled long enough to achieve therapeutic blood levels of the drug.
- *The FDA has agreed that we may analyze the data generated from the trials in a way that more appropriately addresses early drop-outs.* Under a standard “last observation carried forward” or “LOCF” statistical model used by Novartis to analyze the prior trial data, experts in the field of clinical trial statistical analysis have noted that results may be significantly biased in certain circumstances by the presence of early patient drop-outs. To correct for this, these experts recommend models such as a “mixed-method repeated measures” or “MMRM” statistical model to analyze data from clinical trials with early patient drop-outs. While the FDA has not previously approved a drug on the basis of efficacy measured with an MMRM model, we discussed our intent to use it with the FDA in an August 2005 guidance meeting, and they have agreed that the LOCF method may be biased under these circumstances and that an MMRM model approach is valid for our ongoing pivotal Phase III trial. We retrospectively analyzed the Phase III data using an MMRM model and determined that iloperidone demonstrated statistically significant efficacy at Novartis’ declared dose in two of three previous pivotal trials (trials ILP 3004 and ILP 3005), versus just one trial under an LOCF model (trial ILP 3004).

Though not required for registration, Novartis also conducted three long-term (52-week) Phase III trials of iloperidone. In these trials, which involved more than 1,300 patients, Novartis measured the safety and time to discontinuation of iloperidone at doses ranging from 4 mg/day to 16 mg/day compared to the antipsychotic haloperidol. Iloperidone demonstrated

strong safety results and was statistically non-inferior to the efficacy of haloperidol in time to discontinuation of therapy.

Overview of our ongoing pivotal Phase III trial

In November 2005, we initiated our pivotal Phase III trial to evaluate iloperidone for the treatment of patients with schizophrenia. The trial is a randomized, double-blind, placebo- and active-controlled Phase III trial of approximately 600 patients with schizophrenia. To have a successful clinical trial, we need to demonstrate that iloperidone has statistically significant efficacy better than placebo. The active control is present to validate the design of the trial and to increase the chances that trial participants will receive some form of treatment while participating in the trial. Patients will receive four weeks of inpatient treatment in the trial. The iloperidone formulation being used in the study is an oral, twice-daily dose of 12 mg, or 24 mg per day. The trial is being conducted in the United States and India by Quintiles Transnational, a contract research organization. Patient dosing began in November 2005 and will continue through early 2007.

We believe that if this trial is successful, our data and documentation on iloperidone will be adequate to support both United States and European regulatory filings of oral iloperidone. We conducted an End of Phase IIb meeting with the FDA in September 2005, during which the agency agreed that this trial's design is adequate to measure short-term efficacy in schizophrenia. The FDA also agreed that with success in this trial, the iloperidone package would be sufficient for filing an NDA.

Potential indication for bipolar disorder

In addition to schizophrenia, we believe iloperidone may be effective in treating bipolar disorder. Most of the approved atypical antipsychotics have received approval for bipolar disorder subsequent to commercializing for the treatment of schizophrenia. Approximately 25% of atypical antipsychotic prescriptions are for the treatment of bipolar disorder, according to LEK Consulting. Iloperidone is ready for an initial Phase II trial in bipolar disorder.

Commercialization

We expect to build our own sales force to market iloperidone directly to psychiatrists and other target physicians in the U.S. Because the U.S. psychiatric community is relatively small, we believe that we can cost-effectively develop our own sales force to market and sell iloperidone. Outside of the United States, we expect to find commercial partners for iloperidone.

Intellectual property

Iloperidone and its metabolites, formulations, and uses are covered by a total of nine patent and patent application families worldwide. The primary new chemical entity (NCE) patent covering iloperidone expires normally in 2011 in the United States and 2010 in most of the major markets in Europe. In the United States, the Hatch-Waxman Act of 1984 provides for an extension of NCE patents for a period of up to five years following the expiration of the patent covering that compound to compensate for time spent in development. We believe that iloperidone will qualify for the full five-year patent term extension. In Europe, similar legislative enactments provide for five-year extensions of NCE patents through the granting of Supplementary Protection Certificates, and we believe that iloperidone will qualify for this extension as well. Consequently, assuming that we are granted all available extensions by the

FDA and European regulatory authorities and that we receive regulatory approval, we expect that our rights to commercialize iloperidone will be exclusive until 2016 in the United States and until 2015 in Europe. Additionally, the patent application covering the depot formulation of iloperidone, if it is granted, will expire normally in 2022. Several other patent applications covering uses, formulations and derivatives relating to iloperidone extend beyond 2020. Pursuant to a recent European Union directive, we may also acquire the exclusive right in most European Union countries to market iloperidone for a period of 10 years from the date of its regulatory approval in Europe (with the possibility for a further one-year extension), even though the European patents covering iloperidone will likely expire prior to the end of such 10-year period. No generic versions of iloperidone would be permitted to be marketed or sold during this 10-year period in most European countries. See “Patents and Intellectual Property” below for a more complete description of our intellectual property rights.

We acquired worldwide, exclusive rights to the NCE patent covering iloperidone and certain related intellectual property from Novartis under a sublicense agreement we entered into in 2004. Please see “—License agreements” below for a more complete description of the rights we acquired from Novartis with respect to iloperidone.

VEC-162

VEC-162 is an oral small molecule entering Phase III trials for the treatment of insomnia. The compound exhibits highly selective binding to the melatonin-1 (MT1) and melatonin-2 (MT2) receptors, which are thought to govern the body’s natural sleep/wake cycle. Compounds that bind to these receptors are thought to be able to help treat sleep disorders, and additionally are believed to offer potential benefits in depression. We intend to commence enrollment of a Phase III trial of VEC-162 for insomnia in early 2006. VEC-162 is also ready to commence a Phase II trial for the treatment of depression.

Therapeutic opportunity

Industry sources estimate that of the 73 million U.S. adults who suffer from some form of insomnia, only approximately 11 million currently receive treatment. Sleep disorders are segmented into three major categories: primary insomnia, secondary insomnia and circadian rhythm sleep disorders (CRSD). Primary insomnia is a symptom complex that comprises difficulty falling asleep or staying asleep, or non-refreshing sleep, in combination with daytime dysfunction or distress. The symptom complex can be an independent disorder (primary insomnia) or be a result of another condition such as depression or anxiety (secondary insomnia). CRSD results from a misalignment of the sleep/wake cycle and an individual’s daily activities or lifestyle. The circadian rhythm is the rhythmic output of the human biological clock and is governed by melatonin levels in the bloodstream. Both the timing of behavioral events (activity, sleep, and social interactions) and the environmental light-dark cycle result in a sleep/wake cycle that follows the circadian rhythm. Examples of CRSD include transient disorders such as jet lag and chronic disorders such as shift work sleep disorder (SWSD). The American Academy of Sleep Medicine estimates that 25% of all sleep problems are directly related to CRSD. In 2004, the sleep disorder drug market exceeded $3.5 billion in global sales, according to IMS.

There are a number of drugs approved and prescribed for patients with sleep disorders. The most commonly prescribed drugs are hypnotics, such as zolpidem (Ambien®, Sanofi-Aventis), eszopiclone (Lunesta®, Sepracor Inc.) and zaleplon (Sonata®, King Pharmaceuticals, Inc.) These drugs work by acting upon a set of brain receptors known as GABA receptors. Several drugs in

development, including indiplon (Pfizer/Neurocrine Biosciences, Inc.) and gaboxadol (Merck & Co., Inc./Lundbeck A/S), also utilize a similar mechanism of action. Members of the benzodiazapine class of sedatives are also approved for insomnia, but their usage has declined due to an inferior side effect profile compared to hypnotics. Anecdotal evidence also suggests that sedative antidepressants, such as trazodone and doxepin, are prescribed off-label for insomnia. Recently, the FDA approved ramelteon (Rozerem™, Takeda Pharmaceuticals Company Limited), a compound with a mechanism of action similar to VEC-162, for the treatment of insomnia.

Limitations of current treatments

We believe that each of the drugs used to treat insomnia has inherent limitations that leave patients underserved. The key limitations include the potential for abuse, significant side effects, and a failure to address the underlying causes of sleeplessness:

- Many of the products prescribed commonly for sleep disorders, including Ambien, Lunesta, and Sonata, are classified as Schedule IV controlled substances by the DEA due to their potential for abuse, tolerance and withdrawal symptoms. Drugs that are classified as Schedule IV controlled substances are subject to restrictions, and in some cases prohibitions, on providing samples to physicians and on prescription refills under state laws. For example, many states require a doctor visit as a condition for receiving any refill of a prescription for a Schedule IV controlled substance.
- Many drugs approved for and used in sleep disorders also induce a number of nuisance side effects beyond the more serious abuse and addiction effects associated with most approved products. These side effects include next-day grogginess, memory loss, unpleasant taste, dry mouth and hormonal changes.
- We believe that none of the drugs used and approved for sleep, other than Rozerem, work through the body's natural sleep/wake cycle, which is governed by melatonin. We believe that, for patients whose sleep disruption is due to a misalignment of this sleep/wake cycle and the patients' need to sleep (as is the case in CRSD), a drug that naturally modulates the sleep/wake cycle would be an attractive new alternative because it would be addressing the underlying cause of the sleeplessness, rather than merely addressing its symptoms.

Potential advantages of VEC-162

We believe that VEC-162 may offer efficacy similar to the most efficacious of the approved sleep drugs, and that it may provide significant benefits to patients beyond those offered by the approved drugs. We believe that VEC-162 is unlikely to be scheduled as a controlled substance by the DEA, because Rozerem, which has the same mechanism of action as VEC-162, was shown not to have potential for abuse and was not classified as a Schedule IV controlled substance by the DEA. However, despite the fact that the drugs have a similar mechanism of action, our Phase II results demonstrate that VEC-162 has superior sleep maintenance to Rozerem. VEC-162 also appears to be safe, with no significant side effects or effects on next-day performance. For patients with CRSD, VEC-162 may be able to align the patient's sleep/wake cycle with their lifestyle, something we believe no approved sleep therapy has demonstrated.

Overview of Phase II clinical results

We recently completed a randomized, double-blind, multi-center, placebo-controlled Phase II trial evaluating the effect of VEC-162 on healthy volunteers in a transient insomnia setting. This setting involved a five-hour phase shift, which entailed putting trial participants to bed five hours ahead of their regular sleep time.

A total of 37 healthy volunteers were randomly assigned to one of four VEC-162 dosing groups (10, 20, 50, and 100 milligrams) or placebo. Patients took one oral dose 30 minutes before bedtime. The results of this trial demonstrated:

- *Circadian rhythm shift.* There was a statistically significant ($p < 0.025$) shift in circadian rhythm at 50 and 100 mg of up to five hours on the first night, and a statistically significant dose-response curve. This finding confirmed that the drug acts through the sleep/wake cycle, and shows further that the drug can modulate this cycle to address the underlying cause of sleeplessness in patients with circadian rhythm sleep disorders.
- *Reduced duration of wake after sleep onset (WASO).* WASO is defined as the number of minutes awake from the time the participant falls asleep to the end of the evaluation period. There was a statistically significant ($p < 0.05$) reduction in WASO at 100 mg of 68.5 minutes, and a reduction in the duration of WASO versus placebo of at least 36 minutes was observed at all doses. The effects were 36 minutes (10 mg) and 45 minutes (20 and 50 mg).
- *Improved sleep efficiency.* Sleep efficiency is defined as time asleep divided by time in bed. VEC-162 achieved statistically significant improvements in sleep efficiency vs. placebo at 50 mg ($p < 0.05$) and 100 mg ($p < 0.02$). Absolute improvement occurred at all doses with at least 12.5% greater sleep efficiency vs. placebo. Specific improvements were 12.5% (10 mg), 13.5% (20 mg), 15.4% (50 mg) and 18.1% (100 mg).
- *Improved time to achieve persistent sleep.* All patients experienced a reduction in time it took to achieve persistent sleep (otherwise known as latency). The 10 mg dose improved 23.4 minutes vs. placebo ($p < 0.004$), the 20 mg improved 10.1 minutes (not significant), the 50 mg improved 18.8 minutes ($p < 0.02$), and the 100 mg dose improved 19.3 minutes ($p < 0.03$).
- *A placebo-like side effect profile.* VEC-162 also demonstrated a strong safety profile, with no statistically significant side effects versus placebo and no impairment of next-day performance or mood.

Overview of planned Phase III clinical trial

We plan to initiate a Phase III trial in the U.S. early in 2006 to evaluate the safety and efficacy of VEC-162 for the treatment of insomnia. The trial will be a randomized, double-blind, placebo-controlled trial of approximately 300 healthy volunteers. Primary endpoints will include sleep efficiency and time to fall asleep, as well as next-day performance and mood. Participants will receive one to two days of inpatient treatment. We believe that we will need to conduct additional trials beyond this Phase III trial to receive approval for the treatment of primary insomnia. We plan to confirm our path to filing with the FDA in an End of Phase IIb meeting after this upcoming clinical trial.

Potential indication for depression

We believe that VEC-162 may also be effective in treating depression. Agomelatine, another melatonin agonist, has shown efficacy and safety that compared favorably to an approved selective serotonin reuptake inhibitor (SSRI) antidepressant, Paxil® (paroxetine, GSK), in a Phase III trial. Agomelatine's U.S. patent protection has expired. While the precise mechanism for a melatonin agonist's effect on depression is currently unknown, it is possible that by improving sleep, a melatonin agonist could improve mood because depressed patients are likely to have sleep disorders.

Approximately 29 million adults in the United States suffer from some form of depression, over 11 million of whom are currently treated with a prescription antidepressant medication. Sales of antidepressants exceeded $20 billion globally in 2004, with SSRI drugs and newer serotonin/norepinephrine reuptake inhibitor (SNRI) drugs accounting for the majority of sales.

We believe that VEC-162 will be differentiated from approved antidepressants in several ways. In the Phase III trial of agomelatine described above, agomelatine showed significantly improved mood in two weeks, vs. four weeks for Paxil®. Consequently, VEC-162 may, with its similar properties to agomelatine, enjoy a more rapid onset of action than approved SSRI and SNRI drugs. We believe that VEC-162 should also have an improved side effect profile when compared to approved products because it should not have the sexual side effects, weight gain, and sleep disruption associated with SSRI and SNRI drugs.

VEC-162 is ready for Phase II trials in depression. It has demonstrated an antidepressant effect in animal models and has completed several Phase I trials, including one with four weeks of exposure, showing none of the serious side effects associated with the approved SSRI and SNRI drugs.

Commercialization

Given the size of the prescribing physician base for insomnia and depression, we plan to partner with a global pharmaceutical company for the development and commercialization of VEC-162 worldwide.

Intellectual property

VEC-162 and its formulations and uses are covered by a total of five patent and patent application families worldwide. The primary NCE patent covering VEC-162 expires normally in 2017 in the United States and in most European markets. We believe that, like iloperidone, VEC-162 will meet the various criteria of the Hatch-Waxman Act and will receive five additional years of patent protection for VEC-162 in the United States, which would extend its patent protection in the United States until 2022. In Europe, similar legislative enactments provide for five-year extensions of European NCE patents through the granting of Supplementary Protection Certificates, and we believe that VEC-162 will qualify for such an extension, which would extend European patent protection for VEC-162 until 2022. Several other patent applications covering uses of VEC-162 will, if granted, provide exclusive rights for these uses until 2026.

Our rights to the NCE patent covering VEC-162 and related intellectual property have been acquired through a license with BMS. Please see "—License agreements" below for a discussion of this license.

VSF-173

VSF-173 is an oral small molecule that has demonstrated effects on animal sleep/wake patterns and gene expression patterns suggestive of a stimulant effect. The compound also demonstrated a stimulant effect in humans during clinical trials conducted by Novartis for Alzheimer's Disease. As a result of these observations, we are currently planning to begin the clinical evaluation of VSF-173 in excessive daytime sleepiness. We intend to initiate a Phase II trial for VSF-173 in late 2006. We believe the market opportunity for VSF-173 is significant. Provigil® (modafinil, Cephalon Inc.) alone accounted for sales of approximately $440 million in 2004 and is estimated to have grown 35% between 2002 and 2005.

Pharmacogenetic and pharmacogenomic (PG) expertise

Our expertise in PG enables us to acquire high quality, patent-protected clinical compounds that have been discovered and developed by other pharmaceutical firms. We can capitalize on the discovery and early development efforts of other firms by acquiring compounds with clinical safety and possibly efficacy data that we believe can benefit from our extensive PG expertise.

PG starts from the premise that a given drug will not just affect the target/receptor for which it was initially developed, but will in fact interact with many systems within the body. Proof of this comes from two different sources. We know, for instance, that most drugs have side effects. These typically result from a drug's interaction not just with its intended receptor in its intended organ system, but also with either that receptor outside the intended organ system or with other receptors entirely. There are many examples of drugs that were developed initially for one indication but were then shown to be effective for another. One example of this is Viagra® (sildenafil, Pfizer), which was developed initially for hypertension (high blood pressure) but proved more effective for erectile dysfunction. Being compound-focused enables us to forego the costly discovery work and start with compounds already known to be drugs, in that they are safe and interact with at least one biological system.

Starting with safe compounds— ones that have completed at least Phase I safety trials— we use our PG expertise to understand the disease or diseases for which the drug has the optimal biological (and clinical) effect. We have used this expertise to identify potential points of differentiation for iloperidone and VSF-173. Beyond these two, we have already identified a number of unexpected signaling pathways attributable to known compounds using these techniques, and we have secured a number of patent filings based on these findings. For each compound, we may choose to confirm our findings in animal studies. Compounds clearing this hurdle will be ready for Phase II trials.

Compounds that we would most likely consider attractive candidates for applying our expertise would meet the following criteria:

- were initially developed by a well-established biopharmaceutical company
- have already completed Phase I trials
- are free of significant formulation issues
- have potential for strong patent protection through composition of matter patents, new doses or new formulations

License agreements

Our rights to develop and commercialize our clinical-stage product candidates are subject to the terms and conditions of licenses granted to us by other pharmaceutical companies.

Iloperidone

We acquired exclusive worldwide rights to patents for iloperidone through a sublicense agreement with Novartis. A predecessor company of Sanofi-Aventis, Hoechst Marion Roussel, Inc. (HMRI), discovered iloperidone and completed early clinical work on the compound. In 1996, following a review of its product portfolio, HMRI licensed its rights to the iloperidone patents to Titan Pharmaceuticals, Inc. on an exclusive basis. In 1997, soon after it had acquired its rights, Titan sublicensed its rights to iloperidone on an exclusive basis to Novartis. In June 2004, we acquired exclusive worldwide rights to these patents to develop and commercialize iloperidone through a sublicense agreement with Novartis. In consideration for this sublicense, we paid Novartis an initial license fee of $500,000 and are obligated to make future milestone payments to Novartis of less than $100 million in the aggregate (the majority of which are tied to sales milestones), as well as royalty payments to Novartis at a rate which, as a percentage of net sales, is in the mid-twenties. Our rights with respect to the patents to develop and commercialize iloperidone may terminate, in whole or in part, if we fail to meet certain development or commercialization milestones, if we do not meet certain other obligations under our sublicense agreement to make royalty and milestone payments, if we fail to comply with requirements in our sublicense agreement regarding our financial condition, or if we do not abide by certain restrictions in our sublicense agreement regarding our other development activities. Additionally, if we do not cure any breaches by Novartis or Titan of their respective obligations under their agreements with Titan and Sanofi-Aventis, respectively, our rights to develop and commercialize iloperidone may revert back to Novartis.

VEC-162

In March 2004, we entered into a license agreement with BMS under which we received an exclusive worldwide license to develop and commercialize VEC-162. In consideration for the license, we paid BMS an initial license fee of $500,000 and are obligated to make future milestone payments to BMS of less than $40 million in the aggregate (the majority of which are tied to sales milestones) as well as royalty payments based on the net sales of VEC-162 at a rate which, as a percentage of net sales, is in the low teens. We are also obligated under this agreement to pay BMS a percentage of any sublicense fees, upfront payments and milestone payments that we receive from a third party in connection with any partnering arrangement, at a rate which is in the mid-twenties. We have agreed with BMS in our license agreement for VEC-162 to use our reasonable diligence to develop and commercialize VEC-162 and to meet milestones in completing certain clinical work.

BMS holds certain rights with respect to VEC-162 in our license agreement. For example, if we have not agreed to a partnering arrangement to develop and commercialize VEC-162 with a third-party partner after the completion of the entire Phase III program, BMS has the right to commercialize VEC-162 on its own in exchange for certain milestone and royalty payments.

Either party may terminate the VEC-162 license agreement under certain circumstances, including a material breach of the agreement by the other. In the event that we terminate our license without a breach by BMS, or if BMS terminates our license due to our breach, all rights

licensed and developed by us under this agreement will revert or otherwise be licensed back to BMS on an exclusive basis.

VSF-173

In June 2004, we entered into a license agreement with Novartis under which we received an exclusive worldwide license to develop and commercialize VSF-173. In consideration for the license, we paid Novartis an initial license fee of $500,000. We are also obligated to make future milestone payments to Novartis of less than $50 million in the aggregate (the majority of which are tied to sales milestones) and royalty payments at rates which, as a percentage of net sales, range from the low-to-mid teens. Novartis has the right to commercialize VSF-173 on its own after Phase II and Phase III in exchange for certain milestones and royalty payments. In the event that Novartis chooses not to exercise either of these options and we decide to enter into a partnering arrangement to commercialize VSF-173, Novartis has a right of first refusal to negotiate such an agreement with us, as well as a right to submit a last matching counteroffer regarding such an agreement. In addition, our rights with respect to VSF-173 may terminate, in whole or in part, if we fail to meet certain development and commercialization milestones described in our license agreement, if we fail to make royalty or milestone payments or if we do no comply with requirements in our license agreement regarding our financial condition. In the event of an early termination of our license agreement, all rights licensed and developed by us under this agreement may revert back to Novartis.

Government regulation

Government authorities in the United States, at the federal, state and local level, as well as foreign countries and local foreign governments, regulate the research, development, testing, manufacture, labeling, promotion, advertising, distribution, sampling, marketing, import and export of our product candidates. All of our products will require regulatory approval by government agencies prior to commercialization. In particular, human pharmaceutical products are subject to rigorous pre-clinical and clinical trials and other approval procedures of the FDA and similar regulatory authorities in foreign countries. The process of obtaining these approvals and the subsequent compliance with appropriate domestic and foreign laws, rules and regulations require the expenditure of significant time and human and financial resources.

United States government regulation

In the United States, the FDA regulates drugs under the Federal Food, Drug and Cosmetic Act and implementing regulations. If we fail to comply with the applicable requirements at any time during the product development process, approval process, or after approval, we may become subject to administrative or judicial sanctions. These sanctions could include the FDA's refusal to approve pending applications, withdrawals of approvals, clinical holds, warning letters, product recalls, product seizures, total or partial suspension of our operations, injunctions, fines, civil penalties or criminal prosecution. Any such sanction could have a material adverse effect on our business.

The steps required before a drug may be marketed in the United States include:

- pre-clinical laboratory tests, animal studies and formulation studies under cGLP
- submission to the FDA of an investigational new drug application, or IND, which must become effective before human clinical trials may begin

- execution of adequate and well-controlled clinical trials to establish the safety and efficacy of the product for each indication for which approval is sought
- submission to the FDA of an NDA
- satisfactory completion of an FDA inspection of the manufacturing facility or facilities at which the product is produced to assess compliance with cGMP
- FDA review and approval of the NDA

Pre-clinical studies generally are conducted in laboratory animals to evaluate the potential safety and activity of a product. Violation of the FDA's good laboratory practices regulations can, in some cases, lead to invalidation of the studies, requiring these studies to be replicated. In the United States, drug developers submit the results of pre-clinical trials, together with manufacturing information and analytical and stability data, to the FDA as part of the IND, which must become effective before clinical trials can begin in the United States. An IND becomes effective 30 days after receipt by the FDA unless before that time the FDA raises concerns or questions about issues such as the proposed clinical trials outlined in the IND. In that case, the IND sponsor and the FDA must resolve any outstanding FDA concerns or questions before clinical trials can proceed. If these concerns or questions are unresolved, the FDA may not allow the clinical trials to commence.

Pilot studies generally are conducted in a limited patient population, approximately three to 25 subjects, to determine whether the product candidate warrants further clinical trials based on preliminary indications of efficacy. These pilot studies may be performed in the United States after an IND has become effective or outside of the United States prior to the filing of an IND in the United States in accordance with government regulations and institutional procedures.

Clinical trials involve the administration of the investigational product candidate to human subjects under the supervision of qualified investigators. Clinical trials are conducted under protocols detailing, among other things, the objectives of the study, the parameters to be used in assessing the safety and the effectiveness of the drug. Each protocol must be submitted to the FDA as part of the IND prior to beginning the trial.

Typically, clinical evaluation involves a time-consuming and costly three-Phase sequential process, but the phases may overlap. Each trial must be reviewed, approved and conducted under the auspices of an independent Institutional Review Board, and each trial must include the patient's informed consent.

- Phase I: refers typically to closely-monitored clinical trials and includes the initial introduction of an investigational new drug into human patients or health volunteer subjects. Phase I trials are designed to determine the safety, metabolism and pharmacologic actions of a drug in humans, the potential side effects associated with increasing drug doses and, if possible, to gain early evidence of the product candidate's effectiveness. Phase I trials also include the study of structure-activity relationships and mechanism of action in humans, as well as studies in which investigational drugs are used as research tools to explore biological phenomena or disease processes. During Phase I trials, sufficient information about a drug's pharmacokinetics and pharmacological effects should be obtained to permit the design of well-controlled, scientifically valid Phase II studies. The total number of subjects and patients included in Phase I trials varies, but is generally in the range of 20 to 80 people.

- Phase II: refers to controlled clinical trials conducted to evaluate appropriate dosage and the effectiveness of a drug for a particular indication or indications in patients with a disease or condition under study and to determine the common short-term side effects and risks associated with the drug. These trials are typically well controlled, closely monitored and conducted in a relatively small number of patients, usually involving no more than several hundred subjects.
- Phase III: refers to expanded controlled and uncontrolled clinical trials. These trials are performed after preliminary evidence suggesting effectiveness of a drug has been obtained. Phase III trials are intended to gather additional information about the effectiveness and safety that is needed to evaluate the overall benefit-risk relationship of the drug and to provide an adequate basis for physician labeling. Phase III trials usually include from several hundred to several thousand subjects.

Phase I, II and III testing may not be completed successfully within any specified time period, if at all. The FDA closely monitors the progress of each of the three phases of clinical trials that are conducted in the United States and may, at its discretion, reevaluate, alter, suspend or terminate the testing based upon the data accumulated to that point and the FDA's assessment of the risk/benefit ratio to the patient. A clinical program is designed after assessing the causes of the disease, the mechanism of action of the active pharmaceutical ingredient of the product candidate and all clinical and pre-clinical data of previous trials performed. Typically, the trial design protocols and efficacy endpoints are established in consultation with the FDA. Upon request through a special protocol assessment, the FDA can also provide specific guidance on the acceptability of protocol design for clinical trials. The FDA or we may suspend or terminate clinical trials at any time for various reasons, including a finding that the subjects or patients are being exposed to an unacceptable health risk. The FDA can also request additional clinical trials be conducted as a condition to product approval. During all clinical trials, physicians monitor the patients to determine effectiveness and to observe and report any reactions or other safety risks that may result from use of the drug candidate. As noted above, iloperidone is currently in Phase III trials for the treatment of schizophrenia, VEC-162 is ready for Phase III trials for the treatment of insomnia and VSF-173 is ready for Phase II trials for the treatment of sleepiness.

Assuming successful completion of the required clinical trials, drug developers submit the results of pre-clinical studies and clinical trials, together with other detailed information including information on the manufacture and composition of the product, to the FDA, in the form of an NDA, requesting approval to market the product for one or more indications. In most cases, the NDA must be accompanied by a substantial user fee. The FDA reviews an NDA to determine, among other things, whether a product is safe and effective for its intended use.

Before approving an application, the FDA will inspect the facility or facilities where the product is manufactured. The FDA will not approve the application unless cGMP compliance is satisfactory. The FDA will issue an approval letter if it determines that the application, manufacturing process and manufacturing facilities are acceptable. If the FDA determines that the application, manufacturing process or manufacturing facilities are not acceptable, it will outline the deficiencies in the submission and will often request additional testing or information. Notwithstanding the submission of any requested additional information, the FDA may ultimately decide that the application does not satisfy the regulatory criteria for approval and refuse to approve the application by issuing a not approvable letter.

The testing and approval process requires substantial time, effort and financial resources, and each may take several years to complete. The FDA may not grant approval on a timely basis, or

at all. We may encounter difficulties or unanticipated costs in our efforts to secure necessary governmental approvals, which could delay or preclude us from marketing our products. Furthermore, the FDA may prevent a drug developer from marketing a product under a label for its desired indications or place other conditions on distribution as a condition of any approvals, which may impair commercialization of the product. After approval, some types of changes to the approved product, such as adding new indications, manufacturing changes and additional labeling claims, are subject to further FDA review and approval. Similar regulatory procedures must also be complied with in countries outside the United States.

If the FDA approves the new drug application, the drug becomes available for physicians to prescribe in the United States. After approval, the drug developer must comply with a number of post-approval requirements, including delivering periodic reports to the FDA, submitting descriptions of any adverse reactions reported, and complying with drug sampling and distribution requirements. The holder of an approved NDA is required to provide updated safety and efficacy information and to comply with requirements concerning advertising and promotional labeling. Also, quality control and manufacturing procedures must continue to conform to cGMP after approval. Drug manufacturers and their subcontractors are required to register their facilities and are subject to periodic unannounced inspections by the FDA to assess compliance with cGMP which imposes certain procedural and documentation requirements relating to quality assurance and quality control. Accordingly, manufacturers must continue to expend time, money and effort in the area of production and quality control to maintain compliance with cGMP and other aspects of regulatory compliance. The FDA may require post market testing and surveillance to monitor the product's safety or efficacy, including additional studies, known as Phase IV trials, to evaluate long-term effects.

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

We use, and will continue to use, third-party manufacturers to produce our products in clinical and commercial quantities. Future FDA inspections may identify compliance issues at our facilities or at the facilities of our contract manufacturers that may disrupt production or distribution, or require substantial resources to correct. In addition, discovery of problems with a product or the failure to comply with requirements may result in restrictions on a product, manufacturer or holder of an approved NDA, including withdrawal or recall of the product from the market or other voluntary or FDA-initiated action that could delay further marketing. Newly discovered or developed safety or effectiveness data may require changes to a product's approved labeling, including the addition of new warnings and contraindications. Also, new government requirements may be established that could delay or prevent regulatory approval of our products under development.

Foreign regulation

Whether or not we obtain FDA approval for a product, we must obtain approval of a product by the comparable regulatory authorities of foreign countries before we can commence clinical trials or marketing of the product in those countries. The approval process varies from country to country, and the time may be longer or shorter than that required for FDA approval. The requirements governing the conduct of clinical trials, product licensing, pricing and reimbursement also vary greatly from country to country. Although governed by the applicable country, clinical trials conducted outside of the United States typically are administered with

the three-Phase sequential process that is discussed above under "—United States government regulation." However, the foreign equivalent of an IND is not a prerequisite to performing pilot studies or Phase I clinical trials.

Under European Union regulatory systems, we may submit marketing authorization applications either under a centralized or decentralized procedure. The centralized procedure which is available for products produced by biotechnology or which are highly innovative, provides for the grant of a single marketing authorization that is valid for all European Union member states. This authorization is a marketing authorization approval. The decentralized procedure provides for mutual recognition of national approval decisions. Under this procedure, the holder of a national marketing authorization may submit an application to the remaining member states. Within 90 days of receiving the applications and assessment report, each member state must decide whether to recognize approval. This procedure is referred to as the mutual recognition procedure.

In addition, regulatory approval of prices is required in most countries other than the United States. We face the risk that the resulting prices would be insufficient to generate an acceptable return to us or our collaborators.

Third-party reimbursement and pricing controls

In the United States and elsewhere, sales of pharmaceutical products depend in significant part on the availability of reimbursement to the consumer from third-party payors, such as government and private insurance plans. Third-party payors are increasingly challenging the prices charged for medical products and services. It will be time consuming and expensive for us to go through the process of seeking reimbursement from Medicare and private payors. Our products may not be considered cost effective, and coverage and reimbursement may not be available or sufficient to allow us to sell our products on a competitive and profitable basis. The passage of the Medicare Prescription Drug and Modernization Act of 2003 imposes new requirements for the distribution and pricing of prescription drugs which may affect the marketing of our products.

In many foreign markets, including the countries in the European Union, pricing of pharmaceutical products is subject to governmental control. In the United States, there have been, and we expect that there will continue to be, a number of federal and state proposals to implement similar governmental pricing control. While we cannot predict whether such legislative or regulatory proposals will be adopted, the adoption of such proposals could have a material adverse effect on our business, financial condition and profitability.

Marketing and sales

We currently have no sales, marketing or distribution capabilities. However, we plan to develop these capabilities internally to the extent that it is practical to do so, and enter into partnering arrangements to the extent that we believe large sales and marketing forces will be necessary. More specifically, in the United States we expect to build our own sales force to market iloperidone and VSF-173 directly to psychiatrists and other target physicians. Because the number of physicians that would generate the majority of prescriptions for iloperidone and VSF-173 is relatively small, we believe that we can cost-effectively develop our own sales force to market and sell iloperidone and VSF-173. Outside of the U.S., we intend to find commercial partners for iloperidone and VSF-173. We will seek a global commercial partner for VEC-162.

Patents and proprietary rights; Hatch-Waxman protection

We will be able to protect our products from unauthorized use by third parties only to the extent that our products are covered by valid and enforceable patents— either licensed in from third parties or generated internally— that give us sufficient proprietary rights. Accordingly, patents and other proprietary rights are essential elements of our business.

Our three current compounds in clinical development are covered by new chemical entity (NCE) and other patents. The NCE patent for iloperidone is owned by Sanofi-Aventis, and other patents and patent applications relating to iloperidone are owned by Sanofi-Aventis and Novartis. Novartis also owns the NCE patent for VSF-173 and Bristol-Myers Squibb owns the NCE patent for VEC-162. For all three compounds we have obtained exclusive worldwide rights to develop and commercialize the compounds covered by these patents through license and sublicense arrangements. For more on these license and sublicense arrangements, please see "—License agreements" above. In addition, we have generated intellectual property, and filed patent applications covering this intellectual property, for each of the three compounds.

The NCE patent covering iloperidone expires normally in 2011 in the United States and in 2010 in most European markets. The NCE patent covering VEC-162 expires in 2017 in the United States and most European markets. The NCE patent covering VSF-173 expires in 2014 in the United States and in 2012 in most European markets. Additionally, for each of our late-stage compounds, an additional period of exclusivity in the United States of up to five years following the expiration of the patent covering that compound may be obtained pursuant to the United States Drug Price Competition and Patent Term Restoration Act of 1984, more commonly known as the "Hatch-Waxman Act." Assuming we gain such a five-year extension and that we continue to have our intellectual property rights under our sublicense and license agreements, we would have exclusive NCE patent rights in the U.S. for iloperidone until 2016, for VEC-162 until 2022 and for VSF-173 until 2017. In Europe, similar legislative enactments may allow us to obtain five-year extensions of the European NCE patents covering our product candidates through the granting of Supplementary Protection Certificates, which would allow us to have exclusive European NCE patent rights for iloperidone until 2015, for VEC-162 until 2022 and for VSF-173 until 2017. Additionally, a recent directive in the European Union allows companies who receive European regulatory approval for a new compound to have a 10-year period of market exclusivity in most European countries for that compound (with the possibility of a further one-year extension), beginning on the date of such European regulatory approval, regardless of when the European NCE patent covering such compound expires. No generic version of an approved drug may be marketed or sold in most European countries during this 10-year period. This directive may be of particular importance with respect to iloperidone, since the European NCE patent for iloperidone will likely expire prior to the end of this 10-year period of market exclusivity.

Aside from the NCE patents covering our current late-stage compounds, as of December 11, 2005 we had one issued United States patent and 17 pending patent applications in the United States, several of which have already been filed internationally as Patent Cooperation Treaty applications. The claims in these various patents and patent applications are directed to compositions of matter, including claims covering other product candidates, pharmaceutical compositions, and methods of use.

For proprietary know-how that is not appropriate for patent protection, processes for which patents are difficult to enforce and any other elements of our PG discovery process that involve proprietary know-how and technology that is not covered by patent applications, we rely on trade secret protection and confidentiality agreements to protect our interests. We require all

of our employees, consultants and advisors to enter into confidentiality agreements. Where it is necessary to share our proprietary information or data with outside parties, our policy is to make available only that information and data required to accomplish the desired purpose and only pursuant to a duty of confidentiality on the part of those parties.

Manufacturing

We currently depend and expect to continue to depend on a small number of third-party manufacturers to produce sufficient quantities of our product candidates for use in our clinical studies. We are not obligated to obtain our product candidates from any particular third-party manufacturer and we believe that we would be able to obtain our product candidates from a number of third-party manufacturers at comparable cost.

If any of our product candidates are approved for commercial use, we plan to rely on third-party contract manufacturers to produce sufficient quantities for large-scale commercialization. If we do enter into commercial manufacturing arrangements with third parties, these third-party manufacturers will be subject to extensive governmental regulation. Specifically, regulatory authorities in the markets which we intend to serve will require that drugs be manufactured, packaged and labeled in conformity with cGMP or equivalent foreign standards. We intend to engage only those contract manufacturers who have the capability to manufacture drug products in compliance with cGMP and other applicable standards in bulk quantities for commercial use.

Competition

The pharmaceutical industry and the central nervous system segment of that industry in particular, is highly competitive and includes a number of established large and mid-sized companies with greater financial, technical and personnel resources than we have and significantly greater commercial infrastructures than we have. Our market segment also includes several smaller emerging companies whose activities are directly focused on our target markets and areas of expertise. If approved, our product candidates will compete with numerous therapeutic treatments offered by these competitors. While we believe that our product candidates will have certain favorable features, existing and new treatments may also possess advantages. Additionally, the development of other drug technologies and methods of disease prevention are occurring at a rapid pace. These developments may render our product candidates or technologies obsolete or noncompetitive.

We believe the primary competitors for each of our product candidates are as follows:

- For iloperidone in the treatment of schizophrenia, the atypical antipsychotics Risperdal® (risperidone) by Johnson & Johnson (including the depot formulation Risperdal® Consta®), Zyprexa® (olanzapine) by Eli Lilly, Seroquel® (quetiapine) by AstraZeneca, Abilify® (aripiprazole) by BMS/Otsuka Pharmaceutical Co., Ltd., and Geodon® (ziprasidone) by Pfizer, and generic clozapine, as well as the typical antipsychotics haloperidol, chlorpromazine, thioridazine and sulpiride (all of which are generic). In addition to the approved products, compounds in Phase III trials for the treatment of schizophrenia include bifeprunox (Wyeth Pharmaceuticals/ Solvay S.A./ Lundbeck), paliperidone (Johnson & Johnson), and asenapine (Pfizer).
- For VEC-162 in the treatment of insomnia, Rozerem™ (ramelteon) by Takeda Pharmaceuticals, hypnotics such as Ambien® (zolpidem) by Sanofi-Aventis (including Ambien CR®), Lunesta® (eszopiclone) by Sepracor and Sonata® (zaleplon) by King Pharmaceuticals, generic

benzodiazepines such as trazodone and doxepin, and over-the-counter remedies such as Benadryl® and Tylenol PM®. In addition to the approved products, compounds in Phase III trials for insomnia include indiplon (Pfizer/ Neurocrine Biosciences) gaboxadol (Merck/ Lundbeck), and low-dose doxepin (Silenor™, Somaxon Pharmaceuticals, Inc.).

- For VEC-162 in the treatment of depression, agomelatine (Les Laboratoires Servier), SSRI/ SNRI drugs such as Paxil® (paroxetine) by GSK, Zoloft® (sertraline) by Pfizer, Prozac® (fluoxetine) by Eli Lilly, and Lexapro (escitalopram) by Lundbeck/ Forest Pharmaceuticals Inc., Effexor® (venlafaxine) by Wyeth as well as other compounds such as Wellbutrin® (buproprion) by GSK and Cymbalta® (duloxetine) by Eli Lilly.
- For VSF-173 in the treatment of excessive daytime sleepiness, Provigil® (modafinil) by Cephalon and Xyrem® (sodium oxybate) by Jazz Pharmaceuticals, Inc.

Our ability to compete successfully will depend in part on our ability to utilize our PG and drug development expertise to identify, develop, secure rights to and obtain regulatory approvals for promising pharmaceutical compounds before others are able to develop competitive products. Our ability to compete successfully will also depend on our ability to attract and retain skilled and experienced personnel. Additionally, our ability to compete may be affected because insurers and other third-party payors in some cases seek to encourage the use of cheaper, generic products, which could make our products less attractive.

Employees

As of September 30, 2005 we had 30 full-time employees, 25 of whom were primarily engaged in research and development activities. 25 of our full-time employees work at our facility in Rockville, Maryland, and 4 of our full-time employees work at our Singapore research facility. None of our employees are represented by a labor union. We have not experienced any work stoppages and consider our employee relations to be good.

Facilities

Our current headquarters are located in Rockville, Maryland, consisting of approximately 9,000 square feet of leased office space. Our annual rent under our lease for this headquarters is $216,000, with an annual increase of 3% per year until the expiration of our lease in 2008. In August 2005 we notified our landlord of our intent to exercise our sublease rights under this lease, in order to move in to a larger facility to accommodate our development and commercialization activities. In August 2005, we entered into a new lease for this larger facility, at 9605 Medical Center Drive, Rockville, Maryland, consisting of approximately 17,000 square feet of office and laboratory space. We will take possession of the lease space in mid-January 2006. Our annual rent for our new, larger facility under this new lease will be approximately $433,000, with an annual increase of 3% per year, until the expiration of the new lease in 2016. We believe we will be able to sublease our current headquarters prior to vacating it in January 2006 for our new, larger facility.

We have also entered into a lease for a research facility in Singapore. Our annual rent for this facility is approximately $75,000 per year; the lease for the facility expires in December 2006.

Management

Executive officers and directors

The following are our executive officers and directors as of September 30, 2005, with the exception of Steven A. Shallcross and Richard W. Dugan, each of whom joined us after such date.

Name	Age	Position
Mihael H. Polymeropoulos, M.D.	45	President and Chief Executive Officer, Director
William D. “Chip” Clark	37	Senior Vice President, Chief Business Officer and Secretary
Steven A. Shallcross	44	Senior Vice President, Chief Financial Officer and Treasurer
Thomas Copmann, Ph.D.	53	Vice President of Regulatory Affairs
Deepak Phadke, Ph.D.	55	Vice President of Manufacturing
Argeris N. Karabelas, Ph.D.(1),(3)	53	Director and Chairman of the Board
Richard W. Dugan(2)	63	Director
Brian K. Halak, Ph.D.(2),(3)	34	Director
Wayne T. Hockmeyer, Ph.D.(1),(3)	61	Director
David Ramsay(2)	42	Director
James B. Tananbaum, M.D.(1)	42	Director

(1) Member of Compensation Committee.

(2) Member of Audit Committee.

(3) Member of Nominating/ Corporate Governance Committee.

Mihael H. Polymeropoulos, M.D. has served as Chief Executive Officer and a Director of Vanda since May of 2003. Prior to joining Vanda, Dr. Polymeropoulos was Vice President and Head of the Pharmacogenetics Department at Novartis from 1998 to 2003. Prior to his tenure at Novartis, he served as Chief of the Gene Mapping Section, Laboratory of Genetic Disease Research, National Human Genome Research Institute, from 1992 to 1998. Dr. Polymeropoulos is the co-founder of the Integrated Molecular Analysis of Genome Expression (IMAGE) Consortium. Dr. Polymeropoulos holds a degree in Medicine from the University of Patras.

William D. “Chip” Clark has served as Senior Vice President and Chief Business Officer of Vanda since September of 2004 and served as a Director of Vanda from 2002 to 2004. Prior to joining Vanda, Mr. Clark was a Principal at Care Capital, LLC, a venture capital firm investing in biopharmaceuticals companies, from 2000 to 2004. Prior to his tenure at Care Capital, he served in a variety of commercial roles at SmithKline Beecham (now part of GlaxoSmithKline), from 1990 to 2000. Mr. Clark holds a B.A. from Harvard University and an M.B.A. from The Wharton School at the University of Pennsylvania.

Steven A. Shallcross has served as Senior Vice President, Chief Financial Officer and Treasurer of Vanda since November of 2005. From October 2001 to November 2005, Mr. Shallcross was the Senior Vice President, Chief Financial Officer and Treasurer at Advancis Pharmaceutical Corporation, a specialty pharmaceutical company. Mr. Shallcross was the Vice President of Finance and Chief Financial Officer at Bering Truck Corporation, a truck manufacturer, from

1997 to 2001. From 1993 to 1997, Mr. Shallcross served as Vice President of Operations at Precision Scientific, Inc., a manufacturer of scientific laboratory equipment. He was the Controller of Precision Scientific from 1993 to 1994. Mr. Shallcross has over 20 years of senior financial and operations experience in emerging organizations, including acquisitions and restructurings. Mr. Shallcross received a bachelor's degree in accounting from the University of Illinois and an M.B.A. from the University of Chicago, Graduate School of Business. Mr. Shallcross is also a certified public accountant.

Thomas Copmann, Ph.D. has served as Vice President of Regulatory Affairs at Vanda since April of 2005. Prior to joining Vanda, Dr. Copmann served as Senior Director of Regulatory Affairs at Eli Lilly & Co., from 2000 to 2005. Prior to his tenure at Eli Lilly & Co., Dr. Copmann was the Associate Vice President for Regulatory Affairs and Executive Director for the Commission on Drugs for Rare Diseases at the Pharmaceutical Manufacturers Association, from 1989 to 1995. Dr. Copmann holds an M.S. in Endocrinology and a Ph.D. in Physiology from Kent State University.

Deepak Phadke, Ph.D. has served as Vice President of Manufacturing at Vanda since August of 2005. Prior to joining Vanda, Dr. Phadke served as Executive Director of Pharmaceutical Sciences at Beckloff Associates, a pharmaceutical research and development consulting company located in the Kansas City area, from 1998 to 2005. Prior to his tenure at Beckloff Associates, Dr. Phadke served as a manager and research scientist in the formulation development departments at Hoechst Marion Roussel and its predecessor companies in Kansas City and Indianapolis, from 1986 to 1998. Dr. Phadke holds a B.S. and an M.S. in Pharmacy and Pharmaceutics, respectively, from Nagpur University in India, and a Ph.D. in Pharmaceutics from Rutgers University.

Argeris N. "Jerry" Karabelas, Ph.D. has served as a Director and Chairman of the Board since 2003. Dr. Karabelas has served as a Partner of Care Capital, LLC since 2001. Prior to his tenure at Care Capital, Dr. Karabelas was the Founder and Chairman of the Novartis BioVenture fund, from July 2000 to December 2001. From 1998 to 2000, he served as Head of Healthcare and CEO of Worldwide Pharmaceuticals for Novartis. Prior to joining Novartis, Dr. Karabelas was Executive Vice President of SmithKline Beecham responsible for U.S. operations, European operations, Regulatory, and Strategic Marketing, from 1981 to 1998. He is a member of the Scientific Advisory Council of the Massachusetts General Hospital, the Harvard- MIT Health Science and Technology Visiting Committee, a Director of SykePharma Plc, Human Genome Sciences, NitroMed Inc., Anadys Pharmaceuticals, Inc., Acura Pharmaceuticals, Inc. and a Trustee of Fox Chase Cancer Center and the Philadelphia University of the Sciences. Dr. Karabelas holds a Ph.D. in Pharmacokinetics from the Massachusetts College of Pharmacy.

Richard W. Dugan has served as a Director of Vanda since December of 2005. From 1976 to September 2002, Mr. Dugan served as a Partner with Ernst & Young, LLP, where he served in a variety of managing and senior partner positions, including Mid-Atlantic Area Senior Partner from 2001 to 2002, Mid-Atlantic Area Managing Partner from 1989 to 2001 and Pittsburgh Office Managing Partner from 1979 to 1989. Mr. Dugan retired from Ernst & Young LLP in September 2002. Mr. Dugan currently serves on the board of directors of two other publicly-traded pharmaceutical companies, Advancis Pharmaceutical Corporation and Critical Therapeutics, Inc. Mr. Dugan holds a B.S.B.A. from Pennsylvania State University.

Brian K. Halak, Ph.D. has served as a Director of Vanda since 2004. Dr. Halak has served as a Principal at Domain Associates, a venture capital firm based in Princeton, New Jersey, since 2001 and will be a Partner as of January 2006. Prior to joining Domain, he served as an

Associate of the venture capital firm Advanced Technology Ventures, from 2000 to 2001. Dr. Halak serves on the Investment Advisory Council for Ben Franklin Technology Partners and BioAdvance, both seed stage investment groups in Philadelphia. Dr. Halak holds a B.S.E. from the University of Pennsylvania and a Ph.D. in Immunology from Thomas Jefferson University.

Wayne T. Hockmeyer, Ph.D. has served as a Director of Vanda since 2004. Dr. Hockmeyer founded MedImmune, Inc. in April 1988 as President and Chief Executive Officer and was elected to serve on the Board of Directors in May 1988. Dr. Hockmeyer became Chairman of the Board of Directors of MedImmune, Inc. in May 1993. He relinquished his position as Chief Executive Officer in October 2000 and now serves as Chairman of the Board of MedImmune, Inc. and President of MedImmune Ventures, Inc. Dr. Hockmeyer earned his bachelor's degree from Purdue University and his Ph.D. from the University of Florida in 1972. Dr. Hockmeyer was recognized in 1998 by the University of Florida as a Distinguished Alumnus and in 2002, Dr. Hockmeyer was awarded a Doctor of Science honoris causa from Purdue University. Dr. Hockmeyer is a member of the Maryland Economic Development Commission and the Governor's Workforce Investment Board (GWIB). He is also a member of the Maryland Governor's Scientific Advisory Board. He is a member of the Board of Directors of the publicly-traded biotechnology companies, Advancis Pharmaceutical Corp., GenVec, Inc. and Idenix Pharmaceuticals, Inc. and serves on the boards of several educational and philanthropic organizations.

David Ramsay has served as a Director of Vanda since 2004. Mr. Ramsay has served as a Partner of Care Capital, LLC, which he co-founded in 2000. Prior to founding Care Capital, Mr. Ramsay served as a Managing Director of the Rhône Group, LLC, from 1997 to 2000 and co-founded Rhône Capital, LLC, a private equity investment vehicle. Mr. Ramsay previously worked at Morgan Stanley Capital Partners. Mr. Ramsay holds an A.B. in Mathematics from Princeton University and an M.B.A. from the Stanford University Graduate School of Business.

James B. Tananbaum, M.D. has served as a Director of Vanda since 2004. Dr. Tananbaum has served as a Managing Partner of Prospect Venture Partners, a dedicated life science venture fund group which he co-founded, since 2000. Prior to co-founding Prospect Venture Partners, he served as Chief Executive Officer of Theravance, Inc. from 1997 to 2000. Dr. Tananbaum also served as a Partner at Sierra Ventures, from 1993 to 1997. Dr. Tananbaum co-founded GelTex Pharmaceuticals, Inc. in 1991. He is an officer of the Young Presidents' Organization, Golden Gate Chapter and a member of the World Economic Forum and the Harvard-MIT Health Science and Technology Visiting Committee. Dr. Tananbaum serves as a Director of Critical Therapeutics, Inc. Dr. Tananbaum holds a bachelor's degree and a B.S.E.E. from Yale University and an M.D. and an M.B.A. from Harvard University.

Election of officers

Our officers are elected by our board of directors on an annual basis and serve until their successors are duly elected and qualified. There are no family relationships among any of our officers or directors.

Classified board

Our restated certificate of incorporation that will become effective as of the closing of this offering provides for a classified board of directors consisting of three classes of directors, each serving a staggered three-year term. As a result, a portion of our board of directors will be elected each year from and after the closing. To implement the classified structure, upon the

consummation of the offering, three of the nominees to the board will be elected to one-year terms, two will be elected to two-year terms and two will be elected to three-year terms. Thereafter, directors will be elected for three-year terms. Drs. Hockmeyer and Tananbaum and Mr. Ramsay have been designated Class I directors whose term will expire at the 2007 annual meeting of stockholders, assuming the completion of the proposed offering. Dr. Halak and Mr. Dugan have been designated Class II directors whose term will expire at the 2008 annual meeting of stockholders, assuming the completion of the proposed offering. Drs. Polymeropoulos and Karabelas have been designated Class III directors whose term expires at the 2009 annual meeting of stockholders, assuming the completion of the proposed offering. Our bylaws provide that the number of authorized directors may be changed only by resolution of the board of directors. Any additional directorships resulting from an increase in the number of authorized directors will be distributed among the three classes so that, as nearly as reasonably possible, each class will consist of one-third of the directors. The classification of the board of directors may have the effect of delaying or preventing changes in control of our company.

Committees of the board of directors

Our board currently has three committees: the audit committee, the compensation committee and the nominating/corporate governance committee. The information set forth below assumes the completion of the proposed offering.

Audit Committee. The members of our audit committee are Messrs. Dugan, and Ramsay and Dr. Halak. Mr. Dugan chairs the audit committee. Mr. Dugan is our audit committee financial expert (as is currently defined under the SEC rules implementing Section 407 of the Sarbanes-Oxley Act of 2002). Our audit committee, among other duties:

- appoints a firm to serve as independent accountant to audit our financial statements
- discusses the scope and results of the audit with the independent accountant, and reviews with management and the independent accountant our interim and year-end operating results
- considers the adequacy of our internal accounting controls and audit procedures
- approves (or, as permitted, pre-approves) all audit and non-audit services to be performed by the independent accountant

The audit committee has the sole and direct responsibility for appointing, evaluating and retaining our independent auditors and for overseeing their work. All audit services and all non-audit services, other than de minimis non-audit services, to be provided to us by our independent auditors must be approved in advance by our audit committee. We believe that the composition of our audit committee meets the requirements for independence under the current Nasdaq National Market and SEC rules and regulations.

Compensation Committee. The members of our compensation committee are Drs. Hockmeyer, Karabelas and Tananbaum. The purpose of our compensation committee is to discharge the responsibilities of our board of directors relating to compensation of our executive officers. Specific responsibilities of our compensation committee include:

- reviewing and recommending approval of compensation of our executive officers
- administering our equity compensation plans

- reviewing and making recommendations to our board with respect to incentive compensation and equity plans

Nominating/ Corporate Governance Committee. The members of our nominating/corporate governance committee are Drs. Halak, Hockmeyer and Karabelas. Our nominating/corporate governance committee identifies, evaluates and recommends nominees to our board of directors and committees of our board of directors, conducts searches for appropriate directors, and evaluates the performance of our board of directors and of individual directors. The nominating/corporate governance committee is also responsible for reviewing developments in corporate governance practices, evaluating the adequacy of our corporate governance practices and reporting and making recommendations to the board concerning corporate governance matters.

Director compensation

On December 19, 2005, our board of directors adopted a compensation program for outside directors. Pursuant to this program, each member of our board of directors who is not our employee will receive a $25,000 annual retainer as well as $2,500 for each board meeting attended in person ($1,250 for meetings attended by telephone conference). The chairman of the board of directors will receive an additional annual retainer of $10,000, and the chairman of each committee of the board of directors will receive an additional annual retainer of $2,000. Each director will receive $1,000 for each meeting of any committee of the board of directors attended in person or by telephone conference.

Under the director compensation program adopted on December 19, 2005, each member of our board of directors who is not our employee and who is elected after December 19, 2005 will initially receive a nonstatutory option to purchase 35,000 shares of our common stock upon election, and each member of our board of directors who is not our employee will also receive annual grants of options to purchase 15,000 shares of our common stock. The stock option granted upon election will vest and become exercisable in equal monthly installments over a period of four years from the date of the grant, except that in the event of a change of control the option will accelerate and become immediately exercisable. Each annual stock option will vest and become exercisable in equal monthly installments over a period of one year from the date of grant, except that in the event of a change of control the option will accelerate and become immediately exercisable. All of these options will have an exercise price equal to the fair market value of our common stock on the date of the grant. In cases where a director is serving as such on behalf of an entity, we may issue a warrant directly to such entity as consideration for the services provided in lieu of granting an option to the director himself.

Compensation committee interlocks and insider participation

The current members of our compensation committee of our board of directors are Drs. Hockmeyer, Karabelas and Tananbaum. No interlocking relationship exists between our board of directors or compensation committee and the board of directors or compensation committee of any other company, nor has any interlocking relationship existed in the past.

Executive compensation

The following table sets forth the compensation earned by our Chief Executive Officer and the other highest paid executive officer whose salary and bonus exceeded $100,000 for services rendered in all capacities to us during the fiscal year ended December 31, 2004. We use the

term “named executive officers” to refer to these people later in this prospectus. No other executive officers who would have otherwise been includable in the following table on the basis of salary and bonus earned for the year ended December 31, 2004 have been excluded by reason of their termination of employment or change in executive status during that year.

		Annual compensation		Long-term compensation Awards
Name and principal position	Year	Salary($)	Bonus($)	Securities underlying options
Mihael H. Polymeropoulos, M.D. President and Chief Executive Officer	2004	$ 350,000	$ 147,000	—
William D. “Chip” Clark Senior Vice President, Chief Business Officer and Secretary	2004	$ 75,000(1)	$ —	303,400

(1) In September 2004 Mr. Clark joined us as Senior Vice President, Chief Business Officer and Secretary at an annual salary of $225,000.

This table excludes compensation information for Thomas Copmann, who joined us in April 2005 as Vice President of Regulatory Affairs, Deepak Phadke, who joined us in August 2005 as Vice President of Manufacturing, and Steven A. Shallcross, who joined us as Senior Vice President, Chief Financial Officer and Treasurer in November 2005. The terms of Drs. Copmann and Phadke and Mr. Shallcross’ employment are described in the “—Employment agreements” section below.

Option grants in last fiscal year

The following table outlines information regarding stock options granted to our named officers in 2004. Amounts in the following table under potential realizable values are amounts that could be achieved for the respective options if they are exercised at the end of the option term. For purposes of this analysis, the Securities and Exchange Commission mandates the use of 5% and 10% assumed annual rates of compounded stock price appreciation, and these rates do not represent an estimate or projection of our future common stock prices. The amounts under potential realizable value represent assumed rates of appreciation in the value of our common stock from the assumed initial public offering price of $ per share. Actual gains, if any, in this value will depend on the future performance of our common stock and overall market conditions. We may not achieve the amounts reflected in the following table.

	Individual grants				Potential realizable value at assumed annual rates of stock price appreciation for option term(3)	
Name	Number of securities underlying options granted	Percent of total options granted to employees in fiscal year(1)	Exercise price(2)	Expiration date	5%	10%
Mihael H. Polymeropoulos, M.D.	—	—	—	—		
William D. “Chip” Clark	303,400	94.1%	$ 0.10	09/01/2014		

(1) The figures representing percentages of total options granted to employees in the last fiscal year are based on a total of 322,373 option shares granted to our employees during fiscal year 2004.

(2) The exercise price of each option granted was equal to the fair market value of our common stock as valued by our board of directors on the date of grant. The exercise price may be paid in cash, cash equivalents, or in shares of our common stock.

(3) The potential realizable value is calculated based on the ten-year term of the option at the time of grant. Stock price appreciation of 5% and 10% is assumed according to rules promulgated by the Securities and Exchange Commission and does not represent our prediction of our stock price performance. The potential realizable value at 5% and 10% appreciation is calculated by:

- Multiplying the number of shares of stock subject to a given stock option by the exercise price per share
- Assuming that the aggregate stock value derived from that calculation compounds at the annual 5% or 10% rate shown in the table until the expiration of the option
- Subtracting from that result the aggregate option exercise price

Option exercises and fiscal year-end option values

None of the named executive officers exercised options during 2004. The following table presents the number and value of securities underlying unexercised options that were held by our named executive officers as of December 31, 2004.

	Number of securities underlying unexercised options at December 31, 2004		Value of unexercised in-the-money options at December 31, 2004(1)	
Name	**Exercisable**	**Unexercisable**	**Exercisable**	**Unexercisable**
Mihael H. Polymeropoulos, M.D.	—	493,400	—	
William D. “Chip” Clark	—	303,400	—	

(1) Amounts presented under the caption “Value of unexercised in-the-money options at December 31, 2004” are based on the fair market value of $ per share minus the exercise price, multiplied by the number of shares subject to the stock option, without taking into account any taxes that might be payable in connection with the transaction.

Employment agreements

We have entered into offer letters or employment agreements with each of Mihael H. Polymeropoulos, M.D., our Chief Executive Officer, Steven Shallcross, our Chief Financial Officer, William D. “Chip” Clark, our Chief Business Officer, Thomas Copmann, our Vice President of Regulatory Affairs, and Deepak Phadke, our Vice President of Manufacturing.

Mihael Polymeropoulos, M.D. We entered into an employment agreement in February 2005 with Dr. Polymeropoulos, our President and Chief Executive Officer, which provides for an annual base salary of $362,250 and the possibility of an annual target bonus amount equal to 40% of his annual base salary upon achievement of certain performance goals. If Dr. Polymeropoulos’ employment is terminated without cause, he becomes permanently disabled, or he terminates his employment for good reason, he will receive the following severance benefits following his employment termination: (a) a cash payment of his monthly base salary for 12 months; (b) payment of his monthly COBRA health insurance premiums; and (c) a bonus in an amount determined as follows: (i) if he is terminated prior to the first anniversary of this agreement, a pro-rata portion of the anticipated first-year target bonus will be given to him; (ii) if he is terminated on or following the first anniversary and prior to the third, the bonus will equal the greater of the most recent target bonus or the average target bonuses awarded for the prior years; or (iii) if he is terminated on or following the third anniversary, the bonus will be equal to the greater of the most recent target bonus or the average target bonus awarded for the prior three years. In addition, the employment agreement provides for an option grant covering 918,400 shares of our common stock with the

following vesting acceleration terms: if, following a change in control, Dr. Polymeropoulos is terminated without cause, or he terminates his employment for good reason, he will become vested in 100% of his then unvested shares.

William D. "Chip" Clark. We entered into an employment agreement in February 2005 with Mr. Clark, our Senior Vice President, Chief Business Officer and Secretary, which provides for an annual base salary of $227,625 and the possibility of a annual target bonus equal to 25% of his annual base salary upon achievement of certain performance criteria. If Mr. Clark's employment is terminated without cause, he becomes permanently disabled, or he terminates his employment for good reason, he will receive the following severance benefits following his employment termination: (a) a cash payment of his monthly base salary for 12 months; (b) payment of his monthly COBRA health insurance premiums; and (c) a bonus in an amount determined as follows: (i) if he is terminated prior to the first anniversary of this agreement, a pro-rata portion of the anticipated first-year target bonus will be given to him; (ii) if he is terminated on or following the first anniversary and prior to the third, the bonus will equal the greater of the most recent target bonus or the average target bonuses awarded for the prior years; or (iii) if he is terminated on or following the third anniversary, the bonus will be equal to the greater of the most recent target bonus or the average target bonus awarded for the prior three years. In addition, the employment agreement provides for an option grant covering 463,400 shares of our common stock with the following vesting acceleration terms: if, following a change in control, Mr. Clark is terminated without cause, or he terminates his employment for good reason, he will become vested in 24 months' worth of his then unvested shares.

Steven A. Shallcross. We entered into an employment agreement in October 2005 with Mr. Shallcross, our Senior Vice President, Chief Financial Officer and Treasurer, which provides for an annual base salary of $250,000 and the possibility of an annual target bonus equal to 25% of his annual base salary upon achievement of certain performance criteria. If Mr. Shallcross' employment is terminated without cause, he becomes permanently disabled, or he terminates his employment for good reason, he will receive the following severance benefits following his employment termination: (a) a cash payment of his monthly base salary for 12 months; (b) payment of his monthly COBRA health insurance premiums; and (c) a bonus in an amount determined as follows: (i) if he is terminated prior to the first anniversary of this agreement, a pro-rata portion of the anticipated first-year target bonus will be given to him; (ii) if he is terminated on or following the first anniversary and prior to the third, the bonus will equal the greater of the most recent target bonus or the average target bonuses awarded for the prior years; or (iii) if he is terminated on or following the third anniversary, the bonus will be equal to the greater of the most recent target bonus or the average target bonus awarded for the prior three years. In addition, the employment agreement provides for an option grant covering 275,000 shares of our common stock with the following vesting acceleration terms: if, following a change in control, Mr. Shallcross is terminated without cause, or he terminates his employment for good reason, he will become vested in 24 months' worth of his then unvested shares.

Thomas Copmann, Ph.D. We entered into an employment agreement in May 2005 with Dr. Copmann, our Vice President of Regulatory Affairs, which provides for an annual base salary of $200,000 and the possibility of an annual target bonus equal to 28% of his annual base salary upon achievement of certain performance criteria. If Dr. Copmann's employment is terminated without cause, he becomes permanently disabled, or he terminates his employment for good reason, he will receive the following severance benefits following his employment

termination: (a) a cash payment of his monthly base salary for 6 months; (b) payment of his monthly COBRA health insurance premiums; and (c) a bonus in an amount equal to a pro-rata portion of the annual target bonus for the year of his termination. In addition, the employment agreement provides for an option grant covering 75,000 shares of our common stock with the following vesting acceleration terms: if, following a change in control, Dr. Copmann is terminated without cause, or he terminates his employment for good reason, he will become vested in 12 months' worth of his then unvested shares.

Deepak Phadke, Ph.D. We entered into an offer letter in July 2005 with Dr. Phadke, our Vice President of Manufacturing, which provides for a sign-on bonus of $20,000, $10,000 of which was awarded in his first pay period and the remainder of which will be awarded on the one year anniversary of his start date. We also entered into an employment agreement in August 2005 with Dr. Phadke, which provides for an annual base salary of $170,000 and the possibility of an annual target bonus equal to 15% of his annual base salary upon achievement of certain performance criteria. If Dr. Phadke's employment is terminated without cause, he becomes permanently disabled, or he terminates his employment for good reason, he will receive the following severance benefits following his employment termination: (a) a cash payment of his monthly base salary for 6 months; (b) payment of his monthly COBRA health insurance premiums; and (c) a bonus in an amount equal to a pro-rata portion of the annual target bonus for the year of his termination. In addition, the employment agreement provides for an option grant covering 50,000 shares of our common stock with the following vesting acceleration terms: if, following a change in control, Dr. Phadke is terminated without cause, or he terminates his employment for good reason, he will become vested in 12 months' worth of his then unvested shares.

Severance and change in control arrangements

See "—Employment agreements" above for a description of the severance and change in control arrangements for Drs. Polymeropoulos, Copmann and Phadke and Messrs. Clark and Shallcross. Drs. Polymeropoulos, Copmann and Phadke and Messrs. Clark and Shallcross will only be eligible to receive severance payments if each officer signs a general release of claims.

The compensation committee of our board of directors, as plan administrator of the Second Amended and Restated Management Equity Plan, has the authority to provide for accelerated vesting of the shares of common stock subject to outstanding options held by our named executive officers and any other person in connection with certain changes in control of Vanda.

Equity benefit plans

Second amended and restated management equity plan

Share reserve. Our Second Amended and Restated Management Equity Plan was adopted by us and approved by our stockholders in December 2004. We have reserved a total of 5,348,975 shares of our common stock for issuance under the plan as of September 30, 2005. No further option grants will be made under this plan after the effective date of this offering. The options that are outstanding under the plan after the effective date of this offering will continue to be governed by their existing terms. After the effective date of this offering, any shares that remained available for grants under the plan and any shares subject to options or share awards under the plan that are canceled, forfeited or repurchased will not be available for future grants or awards. The plan is administered by our board of directors, or by one or more committees appointed by the Board of Directors.

Eligibility. Employees, non-employee members of our board of directors and consultants are eligible to participate in our Second Amended and Restated Management Equity Plan.

Types of award. Our Second Amended and Restated Management Equity Plan provides for the purchase of shares of our common stock, and incentive and nonstatutory stock options to purchase shares of our common stock. The exercise price for incentive stock options and nonstatutory stock options granted under the plan may not be less than 100% and 30%, respectively, of the fair market value of our common stock on the option grant date. Optionees may pay the purchase price or the exercise price by using cash, shares of common stock that the optionee already owns, a full-recourse promissory note, by rendering services to us, by an immediate sale of the option shares through a broker designated by us, or with a loan from a broker designated by us and secured by the option shares. In most cases, our options vest over a four-year period following the date of grant and generally expire 10 years after they are granted, unless the optionee separates from service with us.

Change in control. If we merge or consolidate with another company, an option granted under the Second Amended and Restated Management Equity Plan will be subject to the terms of the merger or consolidation agreement, which may provide that the option continues, is assumed or substituted, becomes vested and exercisable in full, or is canceled and the optionees receive a payment.

Amendments or termination. Our board of directors may amend or terminate the Second Amended and Restated Management Equity Plan at any time. If our board amends the plan, it does not need to seek stockholder approval of the amendment unless the number of shares reserved under the plan increases or the class of person eligible for the grant of incentive stock options materially changes. The plan will automatically terminate 10 years after its adoption by our board of directors.

2006 equity incentive plan

We expect to adopt a 2006 Equity Incentive Plan prior to the closing of this offering with the following material terms:

Share reserve. We expect to reserve shares of our common stock for issuance under the 2006 Equity Incentive Plan. On January 1 of each year, starting with the year 2007, the number of shares in the reserve will automatically increase by % of the total number of shares of common stock that are outstanding at that time or, if less, by shares. If options or shares awarded under the 2006 Equity Incentive Plan are forfeited, then those options or shares will again become available for awards under this plan.

Administration. The compensation committee of our board of directors will administer the 2006 Equity Incentive Plan. The committee will have the complete discretion to make all decisions relating to the interpretation and operation of this Plan, including the discretion to determine who will receive an award, what type of award it will be, how many shares will be covered by the award, what the vesting requirements will be, if any, and what the other features and conditions of each award will be. The compensation committee will be able to reprice outstanding options and modify outstanding awards in other ways.

Eligibility. The following groups of individuals will be eligible to participate in the 2006 Equity Incentive Plan:

- employees
- members of our board of directors who are not employees
- consultants

Types of awards. The 2006 Equity Incentive Plan will provide for the following types of award:

- options to purchase shares of our common stock
- stock appreciation rights
- restricted shares of our common stock
- stock units (sometimes called phantom shares)

Options and stock appreciation rights. Both incentive stock options and nonstatutory stock options will be available for grant under the 2006 Equity Incentive Plan. An optionee who exercises an incentive stock option may qualify for favorable tax treatment under section 422 of the Internal Revenue Code of 1986. On the other hand, nonstatutory stock options do not qualify for such favorable tax treatment. The exercise price of options and stock appreciation rights granted under the 2006 Equity Incentive Plan may not be less than 100% of the fair market value of our common stock on the grant date. Optionees may pay the exercise price by using:

- cash
- shares of common stock that the optionee already owns
- an immediate sale of the option shares through a broker designated by us
- a full-recourse promissory note

Options and stock appreciation rights will vest at the time or times determined by the compensation committee. In most cases, our options will vest over the four-year period following the date of grant. Options and stock appreciation rights generally expire 10 years after they are granted, except that they generally expire earlier if the optionee's service terminates earlier. The 2006 Equity Incentive Plan will provide that no participant may receive options covering more than 500,000 shares and stock appreciation rights covering more than 500,000 shares in the same year, except that a newly hired employee may receive options covering up to 1,000,000 shares and stock appreciation rights covering up to 1,000,000 shares in the first year of employment.

The 2006 Equity Incentive Plan will also provide for automatic annual option grants to members of our board of directors who are not our employees. See "—Director compensation."

Restricted shares and stock units. Restricted shares may be awarded under the 2006 Equity Incentive Plan in return for:

- cash
- a full-recourse promissory note
- services

Restricted shares and stock units will vest at the time or times determined by the compensation committee.

Change in control. If a change in control of Vanda occurs, an award under the 2006 Equity Incentive Plan will vest on an accelerated basis to the extent determined by the compensation

committee. The compensation committee may determine that outstanding grants will vest in full or in part at the time of the change in control. It may also determine that the grants will vest on an accelerated basis only if the participant is actually or constructively discharged within a specified period of time after the change in control. Finally, the committee will have the discretion to determine that the grants will remain outstanding without acceleration of vesting, except that if the surviving corporation fails to assume an outstanding award or replace it with a comparable award or cash payment, then the award will always become fully vested as a result of the change in control. A change in control will include the following events for purposes of the 2006 Equity Incentive Plan:

- a merger of Vanda after which our own stockholders own 50% or less of the surviving corporation
- a sale of all or substantially all of our assets
- a proxy contest that results in the replacement of 50% or more of our directors over a 24-month period
- an acquisition of % or more of our outstanding stock by any person or group, other than a person related to Vanda (such as a holding company owned by our stockholders)

Amendments or termination. Our board will be able to amend or terminate the 2006 Equity Incentive Plan at any time. If our board were to amend the plan, it would not need to ask for stockholder approval of the amendment unless applicable law requires it. The 2006 Equity Incentive Plan would continue in effect indefinitely, unless the board were to decide to terminate the plan.

401(k) plan

We have established a 401(k) plan to allow our employees to save on a tax-favorable basis for their retirements. We match contributions made by employees pursuant to the plan.

Limitation of liability and indemnification of officers and directors

Upon the closing of this offering, we will adopt and file a new amended and restated certificate of incorporation and will amend and restate our bylaws. Our new amended and restated certificate of incorporation and amended and restated bylaws will provide that we will indemnify our directors and officers to the fullest extent permitted by Delaware law, as it now exists or may in the future be amended, against all expenses and liabilities reasonably incurred in connection with their service for or on behalf of us. In addition, the new amended and restated certificate of incorporation will provide that our directors will not be personally liable for monetary damages to us for breaches of their fiduciary duty as directors, unless they violated their duty of loyalty to us or our stockholders, acted in bad faith, knowingly or intentionally violated the law, authorized illegal dividends or redemptions or derived an improper personal benefit from their action as directors. We maintain liability insurance which insures our directors and officers against certain losses and which insures us against our obligations to indemnify our directors and officers.

In addition, we have entered into indemnification agreements with each of our directors and officers. These agreements, among other things, require us to indemnify each director and officer to the fullest extent permitted by Delaware law, including indemnification of expenses such as attorneys' fees, judgments, fines and settlement amounts incurred by the director or officer in any action or proceeding, including any action or proceeding by or in right of us,

arising out of the person's services as a director or officer. At present, we are not aware of any pending or threatened litigation or proceeding involving any of our directors, officers, employees or agents in which indemnification would be required or permitted. We believe provisions in our new amended and restated certificate of incorporation and indemnification agreements are necessary to attract and retain qualified persons as directors and officers.

Certain relationships and related party transactions

2004 securityholders' agreement

We have entered into a 2004 Securityholders' Agreement with certain holders of our Common Stock, Series A Preferred Stock and Series B Preferred Stock, including our officers and directors and certain affiliates of such officers and directors. Under the Securityholders' Agreement, we have granted the following rights to such stockholders:

- rights to demand the registration of our common stock and to participate in other public offerings of our common stock (for more information regarding the registration rights granted pursuant to the 2004 Securityholders' Agreement, see "Description of capital stock— Registration rights")
- rights to purchase certain new issuances of our securities (which rights do not apply with respect to, and will terminate upon the completion of, this offering)
- rights to information regarding us (which rights will terminate upon the conversion of our preferred stock into common stock upon completion of this offering)
- rights to inspect our facilities, books, records and to discuss our affairs, finances and accounts with its officers (which rights will terminate upon the conversion of our preferred stock into common stock upon completion of this offering)

Additionally, the Securityholders' Agreement restricts the transfer of securities held by such stockholders, subject to certain exceptions (including a sale made pursuant to a public offering of our stock).

Voting agreement

We have entered into a voting agreement which provides for the election of certain stockholder-designated directors to our board. This agreement will terminate upon the closing of this offering.

Indemnification agreements

We have entered into indemnification agreements with each of our directors. These agreements, among other things, require us to indemnify each director to the fullest extent permitted by Delaware law, including indemnification of expenses such as attorneys' fees, judgments, fines and settlement amounts incurred by the director in any action or proceeding, including any action or proceeding by or in right of us, arising out of the person's services as a director.

Relationship with Care Capital, LLC

From time to time, we reimbursed Care Capital, LLC ("Care Capital"), an affiliate of our stockholders, Care Capital Investments II, LP and Care Capital Offshore Investments II, LP, for certain expenses incurred by Care Capital on our behalf. We reimbursed Care Capital for approximately $54,000 and approximately $299,000 for the year ended December 31, 2004 and for the period from March 13, 2003 (inception) to December 31, 2003, respectively.

We also used the services of a Care Capital employee and reimbursed Care Capital for such personnel services related to occupancy and salary expenses incurred on our behalf. Reimbursements related to such expenses were approximately $31,000 and $49,000 for the year ended December 31, 2004 and the period from March 13, 2003 (inception) to December 31, 2003, respectively.

Principal stockholders

The following table sets forth certain information known to us regarding beneficial ownership of our common stock as of September 30, 2005 and as adjusted to reflect the sale of the shares of common stock in this offering by:

- each person known by us to be the beneficial owner of more than 5% of our common stock
- our named executive officers
- each of our directors
- all executive officers and directors as a group

Unless otherwise indicated in the footnotes, to our knowledge, each stockholder possesses sole voting and investment power over the shares listed, except for shares owned jointly with that person's spouse.

Beneficial ownership is determined in accordance with the rules of the Securities and Exchange Commission and generally includes voting or investment power with respect to securities. Options and warrants to purchase shares of our common stock that are exercisable within 60 days of September 30, 2005, are deemed to be beneficially owned by the persons holding these options for the purpose of computing percentage ownership of that person, but are not treated as outstanding for the purpose of computing any other person's ownership percentage.

Percentage of shares beneficially owned before the offering is based on 40,232,047 shares of common stock outstanding as of September 30, 2005, assuming the conversion of all outstanding Preferred Stock to Common Stock as of such date. Percentage of shares beneficially owned after the offering is based on shares of common stock outstanding

after the closing of the offering. This table does not take into account the issuance of 12,195,129 shares of our Series B Preferred Stock made on December 9, 2005.

Name and address of beneficial owner(1)	Number of shares beneficially owned	Percentage of shares beneficially owned: Before offering	Percentage of shares beneficially owned: After offering
5% Stockholders			
Care Capital Investments II, LP(2) 47 Hulfish St., Ste 310 Princeton, NJ 08542	9,172,142	22.80%	
Domain Partners VI, L.P.(3) One Palmer Square, Suite 515 Princeton, NJ 08542	8,130,082	20.21%	
Biomedical Sciences Investment Fund Pte Ltd.(4) 20 Biopolis Way #09-01 Centros, Singapore 138668	6,528,918	16.23%	
Prospect Venture Partners II, L.P.(5) 435 Tasso St., Ste. 200 Palo Alto, CA 94301	6,097,562	15.16%	
Rho Ventures IV, L.P.(6) Carnegie Hall Tower 152 West 57th Street 23rd Floor New York, NY 10019	6,097,562	15.16%	
MedImmune Ventures, Inc.(7) c/o MedImmune, Inc. One MedImmune Way Gaithersburg, MD 20878	4,065,042	10.10%	
Executive Officers and Directors			
Mihael H. Polymeropoulos, M.D.(8)	308,375	*	
William D. “Chip” Clark(9)	88,492	*	
Argeris N. Karabelas, Ph.D.(10)	9,172,142	22.80%	
Brian K. Halak, Ph.D.(11)	8,130,082	20.21%	
Wayne T. Hockmeyer, Ph.D.(12)	4,065,042	10.10%	
David Ramsay(13)	9,172,142	22.79%	
James B. Tananbaum, M.D.(14)	6,097,562	15.16%	
Deepak Phadke, Ph.D.(15)	—	*	
Thomas Copmann, Ph.D.(16)	—	*	
All executive officers and directors as a group	34,374,009	85.44%	

* Represents beneficial ownership of less than one percent of our outstanding common stock.

(1) Unless otherwise indicated, the address for each beneficial owner is c/o Vanda Pharmaceuticals Inc., 9620 Medical Center Drive, Suite 201, Rockville, Maryland 20850.

(2) Includes 8,583,366 shares held of record by Care Capital Investments II, LP and 588,776 shares held of record by Care Capital Offshore Investments II, LP. Excludes 2,610,920 shares issuable upon the conversion of Series B Preferred Stock purchased by Care Capital Investments II, LP on December 9, 2005 and 179,097 shares issuable upon the conversion of Series B Preferred Stock purchased by Care Capital Offshore Investments II, LP on December 9, 2005.

(3) Includes 8,043,874 shares held of record by Domain Partners VI, L.P. and 86,208 shares held of record by DP VI Associates, L.P. Excludes 2,446,817 shares issuable upon the conversion of Series B Preferred Stock purchased by Domain Partners VI, L.P.

on December 9, 2005 and 26,223 shares issuable upon the conversion of Series B Preferred Stock purchased by DP VI Associates, L.P. on December 9, 2005.

(4) Represents 6,528,918 shares held directly but excludes 1,985,991 shares issuable upon the conversion of Series B Preferred Stock purchased by Biomedical Sciences Investment Fund Pte Ltd. on December 9, 2005. EDB Investments Pte. Ltd ("EDB Investments"), the parent entity of Biomedical Sciences Investment Fund Pte. Ltd., and the Economic Development Board of Singapore ("EDB"), the ultimate parent entity of EDB Investments, may be deemed to have voting and dispositive power over the shares owned beneficially and of record by Biomedical Sciences Investment Fund Pte. Ltd.

(5) Includes 6,006,098 shares held of record by Prospect Venture Partners II, L.P. and 91,464 shares held of record by Prospect Associates II, L.P. Excludes 1,826,958 shares issuable upon the conversion of Series B Preferred Stock purchased by Prospect Venture Partners II, L.P. on December 9, 2005 and 27,822 shares issuable upon the conversion of Series B Preferred Stock purchased by Prospect Associates II, L.P. on December 9, 2005.

(6) Includes 763,478 shares held of record by Rho Ventures IV, L.P., 1,873,172 shares held of record by Rho Ventures IV GmbH & Co. Beteiligungs KG, 1,797,418 shares held of record by Rho Ventures IV (QP), L.P. and 1,663,494 shares held of record by Rho Management Trust I. Excludes 232,238 shares issuable upon the conversion of Series B Preferred Stock purchased by Rho Ventures IV, L.P. on December 9, 2005, 569,789 shares issuable upon the conversion of Series B Preferred Stock purchased by Rho Ventures IV GmbH & Co. Beteiligungs KG on December 9, 2005, 546,746 shares issuable upon the conversion of Series B Preferred Stock purchased by Rho Ventures IV (QP), L.P. on December 9, 2005 and 506,008 shares of Series B Preferred Stock purchased by Rho Management Trust I on December 9, 2005.

(7) Excludes 1,236,520 shares issuable upon the conversion of Series B Preferred Stock purchased by MedImmune Ventures, Inc. on December 9, 2005.

(8) Excludes 1,979,006 shares unexercisable as of September 30, 2005.

(9) Excludes 1,055,199 shares unexercisable as of September 30, 2005.

(10) Includes 8,583,366 shares held of record by Care Capital Investments II, LP and 588,776 shares of record held by Care Capital Offshore Investments II, LP., but excludes 2,610,920 shares issuable upon the conversion of Series B Preferred Stock purchased by Care Capital Investments II, LP on December 9, 2005 and 179,097 shares issuable upon the conversion of Series B Preferred Stock purchased by Care Capital Offshore Investments II, LP on December 9, 2005. Dr. Karabelas is a Partner of Care Capital, LLC. Care Capital, LLC is the general partner of Care Capital Investments II, LP and Care Capital Offshore Investments II, LP. Dr. Karabelas disclaims beneficial ownership of the shares held by Care Capital Investments II, LP and Care Capital Offshore Investments II, LP except to the extent of his pecuniary interest therein.

(11) Includes 8,043,874 shares held of record by Domain Partners VI, L.P. and 86,208 shares held of record by DP VI Associates, L.P., but excludes 2,446,817 shares issuable upon the conversion of Series B Preferred Stock purchased by Domain Partners VI, L.P. on December 9, 2005 and 26,223 shares issuable upon the conversion of Series B Preferred Stock purchased by DP VI Associates, L.P. on December 9, 2005. Dr. Halak is a Principal of Domain Associates, LLC, the [general partner] of Domain Partners VI, L.P. and DP VI Associates, L.P. Dr. Halak disclaims beneficial ownership of the shares held by Domain Partners VI, L.P. and DP VI Associates, L.P. except to the extent of his pecuniary interest therein.

(12) Includes 4,065,042 shares held of record by MedImmune Ventures, Inc., but excludes 1,236,520 shares issuable upon the conversion of Series B Preferred Stock purchased by MedImmune Ventures, Inc. on December 9, 2005. Dr. Hockmeyer is the President of MedImmune Ventures, Inc. He disclaims beneficial ownership of the shares held by MedImmune Ventures, Inc. except to the extent of his pecuniary interest therein.

(13) Includes 8,583,366 shares held of record by Care Capital Investments II, LP and 588,776 shares held of record held by Care Capital Offshore Investments II, LP, but excludes 2,610,920 shares issuable upon the conversion of Series B Preferred Stock purchased by Care Capital Investments II, LP on December 9, 2005 and 179,097 shares issuable upon the conversion of Series B Preferred Stock purchased by Care Capital Offshore Investments II, LP on December 9, 2005. Mr. Ramsay is a Partner of Care Capital, LLC. Care Capital, LLC is the general partner of Care Capital Investments II, LP and Care Capital Offshore Investments II, LP. Mr. Ramsay disclaims beneficial ownership of the shares held by Care Capital Investments II, LP and Care Capital Offshore Investments II, LP except to the extent of his pecuniary interest therein.

(14) Includes 6,006,098 shares held of record by Prospect Venture Partners II, L.P. and 91,464 shares held of record by Prospect Associates II, L.P. but excludes 1,826,958 shares issuable upon the conversion of Series B Preferred Stock purchased by Prospect Venture Partners II, L.P. on December 9, 2005 and 27,822 shares issuable upon the conversion of Series B Preferred Stock purchased by Prospect Associates II, L.P. on December 9, 2005. Dr. Tananbaum serves as Managing Director of Prospect Venture Partners II, L.P. [and Prospect Associates II, L.P.] He disclaims beneficial ownership of the shares held of record by Prospect Venture Partners II, L.P. and Prospect Associates II, L.P. except to the extent of his pecuniary interest therein.

(15) Excludes 50,000 shares unexercisable as of September 30, 2005.

(16) Excludes 75,000 shares unexercisable as of September 30, 2005.

Description of capital stock

General

The following is a summary of the rights of our common stock and preferred stock and related provisions of our restated certificate of incorporation and bylaws as they will be in effect upon the closing of this offering. For more detailed information, please see our restated certificate of incorporation, bylaws, governance agreement and amended and restated investors' rights agreement, which are filed as exhibits to the registration statement of which this prospectus is a part.

Immediately following the closing of this offering, our authorized capital stock will consist of shares, each with a par value of $0.01 per share, of which:

- shares are designated as common stock
- shares are designated as preferred stock

At September 30, 2005, we had outstanding 150,739 shares of common stock and 40,081,308 shares of preferred stock. In addition, as of September 30, 2005, 3,783,490 shares of our common stock were subject to outstanding options, and 166,660 shares of our capital stock were subject to outstanding warrants. At September 30, 2005, 140,739 shares of our outstanding common stock were held by our employees and consultants. 36,838 of these shares are subject to a lapsing right of repurchase in our favor, under which we may repurchase these shares upon the termination of the holder's employment or consulting relationship. The number of shares of common stock outstanding as of September 30, 2005 assumes the conversion of all of our outstanding preferred stock outstanding as of such date into 40,081,308 shares of common stock.

Common stock

Voting rights

Unless otherwise provided for in our restated certificate of incorporation or required by applicable law, on all matters submitted to our stockholders for vote, our common stockholders will be entitled to one vote per share, voting together as a single class, upon the closing of this offering.

Dividends

Upon the closing of this offering, our restated certificate of incorporation will provide that subject to preferences that may apply to any shares of preferred stock outstanding at the time, the holders of common stock shall be entitled to share equally in any dividends that our board of directors may determine to issue from time to time. In the event a dividend is paid in the form of shares of common stock or rights to acquire shares of common stock, the holders of common stock shall receive common stock, or rights to acquire common stock, as the case may be.

Liquidation

Upon the closing of this offering, our restated certificate of incorporation will provide that upon our liquidation, dissolution or winding-up, the holders of common stock shall be entitled to share equally all assets remaining after the payment of any liabilities and the liquidation preferences on any outstanding preferred stock.

Anti-takeover effects of our amended and restated certificate of incorporation, bylaws and Delaware law

Some provisions of Delaware law and our amended and restated certificate of incorporation and bylaws could make the following transactions more difficult:

- our acquisition by means of a tender offer
- our acquisition by means of a proxy contest or otherwise
- removal of our incumbent officers and directors

These provisions, summarized below, are expected to discourage and prevent coercive takeover practices and inadequate takeover bids. These provisions are designed to encourage persons seeking to acquire control of us to first negotiate with our board of directors, and also are intended to provide management with flexibility to enhance the likelihood of continuity and stability in our composition if our board of directors determines that a takeover is not in our best interests or the best interests of our stockholders. These provisions, however, could have the effect of discouraging attempts to acquire us, which could deprive our stockholders of opportunities to sell their shares of common stock at prices higher than prevailing market prices. We believe that the benefits of these provisions, including increased protection of our potential ability to negotiate with the proponent of an unfriendly or unsolicited proposal to acquire or restructure us, outweigh the disadvantages of discouraging takeover proposals because negotiation of takeover proposals could result in an improvement of their terms.

Election and removal of directors. Our board of directors is divided into three classes serving staggered three-year terms. This system of electing directors may tend to discourage a third party from making a tender offer or otherwise attempting to obtain control of us because generally at least two stockholders' meetings will be required for stockholders to effect a change in control of the board of directors. Our amended and restated certificate of incorporation and our bylaws contain provisions that establish specific procedures for appointing and removing members of the board of directors. Under our amended and restated certificate of incorporation, vacancies and newly created directorships on the board of directors may be filled only by a majority of the directors then serving on the board, and under our bylaws, directors may be removed by the stockholders only for cause.

Stockholder meetings. Under our bylaws, only the board of directors, the Chairman of the board or our Chief Executive Officer may call special meetings of stockholders.

Requirements for advance notification of stockholder nominations and proposals. Our bylaws establish advance notice procedures with respect to stockholder proposals and the nomination of candidates for election as directors, other than nominations made by or at the direction of the board of directors or a committee of the board of directors.

Delaware anti-takeover law. Upon the closing of this offering, we will be subject to Section 203 of the Delaware General Corporation Law, an anti-takeover law. In general, Section 203 prohibits a publicly held Delaware corporation from engaging in a business combination with an interested stockholder for a period of three years following the date the person became an interested stockholder, unless the business combination or the transaction in which the person became an interested stockholder is approved in a prescribed manner. Generally, a business combination includes a merger, asset or stock sale, or another transaction resulting in a financial benefit to the interested stockholder. Generally, an interested stockholder is a person who, together with affiliates and associates, owns, or within three years prior to the date of determination of interested stockholder status did own, 15% or more of

the corporation's voting stock. The existence of this provision may have an anti-takeover effect with respect to transactions that are not approved in advance by our board of directors, including discouraging attempts that might result in a premium over the market price for the shares of common stock held by stockholders.

Elimination of stockholder action by written consent. Our amended and restated certificate of incorporation eliminates the right of stockholders to act by written consent without a meeting after this offering.

No cumulative voting. Our amended and restated certificate of incorporation and bylaws do not provide for cumulative voting in the election of directors. Cumulative voting allows a minority stockholder to vote a portion or all of its shares for one or more candidates for seats on the board of directors. Without cumulative voting, a minority stockholder will not be able to gain as many seats on our board of directors based on the number of shares of our stock the stockholder holds as the stockholder would be able to gain if cumulative voting were permitted. The absence of cumulative voting makes it more difficult for a minority stockholder to gain a seat on our board of directors to influence our board's decision regarding a takeover.

Undesignated preferred stock. The authorization of undesignated preferred stock makes it possible for our board of directors to issue preferred stock with voting or other rights or preferences that could impede the success of any attempt to change control of us.

These and other provisions may have the effect of deferring hostile takeovers or delaying changes in control or management.

Limitation of liability of directors

To the fullest extent permitted by the Delaware General Corporation Law as it now exists or hereafter may be amended, our directors will not be personally liable to us or our stockholders for monetary damages for breach of fiduciary duty as a director.

If the Delaware General Corporation Law is later amended to authorize the further elimination or limitation of the liability of directors, then the liability of our directors, in addition to the limitation on personal liability provided in our certificate of incorporation, will be limited to the fullest extent permitted by the amended Delaware General Corporation Law. Any repeal or modification of the provisions in our certificate of incorporation by our stockholders relating to the limitation of the liability of our directors will be prospective only and will not adversely affect any limitation on the personal liability of our directors existing at the time of the repeal or modification.

Warrants

As of September 30, 2005, there were warrants outstanding to purchase a total of 166,660 shares of common stock at a price of $0.40 per share.

Registration rights

The holders of 10,000 shares of our common stock and 40,081,308 shares of our common stock issuable upon the conversion of our Series A Preferred Stock and Series B Preferred Stock (not including shares of Series B Preferred Stock issued on December 9, 2005) are entitled to rights with respect to the registration of their shares under the Securities Act. These registration rights are contained in our 2004 Securityholders Agreement and are described below. These registration rights will expire five years following the completion of this offering.

Demand registration rights

For so long as at least 25% of our outstanding common stock has been first issued in one or more public offerings, stockholders with demand registration rights under our 2004 Securityholders Agreement has the right to require that we register such stockholders' common stock. We are only obligated to effect two registrations in response to these demand registration rights, and we are not obligated to effect any demand registration for shares having an aggregate market value of less than $5,000,000 as of the date notice is given to us to effect such a registration. We may postpone the filing of a registration statement for up to 90 days once in any 12-month period if our board of directors determines in good faith that the filing would be significantly disadvantageous to us and our affiliates, taken as a whole. We must pay all expenses incurred in connection with demand registration rights.

Incidental registration rights

If we register any securities for public sale following the closing of this offering, stockholders with incidental registration rights under the 2004 Securityholders' Agreement have the right to include their shares in the registration, subject to specified exceptions. The underwriters of any underwritten offering have the right to limit the number of shares registered by these stockholders due to marketing reasons. We must pay all expenses incurred in connection with these incidental registration rights.

S-3 registration rights

If we are eligible to file a registration statement on Form S-3, the stockholders with S-3 registration rights under the 2004 Securityholder Agreement can request that we register their shares, provided that the total price of the shares of common stock offered to the public is at least $1,000,000 (before deduction of underwriting discounts and commissions). The holders of S-3 registration rights may only require us to file one Form S-3 registration statement in any 12-month period. We may postpone the filing of a Form S-3 registration statement for up to 90 days once in any 12-month period if our board of directors determines in good faith that the filing would be seriously detrimental to us.

Transfer agent and registrar

The transfer agent and registrar for our common stock and the rights is American Stock Transfer and Trust Company.

Shares eligible for future sale

Prior to this offering, there has been no market for our common stock. Future sales of substantial amounts of our common stock in the public market could adversely affect prevailing market prices from time to time. Furthermore, since only a limited number of shares will be available for sale shortly after this offering because of certain contractual and legal restrictions on resale described below, sales of substantial amounts of our common stock in the public market after the restrictions lapse could adversely affect the prevailing market price and our ability to raise equity capital in the future.

Sales of restricted shares

Upon completion of this offering, we will have outstanding an aggregate shares of common stock (not including shares which were issued after September 30, 2005 and which were not issued in connection with this offering), assuming no exercise of the underwriters' over-allotment option and no exercise of outstanding options or warrants. Of these shares, the shares sold in this offering will be freely tradable without restrictions or further registration under the Securities Act, unless one of our existing affiliates as that term is defined in Rule 144 under the Securities Act purchases such shares.

The remaining 40,232,047 shares of our common stock held by existing stockholders as of September 30, 2005 are restricted shares or are restricted by the contractual provisions described below. Restricted shares may be sold in the public market only if registered or if they qualify for an exemption from registration under Rules 144, 144(k) or 701 of the Securities Act, which are summarized below. Of these restricted shares, 10,010,000 shares will be available for resale in the public market in reliance on Rule 144(k), all of which shares are restricted by the terms of the lock-up agreements described below. An additional 15,040,654 of these restricted shares will be available for resale in the public market in reliance on Rule 144, all of which shares are restricted by the terms of the lock-up agreements. The remaining 15,181,393 shares become eligible for resale in the public market at various dates thereafter, all of which shares are restricted by the terms of the lock-up agreements and 36,838 of which shares were held by our employees and restricted as of September 30, 2005 by our rights to repurchase such shares

upon termination of employment. The table below sets forth the approximate number of shares eligible for future sale:

Days after date of this prospectus	Approximate additional number of shares becoming eligible for future sale	Comment
On Effectiveness		Freely tradable shares sold in offering; shares salable under Rule 144(k) that are not locked up or subject to our rights of repurchase
90 Days		Shares eligible on effectiveness; vested options for shares salable under Rule 144 and 701 that are not locked up; additional shares no longer subject to our rights of repurchase
180 Days		Lock-up released; shares and vested options for shares salable under Rule 144, 144(k) and 701; additional shares no longer subject to our rights of repurchase
Thereafter		Restricted securities held for 1 year or less

Under Rule 144 as currently in effect, beginning 90 days after the date of this prospectus, a person who has beneficially owned restricted shares for at least one year and has complied with the requirements described below would be entitled to sell some of its shares within any three-month period. That number of shares cannot exceed the greater of one percent of the number of shares of our common stock then outstanding, which will equal approximately shares immediately after this offering, or the average weekly trading volume of our common stock on the Nasdaq National Market during the four calendar weeks preceding the filing of a notice on Form 144 reporting the sale. Sales under Rule 144 are also restricted by manner of sale provisions, notice requirements and the availability of current public information about us. Rule 144 also provides that our affiliates who are selling shares of our common stock that are not restricted shares must nonetheless comply with the same restrictions applicable to restricted shares with the exception of the holding period requirement.

Under Rule 144(k), a person who is not deemed to have been one of our affiliates at any time during the 90 days preceding a sale and who has beneficially owned the shares proposed to be sold for at least two years is entitled to sell those shares without complying with the manner of sale, public information, volume limitation or notice provisions of Rule 144. Accordingly, unless otherwise restricted, these shares may be sold immediately upon the completion of this offering.

Options

Rule 701 provides that the shares of common stock acquired upon the exercise of currently outstanding options or other rights granted under our Management Equity Plan may be resold, to the extent not restricted by the terms of the lock-up agreements, by persons, other than affiliates, beginning 90 days after the date of this prospectus, restricted only by the manner of sale provisions of Rule 144, and by affiliates in accordance with Rule 144, without compliance

with its one-year minimum holding period. 140,739 shares (not including shares issued after September 30, 2005 upon the exercise of options) will be available for resale in the public market in reliance on Rule 701 beginning 90 days after the date of this prospectus, all of which shares are restricted by the terms of the lock-up agreements and 36,838 shares of which were restricted as of September 30, 2005 by our rights to repurchase such shares upon termination of employment. As of September 30, 2005, our board of directors had authorized an aggregate of up to 5,489,714 shares of common stock for issuance under our existing equity plans. As of September 30, 2005 options to purchase a total of 3,783,490 shares of common stock were outstanding, all of which options were exercisable as of such date. Of these, as of September 30, 2005 options to purchase a total of 3,356,004 shares were restricted by our right to repurchase unvested shares upon the termination of an optionee's business relationship with us, and options to purchase a total of 427,486 shares were no longer restricted by our right of repurchase and will be eligible for sale, if not restricted by the terms of the lock-up agreements, in the public market in accordance with Rule 701 under the Securities Act beginning 90 days after the date of this prospectus. All of the shares issuable upon exercise of these options are restricted by the terms of the lock-up agreements.

We intend to file one or more registration statements on Form S-8 under the Securities Act following this offering to register all shares of our common stock which have been issued or are issuable upon exercise of outstanding stock options or other rights granted under our equity plans. These registration statements are expected to become effective upon filing. Shares covered by these registration statements will thereupon be eligible for sale in the public market, upon the expiration or release from the terms of the lock-up agreements, to the extent applicable, or subject in certain cases to vesting of such shares.

Warrants

As of September 30, 2005, we had outstanding warrants exercisable for a total of 166,600 shares of our common stock, all of which are currently exercisable. All of these shares are restricted by the terms of the lock-up agreements.

Lock-up agreements

Except for sales of common stock to the underwriters in accordance with the terms of the underwriting agreement, we and our executive officers, directors, stockholders and substantially all of our optionholders have agreed not to sell or otherwise dispose of, directly or indirectly, any shares of our common stock (or any security convertible into or exchangeable or exercisable for common stock) without the prior written consent of J.P. Morgan Securities Inc. and Banc of America Securities LLC for a period of 180 days from the date of this prospectus. In addition, for a period of 180 days from the date of this prospectus, except as required by law, we have agreed that our board of directors will not consent to any offer for sale, sale or other disposition, or any transaction which is designed or could be expected to result in the disposition by any person, directly or indirectly, of any shares of our common stock without the prior written consent of J.P. Morgan Securities Inc. and Banc of America Securities LLC, in their sole discretion, at any time or from time to time and without notice, may release for sale in the public market all or any portion of the shares restricted by the terms of the lock-up agreements.

Registration rights

The holders of 40,091,308 shares of common stock, including common stock issuable upon the exercise of our Series A Preferred Stock and Series B Preferred Stock (but not including shares of Series B Preferred Stock issued on December 9, 2005), are entitled to have their shares registered by us under the Securities Act under the terms of an agreement between us and the holders of these registrable securities. Subject to limitations specified in the agreement, these registration rights include the following:

- the holders of at least 25% of the then outstanding registrable securities may require, on two occasions beginning six months after the date of this prospectus, that we use our best efforts to register the registrable securities for public resale
- if we register any common stock, either for our own account or for the account of other security holders, the holders of registrable securities are entitled to include their shares of common stock in the registration, subject to the ability of the underwriters to limit the number of shares included in the offering in view of market conditions
- the holders of at least 25% of the then outstanding registrable securities may require us to register all or a portion of their registrable securities on Form S-3 once in any twelve-month period when use of that form becomes available to us, provided that the proposed aggregate selling price is at least $1,000,000 before underwriting discounts and commissions

All such registration rights terminate five years following the closing of this offering.

Material United States federal income tax consequences

Overview

The following is a general discussion of the material United States federal income tax consequences of the ownership and disposition of our common stock. This discussion is based on the Internal Revenue Code of 1986, as amended (which we refer to as the “Code”), final, temporary and proposed Treasury regulations (which we refer to as the “Treasury regulations”) promulgated thereunder by the Internal Revenue Service (which we refer to as the “IRS”), and administrative and judicial interpretations thereof, each as in effect and available on the date hereof, all of which are subject to change. Any such change, which may or may not be retroactive, could alter the tax consequences to our stockholders. You should note that, due to a lack of definitive judicial or administrative interpretation, uncertainties exist with respect to many of the tax consequences described below.

You should also be aware that this discussion is addressed only to those of our stockholders who are United States citizens and residents and who hold our stock as capital assets. This discussion does not address all of the United States federal income tax consequences that may be relevant to particular stockholders in light of their individual circumstances, such as stockholders who are subject to the alternative minimum tax provisions of the Code, who are dealers in securities or foreign currency, who are financial institutions or insurance companies, who are corporations, who are investors in pass-through entities, who are tax-exempt organizations, who hold their shares as “qualified small business stock” pursuant to Section 1202 of the Code, who are foreign persons or entities, who do not hold their shares of our stock as capital assets, who acquired their shares in connection with stock option or stock purchase plans or in other compensatory transactions, who hold shares of our stock as part of

an integrated investment (including a hedge or a straddle) comprised of shares of our stock and one or more other positions, or who have previously entered into a conversion transaction or constructive sale of shares of our stock under the constructive sale provisions of the Code.

We have not requested a ruling from the IRS in connection with the tax consequences described herein. Accordingly, the discussion below neither binds the IRS nor precludes it from adopting a contrary position.

IN VIEW OF THE FOREGOING AND BECAUSE THE FOLLOWING DISCUSSION IS INTENDED AS A GENERAL SUMMARY ONLY, YOU ARE URGED TO CONSULT YOUR OWN TAX ADVISORS AS TO THE SPECIFIC TAX CONSEQUENCES OF THE OWNERSHIP OR DISPOSITION OF OUR STOCK, INCLUDING THE APPLICABLE FEDERAL, STATE, LOCAL AND FOREIGN TAX CONSEQUENCES, IN LIGHT OF YOUR OWN PARTICULAR TAX SITUATIONS.

General consequences of owning common stock

Distributions, if any, paid with respect to our common stock will be taxable dividends to the extent of our applicable earnings and profits. To the extent that distributions on our common stock exceed our applicable earnings and profits, the amount distributed will be applied to reduce the tax basis in such common stock, and, to the extent that the amount distributed exceeds the tax basis, will constitute long- or short-term capital gain, depending on the holding period for such common stock.

General consequences of disposing of common stock

A stockholder will recognize gain or loss upon the sale of its common stock equal to the difference between its adjusted basis in its sold shares and the sum of the amount of cash and the fair market value of any property the stockholder receives in exchange therefor. Except with respect to the various issues described herein, any such gain or loss will be long- or short-term capital gain or loss depending on the stockholder's holding period for the common stock.

Under Section 1258 of the Code, gain from the sale or other disposition of stock that is recognized on the disposition or other termination of a position that was held as part of a "conversion transaction" will be treated as ordinary income. A "conversion transaction" includes certain transactions from which substantially all of a taxpayer's expected return is attributable to the time value of the taxpayer's investment in the transaction. A holder of our shares of common stock is not expected to be considered to have engaged in a "conversion transaction" within the meaning of Section 1258(c) of the Code. Consequently, the provisions of Section 1258 of the Code is not expected to be applicable to the common stock, although due to a lack of definitive judicial or administrative interpretation, this issue is not free from doubt.

Backup withholding

Certain of our non-corporate stockholders may be subject to backup withholding at a 28% rate on certain of the payments due to such stockholders. In order to avoid backup withholding, a stockholder must complete Form W-8IMY or Form W-8BEN (if it is a nonresident alien individual or foreign entity) or Form W-9 (if it is a United States resident or domestic entity). Forms W-8IMY, W-8BEN and W-9 are available on the Internal Revenue Service's web site, www.irs.gov.

IN LIGHT OF THE UNCERTAINTY ASSOCIATED WITH THE TAX CONSEQUENCES OF THE OWNERSHIP AND DISPOSITION OF OUR COMMON STOCK AND BECAUSE THE TAX CONSEQUENCES TO YOU MAY DIFFER BASED ON YOUR PARTICULAR CIRCUMSTANCES, YOU SHOULD CONSULT YOUR OWN TAX ADVISER REGARDING SUCH TAX CONSEQUENCES.

Underwriters

Under the terms and subject to the conditions contained in an underwriting agreement dated the date of this prospectus, the underwriters named below, for whom J.P. Morgan Securities Inc. and Banc of America Securities LLC are acting as representatives, have severally agreed to purchase, and we have agreed to sell to them, severally, the number of shares indicated below:

Underwriters	Number of shares
J.P. Morgan Securities Inc.	
Banc of America Securities LLC	
Thomas Weisel Partners LLC	
Total	

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

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

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

The underwriters have informed us that they do not intend sales to discretionary accounts to exceed five percent of the total number of shares of common stock offered by them.

We, each of our directors and officers and holders of substantially all of our outstanding stock have agreed that, without the prior written consent of J.P. Morgan Securities Inc. and Banc of America Securities LLC on behalf of the underwriters, we and they will not, during the period ending 180 days after the date of this prospectus:

- offer, pledge, announce the intention to sell, sell, contract to sell, sell any option or contract to purchase, purchase any option or contract to sell, grant any option, right or warrant to purchase of or otherwise transfer or dispose of directly or indirectly, any shares of common stock or any securities convertible into or exercisable or exchangeable for common stock
- enter into any swap or other arrangement that transfers to another, in whole or in part, any of the economic consequences of ownership of the common stock

whether any transaction described above is to be settled by delivery of common stock or such other securities, in cash or otherwise. These restrictions do not apply to:

- in the case of a corporation, the transfer of shares of our common stock or any shares convertible into common stock to any wholly-owned subsidiary of such corporation, provided that in such case, the transferee will execute an agreement stating that the transferee is subject to the restrictions described above
- transactions relating to shares of common stock or other securities acquired in open market transactions after the completion of the offering of the shares, provided that no filing or other public announcement by any party under the Exchange Act shall be required or made in connection with subsequent sales of common stock or other securities acquired in such open market transactions (other than a filing on a Form 5 made after the expiration of the 180-day period referred to above)
- transfers of any shares of common stock or other securities convertible into common stock made as a gift, to a trust, to limited partners, limited liability company members or stockholders of our executive officers, directors, or holders of substantially all of our stock, or to immediate family members, provided that the transferee agrees to be bound by the restrictions described above and if the donor or transferor is a reporting person subject to Section 16(a) of the Exchange Act, any gifts or transfers made in accordance with this paragraph will not require such person to file a report of such transaction on Form 4 under the Exchange Act.

Notwithstanding the foregoing, if (1) during the last 17 days of the 180-day restricted period, we issue an earnings release or material news or a material event relating to us occurs; or (2) prior to the expiration of the 180-day restricted period, we announce that we will release earnings results during the 16-day period beginning on the last day of the 180-day period, the restrictions described above shall continue to apply until the expiration of the 18-day period beginning on the issuance of the earnings release or the occurrence of the material news or material event.

See the section entitled “Shares eligible for future sale” for further discussion of certain transfer restrictions.

The following table shows the underwriting discounts and commissions that we are to pay to the underwriters in connection with this offering. These amounts are shown assuming both no exercise and full exercise of the underwriters' option to purchase additional shares of our common stock.

Paid by Vanda	No exercise	Full exercise
Per Share	$	$
Total	$	$

We estimate that the total expenses of this offering payable by us, not including the underwriting discounts and commissions, will be approximately $ million.

In order to facilitate the offering of the common stock, the underwriters may engage in transactions that stabilize, maintain or otherwise affect the price of the common stock. Specifically, the underwriters may sell more shares than they are obligated to purchase under the underwriting agreement, creating a short position. A short sale is covered if the short position is no greater than the number of shares available for purchase by the underwriters under the over-allotment option. The underwriters can close out a covered short sale by exercising the over-allotment option or purchasing shares in the open market. In determining the source of shares to close out a covered short sale, the underwriters will consider, among other things, the open market price of shares compared to the price available under the over-allotment option. The underwriters may also sell shares in excess of the over-allotment option, creating a naked short position. The underwriters must close out any naked short position by purchasing shares in the open market. A naked short position is more likely to be created if the underwriters are concerned that there may be downward pressure on the price of the common stock in the open market after pricing that could adversely affect investors who purchase in this offering. In addition, to stabilize the price of the common stock, the underwriters may bid for, and purchase, shares of common stock in the open market. Finally, the underwriting syndicate may reclaim selling concessions allowed to an underwriter or a dealer for distributing the common stock in this offering, if the syndicate repurchases previously distributed common stock in transactions to cover syndicate short positions or to stabilize the price of the common stock. Any of these activities may stabilize or maintain the market price of the common stock above independent market levels. The underwriters are not required to engage in these activities, and may end any of these activities at any time.

We will apply to have our common stock approved for quotation on the Nasdaq National Market under the trading symbol "VNDA."

We and the underwriters have agreed to indemnify each other against certain liabilities, including liabilities under the Securities Act of 1933, as amended.

Certain of the underwriters or their affiliates have provided from time to time, and may provide in the future, investment and commercial banking and financial advisory services to Vanda and its affiliates in the ordinary course of business, for which they have received and may continue to receive customary fees and commissions.

A prospectus in electronic format will be made available on the websites maintained by one or more of the lead managers of this offering and may also be made available on websites maintained by other underwriters. The underwriters may agree to allocate a number of shares to underwriters for sale to their online brokerage account holders. Internet distributions will be

allocated by the lead managers to underwriters that may make Internet distributions on the same basis as other allocations.

Prior to this offering, there has been no public market for our common stock. The initial public offering price will be determined by negotiations between us and the representatives. Among the factors to be considered in determining the initial public offering price will be our future prospects and those of our industry in general, our revenues, earnings and other financial operating information in recent periods, and the price-earnings ratios, price-sales ratios, market prices of securities and financial and operating information of companies engaged in activities similar to ours. The estimated initial public offering price range set forth on the cover page of this preliminary prospectus is subject to change as a result of market conditions and other factors.

Legal matters

Gunderson Dettmer Stough Villeneuve Franklin & Hachigian, LLP, Waltham, Massachusetts, will pass upon the validity of the common stock offered by this prospectus. Edward T. Lentz, Esq. will pass upon certain intellectual property matters. Davis Polk & Wardwell will pass upon certain legal matters for the underwriters.

Experts

The financial statements as of December 31, 2004 and 2003 and for the year ended December 31, 2004 and the period from March 13, 2003 (date of inception) to December 31, 2003, and, cumulatively, for the period from March 13, 2003 (date of inception) to December 31, 2004 included in this prospectus have been so included in reliance on the report of PricewaterhouseCoopers LLP, an independent registered public accounting firm, given on the authority of said firm as experts in auditing and accounting.

Where you can find more information

We have filed with the Securities and Exchange Commission (SEC), Washington, D.C. 20549, a registration statement on Form S-1 under the Securities Act of 1933, with respect to our common stock offered hereby. This prospectus, which forms part of the registration statement, does not contain all of the information set forth in the registration statement and the exhibits and schedules to the registration statement. Some items are omitted in accordance with the rules and regulations of the SEC. For further information about us and our common stock, we refer you to the registration statement and the exhibits and schedules to the registration statement filed as part of the registration statement. Statements contained in this prospectus as to the contents of any contract or other document filed as an exhibit are qualified in all respects by reference to the actual text of the exhibit. You may read and copy the registration statement, including the exhibits and schedules to the registration statement, at the SEC's Public Reference Room at 100 F Street N.E., Washington, D.C. 20549. You can obtain information on the operation of the Public Reference Room by calling the SEC at 1-800-SEC-0330. In addition, the SEC maintains an Internet site at *www.sec.gov,* from which you can electronically access the registration statement, including the exhibits and schedules to the registration statement.

Upon completion of this offering, we will be subject to the information reporting requirements of the Securities Exchange Act of 1934 and we intend to file reports, proxy statements and other information with the SEC.

Index to consolidated financial statements

Vanda Pharmaceutical Inc.
(A development stage company)
Index
December 31, 2004 and 2003

Report of Independent Registered Public Accounting Firm

To the Board of Directors and Stockholders of
Vanda Pharmaceuticals Inc. (a development stage company)

In our opinion, the accompanying consolidated balance sheets and the related consolidated statements of operations, changes in stockholders' equity and of cash flows present fairly, in all material respects, the financial position of Vanda Pharmaceuticals Inc. and its subsidiary (a development stage company) at December 31, 2003 and 2004, and the results of operations and cash flows for the period from March 13, 2003 (date of inception) to December 31, 2003 and year ended December 31, 2004 and for the period from March 13, 2003 (date of inception) to December 31, 2004 in conformity with accounting principles generally accepted in the United States of America. These financial statements are the responsibility of the Company's management. Our responsibility is to express an opinion on these financial statements based on our audits. We conducted our audits of these statements in accordance with the standards of the Public Company Accounting Oversight Board (United States). Those standards require that we plan and perform the audit to obtain reasonable assurance about whether the financial statements are free of material misstatement. An audit includes examining, on a test basis, evidence supporting the amounts and disclosures in the financial statements, assessing the accounting principles used and significant estimates made by management, and evaluating the overall financial statement presentation. We believe that our audits provide a reasonable basis for our opinion.

/s/ PricewaterhouseCoopers LLP
McLean, Virginia
December 29, 2005

Vanda Pharmaceuticals Inc.
(A development stage company)
Consolidated Balance Sheets

	December 31,		September 30, 2005	
	2003	2004	Actual	Pro forma
			(unaudited)	(unaudited)
Assets				
Current assets				
Cash and cash equivalents	$ 7,165,722	$ 16,259,770	$ 22,264,920	
Accounts receivable	28,489	—	—	
Prepaid expenses and other current assets	97,044	190,604	526,219	
Total current assets	7,291,255	16,450,374	22,791,139	
Property and equipment, net	1,094,658	1,251,867	1,017,314	
Deposits	—	50,000	50,000	
Restricted cash	—	—	430,230	
Total assets	$ 8,385,913	$ 17,752,241	$ 24,288,683	
Liabilities and stockholders' equity				
Current liabilities				
Accounts payable	$ 458,608	$ 718,606	$ 583,658	
Accrued liabilities	432,474	689,428	1,869,125	
Deferred rent and credit on lease concession, current	—	3,549	6,225	
Current portion of long-term debt	195,925	173,929	186,158	
Current portion of capital lease	—	37,241	—	
Total current liabilities	1,087,007	1,622,753	2,645,166	
Deferred grant revenue	—	—	127,866	
Deferred rent and credit on lease concession	17,661	30,371	27,325	
Long-term debt, less current portion	274,212	142,487	1,365	
Capital lease, less current portion	—	13,043	—	
Total liabilities	1,378,880	1,808,654	2,801,722	
Commitments				
Stockholders' equity				
Series A preferred stock, $0.001 par value; 10,000,000 shares authorized, issued and outstanding at December 31, 2003 and 2004 and September 30, 2005 (unaudited), respectively; liquidation preference of $10,000,000	9,963,541	9,963,541	9,963,541	
Series B preferred stock, $0.001 par value; 30,081,308 shares authorized, 0, 15,040,654 and 30,081,308 shares issued and outstanding at December 31, 2003 and 2004 and September 30, 2005 (unaudited), respectively; liquidation preference of $37,000,009	—	18,345,023	36,845,028	
Common stock, $0.001 par value; 50,000,000 shares authorized and 10,000 shares issued and outstanding at December 31, 2003 and 2004, respectively, and 150,739 shares issued and outstanding at September 30, 2005 (unaudited)	10	10	151	
Additional paid-in capital	16,618	340,630	18,049,479	
Deferred stock-based compensation	—	(257,934)	(13,862,408)	
Accumulated other comprehensive loss	(2,315)	(2,576)	(23,299)	
Deficit accumulated during the development stage	(2,970,821)	(12,445,107)	(29,485,531)	
Total stockholders' equity	7,007,033	15,943,587	21,486,961	
Total liabilities and stockholders' equity	$ 8,385,913	$ 17,752,241	$ 24,288,683	

The accompanying notes are an integral part of these consolidated financial statements.

Vanda Pharmaceuticals Inc.
(A development stage company)
Consolidated Statements of Operations

	Period from March 13, 2003 (inception) to December 31, 2003	Year ended December 31, 2004	Period from March 13, 2003 (inception) to December 31, 2004	Nine months ended September 30,		Period from March 13, 2003 (inception) to September 30, 2005
				2004	2005	
				(unaudited)	(unaudited)	(unaudited)
Revenues from services	$ 47,565	$ 33,980	$ 81,545	$ 33,980	$ —	$ 81,545
Operating expenses:						
Research and development	2,010,532	7,442,983	9,453,515	5,033,488	11,641,565	21,095,080
General and administrative	1,052,659	2,119,394	3,172,053	1,267,485	5,587,147	8,759,200
Total operating expenses	3,063,191	9,562,377	12,625,568	6,300,973	17,228,712	29,854,280
Loss from operations	(3,015,626)	(9,528,397)	(12,544,023)	(6,266,993)	(17,228,712)	(29,772,735)
Other income (expense):						
Interest income	52,595	100,785	153,380	43,053	208,763	362,143
Interest expense	(8,090)	(41,934)	(50,024)	(29,867)	(20,568)	(70,592)
Other income (expense)	300	209	509	(230)	93	602
Total other income	44,805	59,060	103,865	12,956	188,288	292,153
Loss before tax expense	(2,970,821)	(9,469,337)	(12,440,158)	(6,254,037)	(17,040,424)	(29,480,582)
Tax expense	—	4,949	4,949	3,733	—	4,949
Net loss	(2,970,821)	(9,474,286)	(12,445,107)	(6,257,770)	(17,040,424)	(29,485,531)
Beneficial conversion feature— deemed dividend to preferred stockholders	—	—	—	—	(18,500,005)	(18,500,005)
Net loss attributable to common stockholders	$ (2,970,821)	$ (9,474,286)	$ (12,445,107)	$ (6,257,770)	$ (35,540,429)	$ (47,985,536)
Basic and diluted net loss per share applicable to common stockholders	$ (297.08)	$ (947.43)		$ (625.78)	$ (934.93)	
Shares used in calculation of basic and diluted net loss per share applicable to common stockholders	10,000	10,000		10,000	38,014	
Pro forma net loss per share applicable to common stockholders (see Note 2) (unaudited)		$ (0.68)			$ (1.41)	
Shares used in calculation of pro forma net loss per share applicable to common stockholders (see Note 2) (unaudited)		13,913,995			25,264,356	

The accompanying notes are an integral part of these consolidated financial statements.

Vanda Pharmaceuticals Inc.
(A development stage company)
Statements of Changes in Stockholders' Equity

	Series A preferred stock		Series B preferred stock		Common stock		Additional paid-in capital	Deferred stock-based compensation	Accumulated other comprehensive loss	Deficit accumulated during the development stage	Comprehensive loss	Total
	Shares	Par value	Shares	Par value	Shares	Par value						
Balances at March 13, 2003 (Inception)	—	$ —	—	$ —	—	$ —	$ —	$ —	$ —	$ —	$ —	$ —
Issuance of Series A preferred stock, net of issuance costs of $36,459	10,000,000	9,963,541	—	—	—	—	—	—	—	—	—	9,963,541
Issuance of Class A common stock	—	—	—	—	10,000	10	3,990	—	—	—	—	4,000
Issuance of warrants in connection with capital lease	—	—	—	—	—	—	12,628	—	—	—	—	12,628
Comprehensive loss:												
Net loss	—	—	—	—	—	—	—	—	—	(2,970,821)	(2,970,821)	
Cumulative translation adjustment	—	—	—	—	—	—	—	—	(2,315)	—	(2,315)	
Comprehensive loss											(2,973,136)	(2,973,136)
Balances at December 31, 2003	10,000,000	9,963,541	—	—	10,000	10	16,618	—	(2,315)	(2,970,821)	—	7,007,033
Issuance of Series B preferred stock, net of issuance costs of $154,982	—	—	15,040,654	18,345,023	—	—	—	—	—	—	—	18,345,023
Issuance of warrants in connection with consulting services	—	—	—	—	—	—	27,945	—	—	—	—	27,945
Deferred compensation associated with stock options grants	—	—	—	—	—	—	281,130	(281,130)	—	—	—	—
Amortization of deferred stock-based compensation	—	—	—	—	—	—	—	23,196	—	—	—	23,196

Vanda Pharmaceuticals Inc.
(A development stage company)
Statements of Changes in Stockholders' Equity (continued)

	Series A preferred stock		Series B preferred stock		Common stock		Additional paid-in capital	Deferred stock-based compensation	Accumulated other comprehensive loss	Deficit accumulated during the development stage	Comprehensive loss	Total
	Shares	Par value	Shares	Par value	Shares	Par value						
Expense related to accelerated unvested stock options	—	—	—	—	—	—	14,937	—	—	—	—	14,937
Comprehensive loss:												
Net loss	—	—	—	—	—	—	—	—	—	(9,474,286)	(9,474,286)	
Cumulative translation adjustment	—	—	—	—	—	—	—	—	(261)	—	(261)	
Comprehensive loss											(9,474,547)	(9,474,547)
Balances at December 31, 2004	10,000,000	9,963,541	15,040,654	18,345,023	10,000	10	340,630	(257,934)	(2,576)	(12,445,107)	—	15,943,587
Issuance of Series B preferred stock, (unaudited)	—	—	15,040,654	18,500,005	—	—	—	—	—	—	—	18,500,005
Issuance of common stock from exercised stock options (unaudited)	—	—	—	—	140,739	141	14,074	—	—	—	—	14,215
Deferred compensation associated with stock options grants (unaudited)	—	—	—	—	—	—	13,103,916	(13,103,916)	—	—	—	—
Deferred compensation associated with remeasurement of unvested stock grants (unaudited)	—	—	—	—	—	—	1,550,193	(1,550,193)	—	—	—	—

Vanda Pharmaceuticals Inc.
(A development stage company)
Statements of Changes in Stockholders' Equity (continued)

	Series A preferred stock		Series B preferred stock		Common stock		Additional paid-in capital	Deferred stock-based compensation	Accumulated other comprehensive loss	Deficit accumulated during the development stage	Comprehensive loss	Total
	Shares	Par value	Shares	Par value	Shares	Par value						
Expense related to remeasurement of stock options (unaudited)	—	—	—	—	—	—	3,040,666	—	—	—	—	3,040,666
Amortization of deferred stock-based compensation (unaudited)	—	—	—	—	—	—	—	1,049,635	—	—	—	1,049,635
Beneficial conversion feature—deemed dividend on issuance of Series B preferred stock (unaudited)	—	—	—	—	—	—	18,500,005	—	—	—	—	18,500,005
Beneficial conversion feature—accretion of beneficial conversion feature for Series B preferred stock (unaudited)	—	—	—	—	—	—	(18,500,005)	—	—	—	—	(18,500,005)
Comprehensive loss:												
Net loss (unaudited)	—	—	—	—	—	—	—	—	—	(17,040,424)	(17,040,424)	
Cumulative translation adjustment (unaudited)	—	—	—	—	—	—	—	—	(20,723)	—	(20,723)	
Comprehensive loss (unaudited)											(17,061,147)	(17,061,147)
Balances at September 30, 2005 (unaudited)	10,000,000	$ 9,963,541	30,081,308	$ 36,845,028	150,739	$ 151	$ 18,049,479	$ (13,862,408)	$ (23,299)	$ (29,485,531)	—	$ 21,486,961

The accompanying notes are an integral part of these consolidated financial statements.

Vanda Pharmaceuticals Inc.
(A development stage company)
Consolidated Statements of Cash Flows

	Period from March 13, 2003 (inception) to December 31, 2003	Year ended December 31, 2004	Period from March 13, 2003 (inception) to December 31, 2004	Nine months ended September 30,		Period from March 13, 2003 (inception) to September 30, 2005
				2004	2005	
				(unaudited)	(unaudited)	(unaudited)
Cash flows from operating activities						
Net loss	$ (2,970,821)	$ (9,474,286)	$ (12,445,107)	$ (6,257,770)	$ (17,040,424)	$ (29,485,531)
Adjustments to reconcile net loss to net cash used in operating activities						
Depreciation and amortization	79,891	376,709	456,600	268,597	316,435	773,035
Stock-based compensation	—	66,078	66,078	48,786	4,090,301	4,156,379
Changes in assets and liabilities:						
Accounts receivable	(28,489)	28,489	—	785	—	—
Prepaid expenses and other current assets	(97,044)	(93,024)	(190,068)	(105,843)	(335,615)	(525,683)
Deposits	—	(50,000)	(50,000)	(50,000)	—	(50,000)
Accounts payable	458,608	415,506	874,114	52,342	(134,948)	739,166
Accrued expenses	432,474	99,335	531,809	25,700	1,179,697	1,711,506
Deferred grant revenue	—	—	—	—	127,866	127,866
Deferred rent and credit on lease concession	17,661	16,259	33,920	15,763	(370)	33,550
Net cash used in operating activities	(2,107,720)	(8,614,934)	(10,722,654)	(6,001,640)	(11,797,058)	(22,519,712)
Cash flows from investing activities						
Purchases of property and equipment	(679,428)	(414,531)	(1,576,452)	(360,107)	(96,341)	(1,672,793)
Purchases of short-term investments	—	—	—	—	(7,200,000)	(7,200,000)
Proceeds from sales of short-term investments	—	—	—	—	7,200,000	7,200,000
Investing in restricted cash	—	—	—	—	(430,230)	(430,230)
Net cash used in investing activities	(679,428)	(414,531)	(1,576,452)	(360,107)	(526,571)	(2,103,023)
Cash flows from financing activities						
Principal payments on obligations under capital lease	(12,356)	(42,887)	(42,887)	(32,849)	(51,246)	(94,133)
Principal payments on note payable	—	(156,446)	(201,456)	(115,880)	(127,858)	(329,314)
Proceeds from borrowings on note payable	—	—	515,147	—	—	515,147
Proceeds from the issuance of preferred stock, net of issuance costs	9,963,541	18,345,023	28,308,564	18,345,023	18,500,005	46,808,569
Proceeds from exercise of stock options	—	—	—	—	14,076	14,076
Proceeds from issuance of common stock	4,000	—	4,000	—	—	4,000
Net cash provided by financing activities	9,955,185	18,145,690	28,583,368	18,196,294	18,334,977	46,918,345
Effect of foreign currency translation	(2,315)	(22,177)	(24,492)	(16,092)	(6,198)	(30,690)
Net increase in cash and cash equivalents	7,165,722	9,094,048	16,259,770	11,818,455	6,005,150	22,264,920
Cash and cash equivalents						
Beginning of period	—	7,165,722	—	7,165,722	16,259,770	—
End of period	$ 7,165,722	$ 16,259,770	$ 16,259,770	$ 18,984,177	$ 22,264,920	$ 22,264,920
Supplemental disclosure						
Cash payments for interest	$ 4,221	$ 41,354	$ 45,575	$ —	$ 20,008	$ 65,583
Supplemental disclosure of noncash financing activities						
Equipment acquired through obligation under capital lease	$ 482,493	$ 95,305	$ 95,305	$ —	$ —	$ 95,305
Accretion of beneficial conversion feature for Series B preferred stock	—	—	—	—	18,500,005	18,500,005

The accompanying notes are an integral part of these consolidated financial statements.

Vanda Pharmaceuticals Inc.
(A development stage company)
Notes to consolidated financial statements
December 31, 2004 and 2003

1. Business organization and presentation

Business organization

Vanda Pharmaceuticals Inc. (“Vanda” or the “Company”) was founded in November 2002 and commenced its operations on March 13, 2003. Vanda is a biopharmaceutical company focused on the development and commercialization of small molecule therapeutics, with exclusive worldwide commercial rights to three product candidates in clinical development for various central nervous system disorders. The Company’s lead product candidate, iloperidone, is an atypical antipsychotic for the treatment of schizophrenia and bipolar disorder and is in a Phase III trial for schizophrenia. The Company’s second product candidate, VEC-162, is a melatonin agonist for the treatment of insomnia and depression and is entering a pivotal Phase III trial for insomnia. VEC-162 is also ready for Phase II trials for the treatment of depression. The Company’s third product candidate, VSF-173, is a compound for the treatment of excessive daytime sleepiness and is ready for a Phase II trial. Each of these product candidates benefits from new chemical entity (NCE) patent protection and may offer substantial advantages over approved therapies.

The Company expects to complete its Phase III trial for iloperidone in the first half of 2007. If this trial is successful, the Company will file a New Drug Application (NDA) for approval with the Food and Drug Administration (FDA) later that year. The Company recently completed an efficacy and safety Phase II trial of VEC-162 for insomnia and expects to begin a Phase III trial early in 2006. The Company also expects to begin a Phase II trial of VSF-173 for excessive daytime sleepiness in the second half of 2006.

Vanda Pharmaceuticals Pte. Ltd. (“Vanda Singapore”) is a limited liability company domiciled and incorporated in Singapore on February 24, 2003 as a wholly-owned subsidiary of Vanda Pharmaceuticals Inc. Vanda Singapore’s principal activity is drug research using genetic and genomic sciences.

Capital resources

Since its inception, the Company has devoted substantially all of its efforts to business planning, research and development, recruiting management and technical staff, acquiring operating assets and raising capital. Accordingly, the Company is considered to be in the development stage as defined in Statement of Financial Accounting Standards (SFAS) No. 7, *“Accounting and Reporting by Development Stage Enterprises.”*

The Company’s expected activities will necessitate significant uses of working capital throughout 2005 and beyond. Additionally, the Company’s capital requirements will depend on many factors, including the success of the Company’s research and development efforts, payments received under contractual agreements with other parties, if any, and the status of competitive products. The Company plans to continue financing operations with the cash received from the additional private placement of Series B Preferred Stock (see Note 14) and the Company plans to seek additional sources of funding in 2006. The Company’s failure to

Vanda Pharmaceuticals Inc.
(A development stage company)
Notes to consolidated financial statements—(continued)

raise additional capital as and when needed could have a negative impact on the financial condition and the ability of the Company to execute its business strategy.

Basis of presentation

The accompanying consolidated financial statements include the accounts of the Company and its wholly-owned subsidiary. All inter-company balances and transactions have been eliminated. The accompanying consolidated financial statements are prepared in accordance with accounting principles generally accepted in the United States of America.

Interim financial data

The unaudited interim consolidated financial statements as of and for the nine months ended September 30, 2004 and 2005 have been prepared in accordance with generally accepted accounting principles for interim information. Accordingly, they do not contain all of the information and footnotes required by generally accepted accounting principles for complete financial statements. However, in the opinion of management, all adjustments, consisting of normal, recurring adjustments considered necessary for a fair statement of the results of the interim periods have been included.

The results for the nine months ended September 30, 2005 are not necessarily indicative of the results to be expected for the year ending December 31, 2005. Certain information in footnote disclosures normally included in annual financial statements has been condensed or omitted for the interim periods presented, in accordance with the rules and regulation of the Securities and Exchange Commission (the “SEC”) for interim financial statements.

2. Summary of significant accounting policies

Cash and cash equivalents

For purposes of the consolidated balance sheet and consolidated statement of cash flows, cash equivalents represent all highly-liquid investments with an original maturity date of three months or less. At September 30, 2005, the Company maintained all of its cash and cash equivalents in two financial institutions. Deposits held with these institutions may exceed the amount of insurance provided on such deposits. Generally, these deposits may be redeemed upon demand, and the Company believes there is minimal risk of losses on such cash balances.

Short-term investments

The Company maintained highly-liquid investments throughout the period ending September 30, 2005, which were classified as available-for-sale because they can be utilized for current operations. The Company’s investment policy requires the selection of high-quality issuers, with bond ratings of AAA to A1+/ P1. The Company’s objective is to maintain its investment portfolio at an average duration of approximately one year. Interest income is recorded when earned and included in interest income. As of December 31, 2003 and 2004 and September 30, 2005, the Company did not hold any short-term investments.

Vanda Pharmaceuticals Inc.
(A development stage company)
Notes to consolidated financial statements—(continued)

Concentrations of credit risk

Financial instruments which potentially subject the Company to significant concentrations of credit risk consist primarily of cash and cash equivalents and short-term investments. The Company places its cash and cash equivalents and short-term investments with highly-rated financial institutions.

Fair value of financial instruments

The carrying amounts of the Company's financial instruments, which include cash and cash equivalents, short term investments, and accounts payable, approximate their fair values due to their short maturities. The fair value of the long term debt approximates its carrying value based on the variable nature of interest rates and current market rates available to the Company.

Property and equipment

Property and equipment are stated at cost less accumulated depreciation and amortization. Depreciation of property and equipment is provided on a straight-line basis over the estimated useful lives of the assets, generally three to seven years. Amortization of leasehold improvements is provided on a straight-line basis over the shorter of their estimated useful life or the lease term. The costs of additions and betterments are capitalized, and repairs and maintenance costs are charged to operations in the period incurred.

Upon retirement or disposition of property and equipment, the cost and accumulated depreciation are removed from the accounts and any resulting gain or loss is reflected in general and administrative expenses for that period.

Impairment of long-lived assets

The Company assesses the recoverability of its long-lived assets by determining whether the carrying value of such assets can be recovered through undiscounted future operating cash flows. If impairment is indicated, the Company measures the amount of such impairment by comparing the fair value to the carrying value. There have been no indicators of impairment through September 30, 2005.

Restricted cash

During 2005, in conjunction with the lease of the office and laboratory space building, the Company provided the landlord with a letter of credit, which was collateralized with a restricted cash deposit in the amount of $430,230 (see Note 6). These deposits are recorded as non-current restricted cash at September 30, 2005.

Deferred grant revenue

Vanda Singapore entered into an agreement with the Economic Development Board of Singapore ("EDB") to provide a grant for a Development Project. During 2005, the Company submitted its first asset-related claim with the EDB and received a cash payment of $127,866.

Vanda Pharmaceuticals Inc.
(A development stage company)
Notes to consolidated financial statements—(continued)

Given that the Company has not met the conditions attached to the grant, the payment has been recorded as deferred grant revenue on the balance sheet at September 30, 2005. Management expects that a resolution is likely to be reached with the EDB in the near future.

Translation of foreign currency

The functional currency of the Company's wholly-owned foreign subsidiary located in Singapore is the local currency. Assets and liabilities of the Company's foreign subsidiary are translated to United States dollars based on exchange rates at the end of the reporting period. Income and expense items are translated at weighted average exchange rates prevailing during the reporting period. Translation adjustments are accumulated in a separate component of stockholder's equity. Translation gains or losses are included in the determination of operating results.

Other comprehensive income (loss)

SFAS No. 130, *"Reporting Comprehensive Income,"* requires a full set of general-purpose financial statements to include the reporting of "comprehensive income." Other comprehensive loss is composed of two components, net income and other comprehensive income. For the period from March 13, 2003 (inception) to December 31, 2003 and year ended December 31, 2004, other comprehensive loss of $2,315 and $2,576, respectively, consists of cumulative translation adjustments due to foreign currency. For the nine month periods ended September 30, 2004 and 2005, other comprehensive loss of $3,809 and $23,299, respectively, consists of cumulative translation adjustments due to foreign currency.

Revenue recognition

Revenue is recognized upon delivery of products to customers. Revenue earned under research and development contracts are recognized in accordance with the proportional performance method outlined in Staff Accounting Bulletin No. 104 whereby the extent of progress toward completion is measured on the cost-to-cost basis; however, revenue recognized at any point will not exceed the cash received. When the current estimates of total contract revenue and contract cost indicate a loss, a provision for the entire loss on the contract is made in the period which it becomes probable. All costs related to these agreements are expensed as incurred. Revenue is derived principally from consulting agreements the Company entered into during its start-up phase to defray research costs. Vanda completed its obligations under these agreements during the year ended December 31, 2004, and no longer seeks such arrangements.

The Company will use the substantive milestone payment method of revenues recognition when all milestones to be received under contractual arrangements are determined to be substantive, at-risk and the culmination of an earnings process. Substantive milestones are payments that are conditioned upon an event requiring substantive effort, when the amount of the milestone is reasonable relative to the time, effort and risk involved in achieving the milestones and when the milestones are reasonable relative to each other and the amount of

any up-front payment. If these criteria are not met, the timing of the recognition of revenue from the milestone payment may be deferred.

Research and development expenses

Research and development costs are expensed as incurred and include the cost of salaries, building costs, utilities, allocation of indirect costs, and expenses to third parties who conduct research and development, pursuant to development and consulting agreements, on behalf of the Company. Costs related to the acquisitions of intellectual property are expensed as incurred since the underlying technology associated with these acquisitions were made in connection with the Company's research and development efforts and have no alternative future use. Research and development expenses also include the costs incurred by Vanda Singapore.

General and administrative expenses

General and administrative costs are expensed as incurred and consist primarily of salaries and other related costs for personnel serving executive, finance, accounting, information technology and human resource functions. Other costs include facility costs not otherwise included in research and development expense and professional fees for legal and accounting services.

Interest income and expense

Interest income consists of interest earned on the Company's cash and cash equivalents and short-term investments. Interest expense consists of interest incurred on equipment debt.

Accounting for stock-based compensation

As provided by SFAS No. 123, *"Accounting for Stock-Based Compensation"* (SFAS 123), the Company has elected to continue to account for its stock-based compensation programs according to the provisions of Accounting Principles Board Opinion No. 25, (APB 25) *"Accounting for Stock Issued to Employees."* Accordingly, compensation expense has been recognized to the extent of employee or director services rendered based on the intrinsic value of compensatory options or shares granted under the plans. Under APB 25, compensation expense is recognized over the vesting period of the option to the extent that the fair value of the stock exceeds the exercise price of the stock at the date of grant.

Variable stock-base compensation awards are amortized and expensed in accordance with Financial Accounting Standards Board ("FASB") Interpretation No. 28, *"Accounting for Stock Appreciation Rights and other Variable Stock Option Plan or Award Plans,"* an accelerated vesting model. Under this model, all stock based employee compensation charges are amortized over the vesting periods of the individual stock awards.

Had the Company determined compensation cost based on the fair value at the grant date for its stock options under SFAS 123, the Company's net loss and basic and diluted net loss

Vanda Pharmaceuticals Inc.
(A development stage company)
Notes to consolidated financial statements—(continued)

attributable to common stockholders per share would have been changed to the following pro forma amounts:

	Period from March 13, 2003 (inception) to December 31, 2003	Year ended December 31, 2004	Nine months ended September 30, 2004	Nine months ended September 30, 2005
			(unaudited)	(unaudited)
Net loss, attributable to common stockholders	$ (2,970,821)	$ (9,474,286)	$ (6,257,770)	$ (35,540,429)
Add: Stock based employee compensation expense included in net loss	—	38,133	20,841	4,090,301
Less: Stock-based employee compensation expense determined under SFAS 123	(33,160)	(57,954)	(27,831)	(4,130,518)
Pro forma net loss applicable to common stockholders	$ (3,003,981)	$ (9,494,107)	$ (6,264,760)	$ (35,580,646)
Net loss per share:				
Basic and diluted, net loss attributed to common stockholders as reported	$ (297.08)	$ (947.43)	$ (625.78)	$ (934.93)
Pro forma basic and diluted, net loss attributed to common stockholders	$ (300.40)	$ (949.41)	$ (626.48)	$ (935.99)

The weighted average fair value of an option granted during the period from March 13, 2003 (inception) to December 31, 2003 and year ended December 31, 2004 was $0.32 and $1.20, respectively. The weighted average fair value of an option granted during the nine month periods ended September 30, 2004 and 2005 was $1.17 and $4.54, respectively. The fair value

Vanda Pharmaceuticals Inc.
(A development stage company)
Notes to consolidated financial statements—(continued)

of each option grant is estimated on the date of the grant using the Black-Scholes option pricing model with the following weighted-average assumptions for each year:

	Period from March 13, 2003 (inception) to December 31, 2003	Year ended December 31, 2004	Nine months ended September 30, 2004 (unaudited)	Nine months ended September 30, 2005 (unaudited)
Expected dividend yield	0%	0%	0%	0%
Expected volatility	0%	67%	67%	67%
Expected term (years)	10	5	5	5
Risk-free interest rate	3.65%	3.42%	3.89%	3.44%

Stock warrants

The Company accounts for warrants granted to consultants and advisors under SFAS 123 and Emerging Issues Task Force Issue 96-18, “Accounting for Equity Investments that are Issued to Other Than Employees for Acquiring or in Conjunction with Selling Goods or Services,” (“EITF 96-18”). As such, warrants granted to non-employees are periodically re-measured and expense is incurred during their vesting terms.

Income taxes

The Company accounts for income taxes under the liability method in accordance with provisions of SFAS No. 109, *“Accounting for Income Taxes,”* (“SFAS 109”) which requires companies to account for deferred income taxes using the asset and liability method. Under the asset and liability method, current income tax expense or benefit is the amount of income taxes expected to be payable or refundable for the current year. A deferred income tax asset or liability is recognized for future tax consequences attributable to differences between the financial statement carrying amounts of existing assets and liabilities and their respective tax bases and tax credits and loss carryforwards. Deferred tax assets are reduced by a valuation allowance when, in the opinion of management, it is more likely than not that some portion or all of the deferred tax assets will not be realized. Tax rate changes are reflected in income during the period such changes are enacted. Changes in ownership may limit the amount of net operating loss carryforwards that can be utilized in the future to offset taxable income.

Net loss per share

Net loss attributable to common stockholders per share is calculated in accordance with SFAS No. 128, *“Earnings per Share,”* and Staff Accounting Bulletin (“SAB”) No. 98. Basic earnings per share (“EPS”) is calculated by dividing the net income or loss attributable to common stockholders by the weighted average number of common shares outstanding, reduced by the weighted average unvested common shares subject to repurchase.

Vanda Pharmaceuticals Inc.
(A development stage company)
Notes to consolidated financial statements—(continued)

Diluted EPS is computed by dividing the net income or loss attributable to common stockholders by the weighted average number of other potential common stock outstanding for the period. Other potential common stock include Series A and B Convertible Preferred Stock, stock options and warrants but only to the extent that their inclusion is dilutive. The Company incurred a net loss in all periods presented, causing inclusion of any potentially dilutive securities to have an anti-dilutive affect, resulting in dilutive loss per share attributable to common stockholders and basic loss per share attributable to common stockholders being equivalent. The Company did not have any common shares issued for nominal consideration as defined under the terms of SAB No. 98, which would be included in EPS calculations.

The unaudited pro forma shares used to compute basic and diluted net loss per share is the weighted average shares of common stock outstanding, reduced by the weighted average unvested common shares subject to repurchase, and includes the assumed conversion of the convertible preferred stock into shares of common stock using the as-if converted method as of January 1, 2004 or the actual date of issuance if later.

	Period from March 13, 2003 (inception) to December 31, 2003	Year ended December 31, 2004	Nine months ended September 30, 2004 (unaudited)	Nine months ended September 30, 2005 (unaudited)
Historical:				
Numerator:				
Net loss	$ (2,970,821)	$ (9,474,286)	$ (6,257,770)	$ (17,040,424)
Beneficial conversion feature— deemed dividend to preferred stockholders	—	—	—	(18,500,005)
Net loss attributable to common stockholders	$ (2,970,821)	$ (9,474,286)	$ (6,257,770)	$ (35,540,429)
Denominator:				
Weighted average common shares outstanding	10,000	10,000	10,000	38,872
Weighted average unvested common shares subject to repurchase	—	—	—	(858)
Denominator for basic and diluted net loss per share	10,000	10,000	10,000	38,014
Basic and diluted net loss per share applicable to common stockholders	$ (297.08)	$ (947.43)	$ (625.78)	$ (934.93)

Vanda Pharmaceuticals Inc.
(A development stage company)
Notes to consolidated financial statements—(continued)

	Period from March 13, 2003 (inception) to December 31, 2003	Year ended December 31, 2004	Nine months ended September 30, 2004 (unaudited)	Nine months ended September 30, 2005 (unaudited)
Pro forma:				
Numerator:				
Pro forma net loss		$ (9,474,286)		$ (35,540,429)
Denominator:				
Weighted average common shares outstanding		10,000		38,014
Pro forma adjustments to reflect assumed weighted average effect on conversion of preferred stock		13,903,995		25,226,342
Pro forma shares used to compute basic and diluted net loss per share		13,913,995		25,264,356
Basic and diluted pro forma net loss per share applicable to common stockholders		$ (0.68)		$ (1.41)
Historical outstanding anti-dilutive securities not included in diluted net loss per share calculation:				
Series A and B preferred stock	10,000,000	25,040,654	25,040,654	40,081,308
Options to purchase common stock	772,100	1,042,480	1,042,480	3,783,490
Warrants to purchase common stock	45,100	166,600	166,600	166,600
	10,817,200	26,249,734	26,249,734	44,031,398

Certain Risks and Uncertainties

The Company's product candidates under development require approval from the Food and Drug Administration (FDA) or other international regulatory agencies prior to commercial sales. There can be no assurance our products will receive the necessary clearance. If we are denied clearance or clearance is delayed, it may have a material adverse impact on the Company.

The Company's products are concentrated in rapidly changing, highly competitive markets, which are characterized by rapid technological advances, changes in customer requirements and evolving regulatory requirements and industry standards. Any failure by us to anticipate or to respond adequately to technological developments in our industry, changes in customer requirements or changes in regulatory requirements or industry standards, or any significant

Vanda Pharmaceuticals Inc.
(A development stage company)
Notes to consolidated financial statements—(continued)

delays in the development or introduction of products or services, could have a material adverse effect on our business, operating results and future cash flows.

The Company depends on single source suppliers for critical raw materials for manufacturing, as well as other components required for the administration of its product candidates. The loss of these suppliers could delay our clinical trials or prevent or delay commercialization of the product candidates.

Segment information

Management has determined that the Company operates in one business segment which is the development and commercialization of pharmaceutical products.

Use of estimates

The preparation of financial statements in conformity with accounting principles generally accepted in the United States of America requires management to make estimates that affect the reported amounts of assets and liabilities at the date of the financial statements, disclosure of contingent assets and liabilities, and the reported amounts of revenue and expenses during the reporting period. Actual results could differ from those estimates.

Recent accounting pronouncements

In December 2004, the FASB issued SFAS No. 123R, *"Share-Based Payment,"* a revision of SFAS No. 123, *"Accounting for Stock-based Compensation."* SFAS 123R requires companies to recognize expense associated with share-based compensation arrangements, including employee stock options, using a fair value-based option pricing model, and eliminates the alternative to use APB 25's intrinsic method of accounting for share-based payments. In accordance with the new pronouncement, the Company plans to begin recognizing the expense associated with its share-based payments, as determined using a fair-value-based method, in its statements of operations beginning on January 1, 2006. Adoption of the expense provisions of SFAS 123R are expected to have a material impact on the Company's results of operations and net loss per share. The standard generally allows two alternative transition methods in the year of adoption— modified prospective application and retroactive application with restatement of prior financial statements to include the same amounts that were previously included in the pro forma disclosures. The Company has not determined which transition to adopt.

In order to provide implementation guidance related to SFAS 123R, the Securities and Exchange Commission ("SEC") issued Staff Accounting Bulletin ("SAB") No. 107, "Share-Based Payment" in March 2005. SAB 107 provides guidance on numerous issues such as valuation methods (including assumptions such as expected volatility and expected term), the classification of compensation expense, capitalization of compensation cost related to share-based payment arrangements, the accounting for income tax effects of share-based payment arrangements upon adoption of SFAS 123R, and disclosures in MD&A subsequent to adoption of SFAS 123R.

Vanda Pharmaceuticals Inc.
(A development stage company)
Notes to consolidated financial statements—(continued)

SFAS No. 154, "Accounting Changes and Error Corrections— a replacement of APB Opinion No. 20 and FASB Statement No. 3" was issued by the FASB in May 2005. This Statement replaces APB Opinion No. 20, "Accounting Changes", and FASB Statement No. 3, "Reporting Accounting Changes in Interim Financial Statements", and changes the requirements for the accounting for and reporting of a change in accounting principle. SFAS No. 154 applies to all voluntary changes in accounting principle and requires retrospective application to prior periods' financial statements of changes in accounting principle, unless it is impracticable to determine either the period-specific effects or the cumulative effect of the change. This Statement also requires that a change in depreciation, amortization, or depletion method for long-lived, non-financial assets be accounted for as a change in accounting estimate affected by a change in accounting principle. This statement is effective for accounting changes and corrections of errors made in fiscal years beginning after December 15, 2005. SFAS No. 154 is not expected to have a material effect on the Company's consolidated financial statements.

In June 2005, the FASB Staff issued FASB Staff Position 150-5 (FSP 150-5), *"Issuer's Accounting under FASB Statement No. 150 for Freestanding Warrants and Other Similar Instruments on Shares that are Redeemable."* FSP 150-5 addresses whether freestanding warrants and other similar instruments on shares that are redeemable, either puttable or mandatorily redeemable, would be subject to the requirements of FASB Statement No. 150, *"Accounting for Certain Financial Instruments with Characteristics of Both Liabilities and Equity,"* regardless of the timing of the redemption feature or the redemption price. The FSP is effective after June 30, 2005. Adoption of the FSP did not have a material effect on the Company's financial condition or results of operations.

3. Property and equipment

Property and equipment— at cost:

	December 31,		September 30,
	2003	2004	2005
		(unaudited)	
Computer equipment	$ 224,741	$ 698,405	$ 722,700
Lab equipment	636,348	681,455	705,232
Furniture and fixtures	22,063	29,309	29,254
Leasehold improvements	291,397	304,972	330,418
	1,174,549	1,714,141	1,787,604
Less— accumulated depreciation and amortization	79,891	462,274	770,290
	$ 1,094,658	$ 1,251,867	$ 1,017,314

Depreciation and amortization expense for the period from March 13, 2003 (inception) to December 31, 2003 and year ended December 31, 2004 was $79,891 and $376,709, respectively. Depreciation and amortization expense for the nine month period ended September 30, 2004 and 2005 and 2004 was $282,621 and $316,435, respectively.

Vanda Pharmaceuticals Inc.
(A development stage company)
Notes to consolidated financial statements—(continued)

4. Accrued expenses

Accrued expenses consist of the following:

	December 31,		September 30,
	2003	2004	2005
			(unaudited)
Bonus accrual	$ 334,080	$ 284,143	$ 284,843
Accrued professional fees	40,000	192,977	88,025
Accrued research and development expenses	—	172,730	1,384,405
Insurance and benefits	36,753	33,680	106,254
Other accrued expenses	21,641	5,898	5,598
Total accrued expenses	$ 432,474	$ 689,428	$ 1,869,125

5. Line of credit facility

In 2003, the Company entered into a $515,147 line of credit facility to finance the purchase of specified equipment based on lender-approved schedules. The interest rate was fixed at 9.3% per annum. The Company has granted a security interest in the assets purchased under the credit line. During 2003, the full line of credit amount was drawn down. During 2004, the Company had no draw downs under the line of credit. During 2003 and 2004, the Company repaid $45,010 and $156,446 on the line of credit, respectively. The total indebtedness relating to this line of credit was $470,137, $313,691 and $187,523 as of December 31, 2003 and 2004 and September 30, 2005, respectively.

Interest expense for the line of credit facility for the period from March 13, 2003 (inception) to December 31, 2003 and the year ended December 31, 2004 was $3,971 and $41,668, respectively.

The following is a schedule of remaining principal payments under borrowings as of December 31:

2005	$ 197,236
2006	148,356
	345,592
Less: Portion representing interest	29,176
Current portion	173,929
Noncurrent portion	$ 142,487

Vanda Pharmaceuticals Inc.
(A development stage company)
Notes to consolidated financial statements—(continued)

6. Commitments

Lease agreements

In 2003, the Company entered into a five-year non-cancelable operating lease agreement for office and laboratory space. The lease expires in June 2008. The lease contains an option to renew for an additional five years on the same terms and conditions. The lease contains a 3% annual escalation.

The following is a schedule of future minimum lease payments for capital and non-cancelable operating leases as of December 31, 2004:

2005	$	302,057
2006		308,832
2007		239,570
2008		121,555
	$	972,014

In August 2005, the Company entered into a ten-year, six-month non-cancelable operating lease agreement for office and laboratory space at a new office complex, which is renewable for an additional five-year period at the end of the original term. The lease expires in June 2016. The Company will take possession of the lease space during 2006. The lease includes a rent abatement and scheduled base rent increases over the term of the lease. The total amount of the base rent payments and rent abatement will be charged to expense on a straight-line method over the term of the lease. In conjunction with a letter of credit, the Company collateralized the operating lease with a restricted cash deposit in the amount of $430,230 in September 2005, which is recorded as non-current restricted cash at September 30, 2005.

The following is a schedule of future minimum lease payments for capital and non-cancelable operating leases as of September 30, 2005:

Three months ended December 31, 2005	$	57,252
2006		730,602
2007		673,121
2008		567,177
2009		458,034
2010		470,955
Thereafter	$	3,086,203
	$	6,043,344

Capital leases

In 2004, the Company entered into a capital lease obligation at an interest rate of 7.5 percent. The lease obligation was payable in monthly installments of $3,312 through April 2006. The

Vanda Pharmaceuticals Inc.
(A development stage company)
Notes to consolidated financial statements—(continued)

Company capitalized the equipment in accordance with Statement of Financial Accounting Standard No. 13, *"Accounting for Leases"* (SFAS 13). SFAS 13 requires the capitalization of leases meeting certain criteria, with the related asset being recorded in property and equipment and an offsetting amount recorded as a liability. During 2005, the Company repaid the capital lease obligation in full.

Total rent expense for the period from March 13, 2003 (inception) through December 31, 2003 and the year ended December 31, 2004 and was $143,174 and $315,241, respectively. Total rent expense for nine month period ended September 30, 2004 and 2005 was $235,793 and $261,471, respectively.

License and clinical agreements

License agreements

In July 2004, the Company acquired exclusive rights to develop and commercialize iloperidone through a sublicense agreement with Novartis AG ("Novartis"). In consideration for this license, the Company paid Novartis an initial license fee of $500,000, which was immediately expensed to research and development expenses on the Consolidated Statements of Operations for the year ended December 31, 2004. The Company is obligated to make future milestone payments to Novartis of less than $100 million in the aggregate (the majority of which are tied to sales milestones), as well as royalty payments to Novartis which, as a percentage of net sales, is in the mid-twenties. The Company's rights with respect to these patents and to commercialize iloperidone may terminate in whole or in part if the Company breaches its royalty obligations, covenants in the sublicense regarding our financial condition or certain restrictions in the sublicense regarding other development activities.

In March 2004, the Company entered into a license agreement with Bristol-Myers Squibb ("BMS") under which the Company received an exclusive worldwide license to develop and commercialize VEC-162. In consideration for the license, the Company paid BMS an initial license fee of $500,000, which was immediately expensed in research and development expenses on the Consolidated Statements of Operations for the year ended December 31, 2004. The Company is obligated to make future milestone payments to BMS of less than $40 million in the aggregate (the majority of which are tied to sales milestones) as well as royalty payments based on the net sales of VEC-162 at a rate which, as a percentage of net sales, is in the low teens. The Company is also obligated under this agreement to pay BMS a royalty on any upfront payments that the Company receives from a third party in connection with any partnering arrangement, at a rate in the mid-twenties. Either party may terminate the agreement under certain circumstances, including a material breach of the agreement by the other.

In July 2004, the Company entered into a license agreement with Novartis under which the Company received an exclusive worldwide license to develop and commercialize VSF-173. In consideration for the license, the Company paid Novartis an initial license fee of $500,000, which was immediately expensed in research and development expenses on the Consolidated Statements of Operations for the year ended December 31, 2004. The Company is also obligated to make future milestone payments to Novartis of less than $50 million in the

aggregate (the majority of which are tied to sales milestones) and royalty payments which, as a percentage of net sales, is in the low to mid teens. Either party may terminate the agreement under certain circumstances, including a material breach of the agreement by the other.

Clinical agreements

The Company has agreements with clinical sites for the treatments of patients under clinical protocols. In 2004, the Company entered into an agreement with a clinical organization to provide these services under a fee for service arrangement. The total cost of these trial services will be unknown until the trials are completed since the fees are based on the amount of service and the number of patients.

In February 2005, the Company entered into a milestone-based clinical trial agreement for approximately $416,000 which was completed in August 2005.

7. Related party transactions

From time to time, the Company reimbursed Care Capital, LLC (“Care”), an affiliate of the majority shareholder of the Company, for certain expenses paid by Care on behalf of the Company. The Company reimbursed Care for approximately $299,000 and $54,000 for the period from March 13, 2003 (inception) through December 31, 2003 and the year ended December 31, 2004, respectively.

The Company used the services of a Care employee and reimbursed Care for such personnel services related to occupancy and salary expenses incurred on behalf of the Company. Reimbursements related to such expenses were approximately $34,000 and approximately $49,000 for the period from March 13, 2003 (inception) through December 31, 2003 and the year ended December 31, 2004, respectively.

There were no related party transactions during 2005.

8. Preferred and common stock

Series A preferred and common stock

In March 2003, the Company closed a private placement of its securities and raised $10,004,000 in gross proceeds. The Company sold 10,000 shares of newly issued Class A Common Stock at a per share price of $0.40 and 10,000,000 shares of newly-issued Series A Preferred Stock at a per share price of $1.00 a share. Each preferred share is convertible into one share of the Company’s Common Stock, as adjusted. Each share of Series A Preferred Stock shall entitle the holder thereof to vote on the election and removal of the directors of the Company and on all other matters to be voted on by the stockholders of the Company. The holder of a share of Series A Preferred Stock shall be entitled to such number of votes as equal the number of shares of Common Stock into which such shares of Series A Preferred Stock is then convertible into at the record date of determination. The outstanding shares of Series A Preferred Stock shall have all other voting rights required by law and shall have additional rights pursuant to Article IV of the Company’s Second Restated Certificate of Incorporation.

Vanda Pharmaceuticals Inc.
(A development stage company)
Notes to consolidated financial statements—(continued)

In September 2004, the Board of Directors approved a 100-for-1 stock split on Common and Series A Preferred Stock. All share information in the financial statements has been retroactively adjusted to reflect the effect of the split as if it had occurred at the beginning of the earliest period presented.

Series B preferred stock

In September 2004, the Company closed a private placement of 15,040,654 shares of Series B Preferred Stock for approximately $18.5 million.

In September 2005, the Company closed an additional private placement of 15,040,654 shares of Series B Preferred Stock for approximately $18.5 million. In December 2005, the Company closed an additional private placement of 12,195,129 shares of Series B Preferred Stock for approximately $15 million (see Note 13). The issuance costs from the issuance of the Series B Preferred Stock in September and December 2005 were considered insignificant to record against the Series B Preferred Stock on the balance sheet.

Voting rights

The holders of preferred stock shall vote together with the holders of the outstanding shares of Common Stock, and not as a separate class or series. So long as 10,528,457 shares of Series B Preferred Stock remain outstanding, the holders of the outstanding shares of Series B Preferred Stock, voting together as a class and to the exclusion of all other classes of capital stock of the Company, shall be entitled to elect three (3) members of the Board of Directors (the “Series B Preferred Directors”). So long as 3,500,000 shares of Series A Preferred Stock remain outstanding, the holders of the outstanding shares of Series A Preferred Stock, voting together as a class and to the exclusion of all other classes of capital stock of the Company, shall be entitled to elect three (3) members of the Board of Directors (the “Series A Preferred Directors” and, together with the Series B Preferred Directors, the “Preferred Directors”). Any remaining directors shall be appointed upon the mutual agreement of a majority of the Series A Preferred Directors and the Series B Preferred Directors (the “General Directors”), provided that one of the General Directors shall be the chief executive officer of the Company.

Dividends

The holder of each then outstanding share of Series A Preferred Stock and the holder of each then outstanding share of Series B Preferred Stock shall be entitled to receive dividends payable out of funds legally available therefore when, as and if declared by the Board of Directors of the Company. Such dividends shall be payable on parity with the holders of the Common Stock and any such dividend shall be distributed ratably among the holders of the Common Stock and the holders of the Preferred Stock as if all such shares of Preferred Stock were to convert into Common Stock. The right to such dividends shall not be cumulative, and no right shall accrue to holders of Preferred Stock. Dividends, if paid, or if declared and set apart for payment, must be paid, or declared and set apart for payment, on all outstanding shares of the Preferred Stock contemporaneously.

Vanda Pharmaceuticals Inc.
(A development stage company)
Notes to consolidated financial statements—(continued)

Liquidation preference

In the event of any voluntary or involuntary dissolution, liquidation or winding up of the affairs of the Company (a "Liquidation Event"), after payment or provision for payment of the debts and other liabilities of the Company, the holders of each share of Series A Preferred Stock and each share of Series B Preferred Stock shall be entitled to receive, on a pari passu basis out of the assets of the Company, an amount equal to the liquidation preference. The liquidation preference per share of Series A Preferred Stock as of any particular date (the "Series A Liquidation Preference") shall be the greater of the Original Series A Purchase Price or the amount per share of Series A Preferred Stock that the holder of the number of shares of Common Stock issuable upon conversion thereof would receive upon any such Liquidation Event. The liquidation preference per share of Series B Preferred Stock as of any particular date (the "Series B Liquidation Preference" and, together with the Series A Liquidation Preference, the "Liquidation Preference") shall be the greater of the Original Series B Purchase Price or the amount per share of Series B Preferred Stock that the holder of the number of shares of Common Stock issuable upon conversion thereof would receive upon any such Liquidation Event.

If upon any Liquidation Event the assets of the Company distributable among the holders of the Series A Preferred Stock and the Series B Preferred Stock shall be insufficient to permit the payment to them of the full preferential amounts to which they are entitled, then the entire assets of the Company to be distributed shall be distributed ratably among the holders of the Series A Preferred Stock and the Series B Preferred Stock, in proportion to the sum of their respective per share liquidation preferences, until payment in full of such amount per share.

Conversion

Each share of the Preferred Stock shall be convertible, at the option of the holder, at any time after the date of the issuance of such share, into that number of the fully paid and nonassessable shares of common stock determined in accordance with the following provisions:

(a) Each share of Series A Preferred Stock shall be convertible into the number of shares of Common Stock which results from dividing the Series A Conversion Price (as defined herein) per share in effect at the time into the Original Series A Purchase Price; and

(b) Each share of Series B Preferred Stock shall be convertible into the number of shares of Common Stock which results from dividing the Series B Conversion Price (as defined herein) per share in effect at the time into the Original Series B Purchase Price.

The conversion price per share for the Series A Preferred Stock shall initially be $1.00. The conversion price per share for the Series B Preferred Stock shall initially be $1.23 and shall be subject to adjustment from time to time as provided herein.

Vanda Pharmaceuticals Inc.
(A development stage company)
Notes to consolidated financial statements—(continued)

Automatic conversion

Each share of Preferred Stock then outstanding shall be automatically converted into the number of fully paid and nonassessable shares of Common Stock determined in accordance with the conversion features listed above upon the earlier of:

(a) The close of business of the day immediately preceding the closing of the sale of its Common Stock in connection with a Qualified Public Offering ("IPO"); or

(b) The consent of the holders of at least a majority of the outstanding shares of Preferred Stock voting or consenting together as a single class and to the exclusion of all other classes of capital stock of the Company.

Special mandatory conversion

In connection with the additional sale of Series B Preferred Stock in September 2005, if any holder of shares of Series B Preferred Stock fails to purchase all shares of Series B Preferred Stock required to be purchased by such holder at any additional closing (as defined), all of such holder's Series B Preferred Stock shall automatically and without further action on the part of such holder be converted into such number of shares of Common Stock into which such shares of Series B Preferred Stock are then convertible. Upon conversion, the shares of Series B Preferred Stock converted shall be canceled and not subject to reissuance.

9. Beneficial conversion feature— Series B convertible preferred stock

In September 2005, the Company completed the sale of an additional 15,040,654 shares of Series B Convertible Preferred Stock for proceeds of approximately $18.5 million. After evaluating the fair value of the Company's Common Stock obtainable upon conversion by the stockholders, the Company determined that the issuance of the Series B Preferred Stock sold in September 2005 resulted in a beneficial conversion feature calculated in accordance with EITF Issue No. 98-5, "Accounting for Convertible Securities with Beneficial Conversion Features or Contingently Adjustable Conversion Ratios," as interpreted by EITF Issue No. 00-27, "Application of Issue No. 98-5 to Certain Convertible Instruments," of approximately $18.5 million which was fully accreted in September 2005 and is recorded as a deemed dividend to preferred stockholders for the nine month period ended September 30, 2005.

10. Management equity plan

In March 2003, the Company adopted the Vanda Pharmaceuticals Inc. Management Equity Plan ("Stock Option Plan"), a non-qualified stock option plan. The Company has reserved 5,489,714 shares of Common Stock to accommodate the exercise of options granted under the Stock Option Plan. As of September 30, 2005, there were a remaining 1,565,485 shares reserved for issuance under the Stock Option Plan. The Company has issued options to purchase Common Stock to various employees which expire 10 years from the date of grant. The options become 100% vested on the fourth anniversary of the date of grant.

Vanda Pharmaceuticals Inc.
(A development stage company)
Notes to consolidated financial statements—(continued)

Management equity plan

The Company has historically granted stock options at exercise prices that equaled the fair value of its Common Stock at the date of grant as estimated by its board of directors. Since there has not been a public market for the Company's Common Stock, the board of directors determined the fair value of its Common Stock by considering a number of objective and subjective factors, including the pricing of Convertible Preferred Stock, the preferences and rights of the Company's Preferred Stock over the Common Stock, important operational events, the risk and non-liquid nature of the Common Stock, and underlying market conditions. The Company has not historically obtained contemporaneous valuations by an unrelated valuation specialist because, at the time of the issuances of stock options, the Company believed its estimates of the fair value of its common stock to be reasonable based on the foregoing factors.

In connection with this proposed initial public offering, the Company retrospectively assessed the fair value of its Common Stock. In reassessing the fair value, the Company considered the factors used in its historical determinations of fair value, the likelihood of a liquidity event such as an initial public offering, and feedback received from investment banks relating to an initial public offering upon beginning such discussions in November 2005. In reassessing the fair value of the Common Stock, the Company determined that an increase in the estimated fair value of the underlying Common Stock for options granted after December 2003 was appropriate. As allowed by SFAS No. 123, *Accounting for Stock Based Compensation,* the Company accounts for its stock options granted to employees and directors under APB 25, *Accounting for Stock Issued to Employees.* Accordingly, deferred stock compensation is recognized to the extent that the price of the underlying common stock, as determined in the retrospective fair value analysis, exceeds the exercise price of the stock options at the date of grant. Deferred stock compensation is amortized over the vesting period of the related options which is generally four years.

For the year ended December 31, 2004, the Company granted 332,080 stock options to employees with a weighted average intrinsic value of $0.85 per share, resulting in deferred stock compensation of $281,130. For the nine month period ended September 30, 2005, the Company granted 2,899,111 stock options to employees with a weighted average intrinsic value of $4.52 per share, resulting in deferred stock compensation of $13,103,916. Compensation expense relating to stock options with the common stock fair value greater than the exercise price granted to employees was $23,196 for the year ended December 31, 2004, and $5,904 and $566,682 for the nine month period ended September 30, 2004 and 2005, respectively. Of the $23,196 of compensation expense recognized during the year ended December 31, 2004, $2,086 was included in research and development and $21,110 was included in general and administrative. Of the $5,904 and $566,682 of compensation expense recognized during the nine month period ended September 30, 2004 and 2005, respectively, $587 and $183,822 was included in research and development and $5,317 and $382,860 was included in general and administrative expense.

In August 2004, the Company approved a modification to an employee's stock option awards at time of employment termination. The modification was to accelerate a portion of the unvested stock options so the shares could be immediately exercisable. According to FASB Interpretation No. 44, *"Accounting for Certain Transactions involving Stock Compensation"* (FIN 44), the result

Vanda Pharmaceuticals Inc.
(A development stage company)
Notes to consolidated financial statements—(continued)

of such a modification is to remeasure the stock options that were modified. The remeasurement of the stock options resulted in an immediate charge of $14,937, which was included in general and administrative expense for the year ended December 31, 2004.

In February 2005, the Board of Directors approved a modification to all outstanding granted stock option awards, repricing the options from its original exercise price of $0.40 to $0.10. According to FIN 44, the result of such a modification is to account for the modified stock option awards as variable from the date of the modification to the date the awards are exercised, forfeited, or cancelled. For the nine month period ended September 30, 2005, the Company remeasured approximately 1.1 million outstanding stock options, resulting in an initial deferred stock compensation of $1,550,193. Compensation expense relating to the remeasurement of modified stock options was $3,523,619 for the nine month period ended September 30, 2005, which includes $3,040,666 of immediate stock compensation charges for vested shares at the time of remeasurement for the nine month period ended September 30, 2005. Of the $3,523,619 of compensation expense recognized during the nine month period ended September 30, 2005, $474,249 was included in research and development and $3,048,912 was included in general and administrative expense.

A summary of stock option activity is as follows with the repricing the options from its original exercise price of $0.40 to $0.10 reflected for all option activity:

	Number of shares	Weighted average exercise price at grant date
March 13, 2003 (inception)	—	$ —
Granted	772,100	0.10
Outstanding at December 31, 2003	772,100	0.10
Granted	332,080	0.10
Cancelled or expired	(61,700)	0.10
Outstanding at December 31, 2004	1,042,480	0.10
Granted (unaudited)	2,899,111	0.10
Cancelled or expired (unaudited)	(17,362)	0.10
Exercised (unaudited)	(140,739)	0.10
Outstanding at September 30, 2005 (unaudited)	3,783,490	0.10
Exercisable at September 30, 2005 (unaudited)	446,743	0.10

Vanda Pharmaceuticals Inc.
(A development stage company)
Notes to consolidated financial statements—(continued)

The following table summarizes information about stock options outstanding and exercisable at December 31, 2004 and September 30, 2005 (unaudited):

	Options outstanding			Options exercisable	
Exercise price	Number of underlying shares	Weighted-average exercise price per share	Weighted-average remaining contractual life (years)	Number of underlying shares	Weighted-average exercise price per share
December 31, 2004					
$0.10	1,042,480	$ 0.10	9.3	316,058	$ 0.10
September 30, 2005 (unaudited)					
$0.10	3,783,490	$ 0.10	9.4	446,743	$ 0.10

Restricted stock

Certain of the Company's employees have entered into the Company's standard form of stock restriction agreement as a condition to their exercise of options to acquire common stock pursuant to the Plan. Shares exercised prior to vesting are subject to forfeiture in accordance with the vesting schedule of the granted stock options. During 2005, certain of the Company's employees exercised unvested stock options, awarded under the Company's Stock Incentive Plan, to acquire a total of 79,039 shares of restricted common stock. At September 30, 2005, 53,203 shares of restricted common stock remain unvested pursuant to awards.

11. Stock warrants

In 2003, in connection with entering into the line of credit facility to finance the purchase of equipment, the Company granted to the lender a freely exercisable warrant to purchase 45,100 shares of the Company's common stock (the "Lender Warrant Shares") at an exercise price of $0.40 per share. The Lender Warrant Shares were valued using the Black Scholes option pricing model at $0.28 per share and the aggregate value was $12,628, which was recorded as general and administrative for the period from March 13, 2003 through December 31, 2003.

In February 2004, the Company issued warrants to a consultant to purchase 121,500 shares of the Company's common stock (the "Consultant Warrant Shares") at an exercise price of $0.40 per share. The Consultant Warrant Shares were valued using the Black Scholes option pricing model at $0.23 per Consultant Warrant Share and the aggregate value was $27,945, which was recorded as general and administrative for the year ended December 31, 2004.

Vanda Pharmaceuticals Inc.
(A development stage company)
Notes to consolidated financial statements—(continued)

The Company used the following assumptions to calculate the individual warrant shares through the Black Scholes option pricing model:

	Lender	Consultant
Expected dividend yield	0%	0%
Expected volatility	67%	67%
Expected term (years)	8	5
Risk-free interest rate	3.65%	3.08%

12. Income taxes

The tax provision or benefit for the years ended December 31, 2004 and 2003 are as follows:

	December 31, 2003	December 31, 2004
Current federal tax expense	$ —	$ —
Current state tax expense	—	—
Current foreign expense	—	4,949
Deferred tax expense	—	—
	—	—
Total Tax Expense	$ —	$ 4,949

Deferred tax assets consist of the following:

	December 31, 2003	December 31, 2004
Deferred Tax Asset (Liability)		
Net operating loss carryforwards	$ 1,053,424	$ 3,863,758
Start-up costs	107,710	869,656
Research and development credit	110,460	365,134
Depreciation and amortization	(37,222)	(52,549)
Amortization of warrants	—	26,878
Deferred expenses	6,818	10,083
Accrued expenses	—	64,787
Net deferred tax assets	1,241,190	5,147,747
Deferred tax asset valuation allowance	(1,241,190)	(5,147,747)
	$ —	$ —

Based on the Company's limited operating history and management's expectation of future profitability, management believes that the Company's deferred tax assets do not meet the "more likely than not" criteria under SFAS No. 109. Accordingly, a valuation allowance for the entire deferred tax asset amount has been recorded.

Vanda Pharmaceuticals Inc.
(A development stage company)
Notes to consolidated financial statements—(continued)

The effective tax rate differs from the U.S. federal statutory tax rate of 34% due to the following:

	December 31, 2003	December 31, 2004
Federal tax at statutory rate	34.0%	34.0%
State taxes	4.6%	4.6%
Change in valuation allowance	(42.3%)	(42.5%)
Research and development credit	3.7%	4.0%
Meals, entertainment and other nondeductable items	0.0%	(0.1%)
Effective tax rate	0.0%	0.0%

As of December 31, 2003 and 2004, the Company had U.S. federal and state net operating loss carryforwards of approximately $2.7 million and $10.0 million, respectively available to reduce future taxable income, which will begin to expire in 2023.

Under the Tax Reform Act of 1986, the amounts of and benefits from the operating loss carryforwards may be impaired in certain circumstances. Events which cause limitations in the amount of net operating losses that the Company may utilize in any one year include, but are not limited to, a cumulative ownership change of more than 50%, as defined, over a three year period.

13. Employee benefit plan

The Company has a defined contribution plan (the Plan) under the Internal Revenue Code Section 401(k). This plan covers substantially all employees who meet minimum age and service requirements and allows participants to defer a portion of their annual compensation on a pre-tax basis. Currently, the Company matches 50 percent up to the first six percent of employee contributions. All matching contributions have been paid by the Company. The employer match vests over a 4 year period. The total employer match for the period from March 13, 2003 (inception) through December 31, 2003 and for the year ended December 31, 2004 was $12,731 and $42,206, respectively. The total employer match for nine month period ended September 30, 2004 and 2005 was $33,037 and $40,589, respectively.

14. Subsequent events

In December 2005, the Company closed an additional private placement of 12,195,129 shares of Series B preferred stock for proceeds of approximately $15.0 million. The Company evaluated the fair value of the Company's common stock obtainable upon conversion by the stockholders and determined that the issuance of the Series Preferred Stock sold in December 2005 will result in a beneficial conversion feature of approximately $15.0 million that will fully accrete in December 2005 and will be recorded as a deemed dividend to Preferred Stockholders for the year ended December 31, 2005.

Vanda Pharmaceuticals Inc.
(A development stage company)
Notes to consolidated financial statements—(continued)

When the Company takes possession of the new lease space in January 2006, the Company will vacate the current office and laboratory space. According to SFAS 146 *"Accounting for Costs Associated with Exit or Disposal Activities"*, a liability for costs that will continue to be incurred under a contract for its remaining term without economic benefit to the Company shall be recognized and measured when the Company ceases using the right conveyed by the lease agreement, reduced by estimated sublease rentals that could be reasonably obtained. The Company expects to incur a charge of approximately $260,000 at the time the Company moves from the current location to the new office complex in January 2006.

Table of Contents

shares

Common shares

Prospectus

JPMorgan **Banc of America Securities LLC**

Thomas Weisel Partners LLC

, 2006

You should rely only on the information contained in this prospectus. We have not authorized anyone to provide you with information different from that contained in this prospectus. We are offering to sell, and seeking offers to buy, common shares only in jurisdictions where offers and sales are permitted. The information contained in this prospectus is accurate only as of the date of this prospectus, regardless of the time of delivery of this prospectus or of any sale of our common shares.

No action is being taken in any jurisdiction outside the United States to permit a public offering of the common shares or possession or distribution of this prospectus in that jurisdiction. Persons who come into possession of this prospectus in jurisdictions outside the United States are required to inform themselves about and to observe any restrictions as to this offering and the distribution of this prospectus applicable to that jurisdiction.

Until , 2006 all dealers that buy, sell or trade in our common shares, whether or not participating in this offering, may be required to deliver a prospectus. This is in addition to the dealers' obligation to deliver a prospectus when acting as underwriters and with respect to their unsold allotments or subscriptions.

Part II
information not required in prospectus

Item 13. *Other expenses of issuance and distribution.*

Estimated expenses payable in connection with the sale of the common stock in this offering are as follows:

SEC registration fee	$	8,025.00
NASD filing fee	$	8,000.00
Nasdaq National Market listing fee	$	5,000.00
Printing and engraving expenses	$	*
Legal fees and expenses	$	*
Accounting fees and expenses	$	*
Transfer agent and registrar fees and expenses	$	*
Miscellaneous	$	*
Total	$	*

* To be completed by amendment.

The registrant will bear all of the expenses shown above.

Item 14. *Indemnification of directors and officers.*

The Delaware General Corporation Law and the registrant's charter and bylaws provide for indemnification of the registrant's directors and officers for liabilities and expenses that they may incur in such capacities. In general, directors and officers are indemnified with respect to actions taken in good faith in a manner reasonably believed to be in, or not opposed to, the best interests of the registrant, and with respect to any criminal action or proceeding, actions that the indemnitee had no reasonable cause to believe were unlawful. Reference is made to the registrant's amended and restated certificate of incorporation filed as Exhibit 3.2 hereto and the registrant's bylaws filed as Exhibit 3.3 hereto.

The registrant has entered into indemnification agreements with its officers and directors, a form of which is attached as Exhibit 10.14 hereto and incorporated herein by reference. The Indemnification Agreements provide the registrant's officers and directors with further indemnification to the maximum extent permitted by the Delaware General Corporation Law. The underwriting agreement provides that the underwriters are obligated, under certain circumstances, to indemnify directors, officers and controlling persons of the registrant against certain liabilities, including liabilities under the Securities Act. Reference is made to the form of underwriting agreement filed as Exhibit 1.1 hereto.

The registrant currently maintains a directors' and officers' liability insurance policy.

Item 15. *Recent sales of unregistered securities.*

In the three years preceding the filing of this registration statement, the registrant has sold the following securities that were not registered under the Securities Act:

Common stock

In March 2003, the company issued a total of 100 shares of its Series A Common Stock to three accredited investors at an aggregate purchase price of $4,000. These shares were subsequently converted into a total of 10,000 shares of Common Stock.

In April 2005, the company issued a total of 1,838 shares of its common stock to employees, officers and directors upon exercises of options granted pursuant to its Management Equity Plan, for an aggregate purchase price of $183.80.

In June 2005, the company issued a total of 61,700 shares of its common stock to employees, officers and directors upon exercises of options granted pursuant to its Management Equity Plan, for an aggregate purchase price of $6,170.00.

In August 2005, the company issued a total of 3,700 shares of its common stock to employees, officers and directors upon exercises of options granted pursuant to its Management Equity Plan, for an aggregate purchase price of $370.00.

In September 2005, the company issued a total of 73,501 shares of its common stock to employees, officers and directors upon exercises of options granted pursuant to its Management Equity Plan, for an aggregate purchase price of $7,350.10.

In October 2005, the company issued a total of 133,796 shares of its common stock to employees, officers and directors upon exercises of options granted pursuant to its Management Equity Plan, for an aggregate purchase price of $13,379.60.

In November 2005, the company issued a total of 53,939 shares of its common stock to employees, officers and directors upon exercises of options granted pursuant to its Management Equity Plan, for an aggregate purchase price of $5,393.90.

No underwriters were involved in the foregoing sales of securities. Such sales were made in reliance upon the exemption provided by Section 4(2) of the Securities Act for transactions not involving a public offering.

Series B preferred stock

In September 2004, the company sold an aggregate of 15,040,654 shares of its Series B Preferred Stock to twelve accredited investors at an aggregate purchase price of $18,500,004.42.

In September 2005, the company sold an aggregate of 15,040,654 shares of its Series B Preferred Stock to twelve accredited investors at an aggregate purchase price of $18,500,004.42.

In December 2005, the company sold an aggregate of 12,195,129 shares of its Series B Preferred Stock to twelve accredited investors at an aggregate purchase price of $15,000,008.67.

No underwriters were involved in the foregoing sales of securities. Such sales were made in reliance upon the exemption provided by Section 4(2) of the Securities Act for transactions not involving a public offering.

Series A preferred stock

In March 2003, the company sold an aggregate of 10,000,000 shares of its Series A Preferred Stock (giving effect to a 100 for 1 stock split occurring after such sale) to three accredited investors at an aggregate purchase price of $10,000,000.

No underwriters were involved in the foregoing sales of securities. Such sales were made in reliance upon the exemption provided by Section 4(2) of the Securities Act for transactions not involving a public offering.

Options

The Company has granted currently outstanding options to purchase an aggregate of 5,026,123 shares, at prices ranging from $0.10 to $1.43. These options have been granted to employees, directors and consultants in accordance with the terms of the registrant's equity compensation plans. Such issuances were made in reliance upon the exemption provided by Rule 701 promulgated under the Securities Act and, in the case of certain consultants, Section 4(2) of the Securities Act.

Warrants

In October 2003, the company granted a warrant to purchase 451 shares of its Class A Common Stock which, with the subsequent conversion of Class A Common Stock to the company's common stock, has become exercisable for 45,100 shares of the company's common stock.

In February 2004, the company granted a warrant to purchase 1,215 shares of its Class A Common Stock which, with the subsequent conversion of Class A Common Stock to the company's common stock, has become exercisable for 121,500 shares of the company's common stock.

No underwriters were involved in the foregoing sales of securities. Such sales were made in reliance upon the exemption provided by Section 4(2) of the Securities Act for transactions not involving a public offering.

Item 16. ***Exhibits and financial statement schedules.***

(a) *Exhibits:*

Exhibit index

Exhibit no.	Exhibit index
1.1*	Form of Underwriting Agreement
3.1	Second Restated Certificate of Incorporation of the registrant
3.2	Certificate of Amendment of the Second Restated Certificate of Incorporation of the registrant dated March 22, 2005
3.3	Certificate of Amendment of the Second Restated Certificate of Incorporation of the registrant dated December 9, 2005
3.4*	Form of Amended and Restated Certificate of Incorporation of the registrant effecting a conversion of Preferred Stock and reverse stock split to take effect as of the closing of the offering
3.5	Bylaws of the registrant
3.6*	Form of Amended and Restated Bylaws to take effect as of the closing of the offering
4.1	2004 Securityholder Agreement
4.2	Class A Common Stock Purchase Warrant dated February 20, 2004 issued to Investment Opportunities I, LLC
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23.1*	Consent of Gunderson Dettmer Stough Villeneuve Franklin & Hachigian, LLP (included in Exhibit 5.1)
23.2	Consent of PricewaterhouseCoopers LLP, Independent Registered Public Accounting Firm
24.1	Power of Attorney (included on page II-6)

* To be included by amendment

Application will be made to the Securities and Exchange Commission to seek confidential treatment of certain provisions. Omitted material for which confidential treatment has been requested has been filed separately with the Securities and Exchange Commission.

(b) *Consolidated Financial Statements Schedules*:

All schedules for which provision is made in the applicable accounting regulations of the Securities and Exchange Commission are not required under the related instructions, the required information is disclosed in the notes to the consolidated financial statements or the schedules are inapplicable, and therefore have been omitted.

Item 17. *Undertakings.*

Insofar as indemnification for liabilities arising under the Securities Act may be permitted to directors, officers and controlling persons of the registrant pursuant to provisions described in Item 14 above, 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 Securities 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 Securities Act and will be governed by the final adjudication of such issue.

The registrant hereby undertakes (1) to provide to the underwriters at the closing specified in the underwriting agreement certificates in such denominations and registered in such names as required by the underwriters to permit prompt delivery to each purchaser; (2) that for purposes of determining any liability under the Securities Act, the information omitted from the form of prospectus filed as part of this registration statement in reliance upon Rule 430A and contained in the form of prospectus filed by the registrant pursuant to Rule 424(b)(1) or (4) or 497(h) under the Securities Act shall be deemed to be part of this registration statement as of the time it was declared effective; and (3) that for the purpose of determining any liability under the Securities Act, each post-effective amendment that contains a form of prospectus 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.

Signatures

Pursuant to the requirements of the Securities Act of 1933, the registrant has duly caused this Registration Statement on Form S-1 to be signed on its behalf by the undersigned, thereunto duly authorized, in Rockville, Maryland on December 29, 2005.

VANDA PHARMACEUTICALS INC.

By: /s/ MIHAEL H. POLYMEROPOULOS, M.D.
Mihael H. Polymeropoulos, M.D.
Chief Executive Officer

Power of attorney and signatures

The undersigned officers and directors of Vanda Pharmaceuticals Inc. hereby constitute Mihael H. Polymeropoulos, M.D., and Steven A. Shallcross, and each of them singly, with full power of substitution, our true and lawful attorneys-in-fact and agents to take any actions to enable Vanda Pharmaceuticals Inc. to comply with the Securities Act, and any rules, regulations and requirements of the Securities and Exchange Commission, in connection with this registration statement, including the power and authority to sign for us in our names in the capacities indicated below any and all amendments (including post-effective amendments) to this registration statement and any other registration statement filed pursuant to the provisions of Rule 462 under the Securities Act and the power to file the same, with all exhibits thereto, and all other documents in connection therewith, with the Securities and Exchange Commission, granting unto each said attorney-in-fact and agents full power and authority to perform each and every act in person, hereby ratifying and confirming all that said attorneys-in-fact and agents or either of them or their or his substitute or substitutes may lawfully 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 below by the following persons in the capacities and on the dates indicated.

Name	Title	Date
/s/ MIHAEL H. POLYMEROPOULOS, M.D. Mihael H. Polymeropoulos, M.D.	President and Chief Executive Officer and Director (principal executive officer)	December 29, 2005
/s/ STEVEN A. SHALLCROSS Steven A. Shallcross	Senior Vice President, Chief Financial Officer and Treasurer (principal financial and accounting officer)	December 29, 2005
/s/ ARGERIS N. KARABELAS, PH.D. Argeris N. Karabelas, Ph.D.	Director	December 29, 2005

Name	Title	Date
/s/ Brian K. Halak, Ph.D. Brian K. Halak, Ph.D.	Director	December 29, 2005
/s/ Wayne T. Hockmeyer, Ph.D. Wayne T. Hockmeyer, Ph.D.	Director	December 29, 2005
/s/ David Ramsay David Ramsay	Director	December 29, 2005
/s/ James B. Tananbaum, M.D. James B. Tananbaum, M.D.	Director	December 29, 2005
/s/ Richard W. Dugan Richard W. Dugan	Director	December 29, 2005

Table of Contents

Exhibit index

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1.1*	Form of Underwriting Agreement
3.1	Second Restated Certificate of Incorporation of the registrant
3.2	Certificate of Amendment of the Second Restated Certificate of Incorporation of the registrant dated March 22, 2005
3.3	Certificate of Amendment of the Second Restated Certificate of Incorporation of the registrant dated December 9, 2005
3.4*	Form of Amended and Restated Certificate of Incorporation of the registrant effecting a conversion of Preferred Stock and reverse stock split to take effect as of the closing of the offering
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State of Delaware
Secretary of State
Division of Corporations
Delivered 12:47 PM 09/28/2004
FILED 12:12 PM 09/28/2004
SRV 040699906-3590747 FILE

SECOND RESTATED CERTIFICATE OF INCORPORATION OF VANDA PHARMACEUTICALS INC.

Vanda Pharmaceuticals Inc., a Delaware corporation (the "Corporation"), hereby certifies as follows:

1. The name of the Corporation is Vanda Pharmaceuticals Inc. The date of filing of its original Certificate of Incorporation with the Secretary of State of the State of Delaware was November 13, 2002. A First Restated Certificate of Incorporation of the Corporation was filed with the Secretary of State of the State of Delaware on March 12, 2003.

2. This Second Restated Certificate of Incorporation amends and restates the provisions of the First Restated Certificate of Incorporation of the Corporation and was duly adopted by the unanimous written consent of the stockholders of the Corporation in accordance with the provisions of Sections 228, 242 and 245 of the General Corporation Law of the State of Delaware. Notice of such adoption has been given to the stockholders of the Corporation as provided in Section 228.

3. The text of the First Restated Certificate of Incorporation is hereby amended and restated in its entirety to read as follows:

I

The name of this Corporation is Vanda Pharmaceuticals Inc.

II

The address of the Corporation's registered office in the State of Delaware is National Corporate Research, Ltd., 615 South Dupont Highway, City of Dover, County of Kent 19901. The name of its registered agent at such address is National Corporate Research, Ltd.

III

The purpose of the Corporation is to engage in any lawful act or activity for which a corporation may be organized under the General Corporation Law of the State of Delaware.

IV

The total number of shares of capital stock that the Corporation shall have authority to issue is: (i) 50,000,000 shares of Common Stock, par value $.01 per share (the "Common Stock") and (ii) 40,081,308 shares of Preferred Stock, par value $.01 per share, of which 10,000,000 shares shall be Series A Preferred Stock (the "Series A Preferred Stock") and 30,081,308 shares shall be Series B Preferred Stock (the "Series B Preferred Stock" and, together with the Series A Preferred Stock, the "Preferred Stock").

Reclassification. Upon the filing of the Second Restated Certificate of Incorporation, a reclassification of the Corporation's capital stock shall become effective, pursuant to which each outstanding share of Class A Common Stock shall be reclassified as and converted into 100 shares of Common Stock, and each outstanding share of Series A Preferred Stock shall be converted into 100 shares of Series A Preferred Stock. No fractional shares of common stock or preferred stock shall be issued as a result of the reclassification and any fractional shares that would otherwise be issuable upon such reclassification and conversion shall, without further action, be canceled.

The rights, preferences, privileges and restrictions granted to or imposed upon the respective classes and series of shares of capital or the holders thereof are set forth below in this Article IV.

1. Rights to Receive Dividends.

The holder of each then outstanding share of Series A Preferred Stock and the holder of each then outstanding share of Series B Preferred Stock shall be entitled to receive dividends payable out of funds legally available therefor when, as and if declared by the board of directors of the Corporation (the "Board of Directors"). Such dividends shall be payable on parity with the holders of the Common Stock and any such dividend shall be distributed ratably among the holders of the Common Stock and the holders of the Preferred Stock as if all such shares of Preferred Stock were to convert into Common Stock. The right to such dividends shall not be cumulative, and no right shall accrue to holders of Preferred Stock by reason of the fact that dividends on such shares are not declared or paid in any prior year, whether or not the earnings of the Corporation were sufficient to pay such dividends in whole or in part. Notwithstanding the foregoing, dividends, if paid, or if declared and set apart for payment, must be paid, or declared and set apart for payment, on all outstanding shares of the Preferred Stock contemporaneously.

So long as any shares of Preferred Stock are outstanding, no dividend shall, directly or indirectly, be declared or paid or set aside for payment or other distribution declared or made upon, or to any holder of, the Common Stock, or any other class of capital stock of the Corporation ranking junior to the Preferred Stock as to dividends or upon liquidation, or any Rights with respect to any such capital stock of the Corporation, nor shall any Common Stock, or any other class of capital stock of the Corporation ranking junior to the Preferred Stock as to dividends or upon liquidation, or any Rights with respect to such capital stock of the Corporation, be, directly or indirectly, repurchased, redeemed, reacquired or retired for any consideration by the Corporation or any of its subsidiaries (other than any reacquisition of shares of Common Stock or Rights at cost with respect to shares of Common Stock or Rights reacquired from any employee of the Corporation or any of its Subsidiaries in connection with the termination of such employee's employment with any thereof; provided, however, that shares of Common Stock or Rights granted under the MEP may be reacquired in accordance with the terms and conditions thereof), unless, in each case, all dividends on all outstanding shares of Preferred Stock to which the holders thereof shall then be entitled shall have been paid in full. Upon the conversion of any share of Preferred Stock, any declared but unpaid dividends thereon shall be paid in full.

2. Liquidation.

(a) Preference. In the event of any voluntary or involuntary dissolution, liquidation or winding up of the affairs of the Corporation (a "Liquidation Event"'), after payment or provision for payment of the debts and other liabilities of the Corporation, the holders of each share of Series A Preferred Stock and each share of Series B Preferred Stock shall be entitled to receive on a pari passu basis out of the assets of the Corporation, whether such assets are capital, surplus or earnings, an amount equal to the Liquidation Preference of each series as set forth in Section 2(e), before any payment shall be

made or assets distributed on the Common Stock or any other class or series of capital stock of the Corporation.

(b) Partial Payment. If upon any Liquidation Event the assets of the Corporation distributable as aforesaid among the holders of the Series A Preferred Stock and the Series B Preferred Stock and all other series of preferred stock ranking as to assets pari passu to such series shall be insufficient to permit the payment to them of the full preferential amounts to which they are entitled, then the entire assets of the Corporation so to be distributed shall be distributed ratably among the holders of the Series A Preferred Stock, the Series B Preferred Stock and all other preferred stock ranking as to assets pari passu to the Series A Preferred Stock and Series B Preferred Stock, in proportion to the sum of their respective per share liquidation preferences, until payment in full of such amount per share.

(c) Remaining Assets. After payment to the holders of the Preferred Stock of the amounts set forth in Section 2(a) above, the entire remaining assets and funds of the corporation legally available for distribution, if any, shall be distributed ratably among the holders of the Common Stock.

(d) Reorganization. Unless holders of a majority of the outstanding shares of each series of Preferred Stock then outstanding elect otherwise in writing, for purposes of this Section 2, a Liquidation Event shall be deemed to mean the Corporation's (i) sale of all or substantially all of its assets or (ii) consolidation or merger with or into another Person (as defined in Section 8 below) if, as a result of such consolidation or merger, the holders of the Common Stock and the Preferred Stock prior to such consolidation or merger do not hold at a majority of the combined voting power of the surviving Person.

(e) Liquidation Preference.

(i) The liquidation preference per share of Series A Preferred Stock as of any particular date (the "Series A Liquidation Preference") shall be the greater of (x) the Original Series A Purchase Price or (y) the amount per share of Series A Preferred Stock that the holder of the number of shares of Common Stock issuable upon conversion thereof would receive upon any such Liquidation Event (assuming conversion of all shares of Series A Preferred Stock into Common Stock pursuant to Section 5 of Article IV).

(ii) The liquidation preference per share of Series B Preferred Stock as of any particular date (the "Series B Liquidation Preference and, together with the Series A Liquidation Preference, the "Liquidation Preference") shall be the greater of (x) the Original Series B Purchase Price or (y) the amount per share of Series B Preferred Stock that the holder of the number of shares of Common Stock issuable upon conversion thereof would receive upon any such Liquidation Event (assuming conversion of all shares of Series B Preferred Stock into Common Stock pursuant to Section 5 of Article IV).

3. Redemption. Neither the Corporation nor any of its Subsidiaries shall be obligated to, call or redeem any shares of any class or series of the Corporation's capital stock and no money shall be paid into or set aside or made available for a sinking fund for the purchase, redemption or acquisition thereof.

4. Voting Rights; Directors.

(a) Generally. On all matters to come before the stockholders, the Preferred Stock shall have that number of votes per share (rounded up to the nearest whole share) equivalent to the number of shares of Common Stock into which such share of Preferred Stock is then convertible determined by reference to the Conversion Price in effect at the record date of the determination of the

holders of the shares entitled to vote or, if no such record date is established, at the date such vote is taken or any written consent of stockholders is first solicited. Except as otherwise provided by law or this Restated Certificate of Incorporation, the holders of Preferred Stock shall vote together with the holders of the outstanding shares of Common Stock, and not as a separate class or series.

(b) Directors.

(i) So long as 10,528,457 remain outstanding, the holders of the outstanding shares of Series B Preferred Stock, voting together as a class and to the exclusion of all other classes of capital stock of the Corporation, shall be entitled to elect three (3) members of the Board of Directors (the "Series B Preferred Directors"). So long as 3,500,000 shares of Series A Preferred Stock remain outstanding, the holders of the outstanding shares of Series A Preferred Stock, voting together as a class and to the exclusion of all other classes of capital stock of the Corporation, shall be entitled to elect three (3) members of the Board of Directors (the "Series A Preferred Directors" and, together with the Series B Preferred Directors, the "Preferred Directors"). Any remaining directors shall be appointed upon the mutual agreement of a majority of the Series A Directors and the Series B Preferred Directors (the "General Directors"), provided that one of the General Directors shall be the chief executive officer of the Corporation.

(ii) In the case of any vacancy in the office of a director occurring among the Series B Preferred Directors or the Series A Preferred Directors, the remaining Series B Preferred Director(s) or Series A Preferred Director(s), as the case may be, may, by affirmative vote of a majority thereof (or the remaining director so elected if there is but one, or if there is no such director remaining, by the affirmative vote of the holders of a majority of the shares of the class or classes entitled to vote on the election of the Series B Preferred Directors or Series A Preferred Directors, as the case may be), elect a successor or successors to hold the office for the unexpired term of the director or directors whose place or places shall be vacant. In the case of any vacancy in the office of a director occurring among the General Directors, the remaining Series B Preferred Director(s) and Series A Preferred Director(s), may, by mutual agreement thereof (or the remaining director so elected if there is but one, or if there is no such director remaining, by the affirmative vote of the holders of a majority of the shares of the class or classes entitled to vote on the election of the Series B Preferred Director and Series A Preferred Director, as the case may be), elect a successor or successors to hold the office for the unexpired term of the director or directors whose place or places shall be vacant. Any director may be removed during the aforesaid term of office, whether with or without cause, only by the affirmative vote of the holders of a majority of the shares eligible to vote in an election for the seat occupied by that director (e.g., in order to remove a Series A Preferred Director, the holders of a majority of the Series A Preferred Stock, voting together as a single class and to the exclusion of all other classes of capital stock of the Corporation, must so vote).

(c) Preferred Stock Protective Provisions.

In addition to voting rights provided by law, so long as at least any share of Preferred Stock shall be outstanding (as adjusted for all stock splits, stock dividends, consolidations, recapitalizations and reorganizations), neither the Corporation nor any of its subsidiaries or controlled Affiliates shall (by amendment, merger, consolidation or otherwise), without the consent of the holders of at least a majority of the outstanding shares of Preferred Stock voting or consenting together as a single class and to the exclusion of all other classes of capital stock of the Corporation, given in person or by proxy, either in writing or by vote at a meeting called for that purpose at which the holders of the Preferred Stock shall vote together as a single class:

(i) amend or repeal any provision of, or add any provision to, this Restated Certificate of Incorporation or the Corporation's By-laws;

(ii) alter or change any of the rights, privileges or preferences of the Preferred Stock, by merger, consolidation or otherwise;

(iii) increase or decrease the authorized number of shares of the Corporation's Preferred Stock;

(iv) increase or decrease the number of directors permitted to serve on the Board of Directors;

(v) increase the number of securities available far issuance to employees, officers, directors and consultants under any equity incentive plan, including the MEP, which exists at the time of filing of this Restated Certificate of Incorporation;

(vi) authorize, issue or otherwise create shares of any class or series of stock having any preference over, or on parity with, the Preferred Stock with respect to any rights, preferences or privileges associated with the Preferred Stock;

(vii) redeem or repurchase or otherwise acquire any equity security of the Corporation (other than a repurchase or acquisition at cost pursuant to equity incentive agreements or restricted stock purchase agreements with employees, directors, consultants or service providers giving the Corporation the right to repurchase shares at cost upon the termination of services or other than pursuant to the MEP (in accordance with the provisions thereof)) in each case as approved by the Board of Directors;

(viii) authorize or enter into, whether directly or indirectly by means of a subsidiary, any transaction which purports to (A) sell or otherwise dispose of all or substantially all of the Corporation's assets; (B) consolidate, merge or create a business combination with or into another Person if, as a result of such consolidation or merger, the holders of the Common Stock and the Preferred Stock prior to such consolidation or merger do not hold at least a majority of the combined voting power of the surviving corporation; (C) exclusively license all or substantially all of the Corporation's assets; (D) recapitalize or liquidate the Corporation; (E) acquire the stock or assets of any other entity; (F) form a strategic alliance, technology licensing arrangement or other corporate partnering relationship involving the issuance by the Corporation of equity securities; (G) file any registration statement by the Corporation with the Securities and Exchange Commission pursuant to the Securities Act of 1933, as amended; (H) restrict the lines of business in which the Corporation may compete or conduct operations;

(ix) enter into, directly or indirectly, any transaction (including, without limitation, the purchase, sale, lease or exchange of any property or the rendering of any service other than employment in the case of an employee or officer) with (A) any Preferred Holder Restricted Person, (B) any other stockholder of the Corporation or any employee, officer or director (each, an "Insider"), (C) any Affiliate of any Insider, (D) any entity in which any Insider holds three percent (3%) or more of the beneficial interest or (E) in the case of any Insider who is an individual, any member of the Individual's Family Group (in each case, other than the Corporation or any of its controlled Affiliates or Associates) (each of (B) through (E), an "Other Related Party"), involving the transfer of any economic benefit to any Preferred Holder Restricted Person or any Other Related Party (other than the Corporation and its controlled Affiliates and Associates), or the incurrence of any economic detriment by the Corporation or any of its subsidiaries (any such transaction being a "Related Party Transaction"), except on terms and conditions (taken as a whole) substantially as favorable to the Corporation (or the stockholders thereof, taken as a whole) as could reasonably be expected to be obtainable at the time in a comparable arm's-length transaction with a Person that is not such a Preferred Holder Restricted Person or Other Related Party as determined in good faith by a majority of the Board of Directors. The foregoing limitation shall

not limit, or apply to, any transaction or series of related transactions the aggregate amount of which exceeds $1 million ($50,000 in the case of any transaction with an Other Related Party) in value for which the Corporation or the Preferred Holder Restricted Person or Other Related Party, as appropriate, shall have obtained a written opinion of a nationally recognized investment banking firm (other than an Affiliate of any Preferred Holder Restricted Party or Other Related Party) stating that the transaction is fair to the Corporation and its stockholders from a financial point of view. Notwithstanding the foregoing, any transaction or series of related transactions referred to above the aggregate amount of which does not exceed $1 million ($50,000 in the case of any transaction with an Other Related Party) need not be approved in the manner provided in the first sentence of this paragraph. The Corporation shall not enter into, or permit any of its subsidiaries to enter into, directly or indirectly, any Related Party Transaction without the approval of the Board of Directors;

(x) enter into any agreements which require any material disbursements by the Corporation unless such material disbursement shall have been approved by the Board of Directors; for purposes of this Section 4 of Article IV, "material disbursements" shall mean any disbursement by the Corporation equal to, or greater in value than, $1,000,000;

(xi) declare or pay any dividends on any capital stock of the Corporation; provided, however, that the restriction shall not apply to dividends payable solely in Common Stock;

(xii) take any action which would result in taxation of the holders of shares of the Preferred Stock under Section 305 of the Internal Revenue Code of 1986, as amended (or any comparable provision of the Internal Revenue Code as hereafter from time to time amended); or

(xiii) take any action which would result in a change of the forgoing paragraphs (i) through (xiii) of this Section 4(c) of Article IV.

(d) Series A Preferred Stock Protective Provisions.

In addition to voting rights provided by law, so long as at least any share of Series A Preferred Stock shall be outstanding (as adjusted for all stock splits, stock dividends, consolidations, recapitalizations and reorganizations), neither the Corporation nor any of its subsidiaries shall (by amendment, merger, consolidation or otherwise), without the consent of the holders of at least a majority of the outstanding shares of Series A Preferred Stock voting or consenting together as a single class and to the exclusion of all other classes of capital stock of the Corporation, given in person or by proxy, either in writing or by vote at a meeting called for that purpose at which the holders of the Preferred Stock shall vote together as a single class:

(i) authorize, issue or otherwise create shares of any class or series of stock having any preference over, or on parity with, the Series A Preferred Stock with respect to any rights, preferences or privileges associated with the Series A Preferred Stock; or

(ii) modify, alter or change in any way any of the rights, privileges or preferences of the Series A Preferred Stock whether by merger, consolidation or otherwise (other than any transaction that qualifies as a Liquidation Event).

(e) Series B Preferred Stock Protective Provisions.

In addition to voting rights provided by law, so long as at least any share of Series B Preferred Stock shall be outstanding (as adjusted for all stock splits, stock dividends, consolidations, recapitalizations and reorganizations), neither the Corporation nor any of its subsidiaries shall (by

amendment, merger, consolidation or otherwise), without the consent of the holders of at least a majority of the outstanding shares of Series B Preferred Stock voting or consenting together as a single class and to the exclusion of all other classes of capital stock of the Corporation, given in person or by proxy, either in writing or by vote at a meeting called for that purpose at which the holders of the Preferred Stock shall vote together as a single class:

(i) authorize, issue or otherwise create shares of any class or series of stock having any preference over, or on parity with, the Series B Preferred Stock with respect to any rights, preferences or privileges associated with the Series B Preferred Stock; or

(ii) modify, alter or change in any way any of the rights, privileges or preferences of the Series B Preferred Stock whether by merger, consolidation or otherwise (other than any transaction that qualifies as a Liquidation Event).

5. Conversion. The rights of the holders of shares of Preferred Stock to convert such shares into shares of Common Stock (as defined in Section 5(h) below) of the Corporation (the "Conversion Rights"), and the terms and conditions of such conversion, shall be as follows:

(a) Right to Convert; Automatic Conversion.

(i) Each share of the Preferred Stock shall be convertible, at the option of the holder thereof, at any time after the date of the issuance of such share, at the office of the Corporation or any transfer agent for the Preferred Stock or the Common Stock, into that number of the fully paid and nonassessable shares of Common Stock determined in accordance with the provisions of Section 5(b) below. In order to convert shares of the Preferred Stock into shares of Common Stock, the holder thereof shall surrender the certificate or certificates therefor, duly endorsed, at the office of the Corporation or to the transfer agent for the Preferred Stock or the Common Stock, together with written notice to the Corporation stating that it elects to convert the same and setting forth the name or names in which it wishes the certificate or certificates for Common Stock to be issued, and the number of shares of Preferred Stock being converted.

(ii) The Corporation shall, as soon as practicable after the surrender of the certificate or certificates evidencing shares of Preferred Stock for conversion at the office of the Corporation or the transfer agent for the Preferred Stock or the Common Stock, issue to each holder of such shares, or its nominee or nominees, a certificate or certificates evidencing the number of shares of Common Stock (and any other securities and property) to which it shall be entitled and, in the event that only a part of the shares evidenced by such certificate or certificates are converted, a certificate evidencing the number of shares of Preferred Stock which are not converted. Such conversion shall be deemed to have been made immediately prior to the close of business on the date of such surrender of the shares of Preferred Stock to be converted, and the Person or Persons entitled to receive the shares of Common Stock issuable upon such conversion shall be treated for all purposes as the record holder or holders of such shares of Common Stock at such date and shall, with respect to such shares, have only those rights of a holder of Common Stock of the Corporation.

(iii) Each share of Preferred Stock then outstanding shall be automatically converted into that number of fully paid and nonassessable shares of Common Stock determined in accordance with the provisions of Section 5(b) below upon the earlier of (A) the close of business of the day immediately preceding the closing of the sale of its Common Stock in connection with a Qualified Public Offering (as defined in Section 8 below) or (B) the consent of the holders of at least a majority of the outstanding shares of Preferred Stock voting or consenting together as a single class and to the exclusion of all other classes of capital stock of the Corporation, given in person or by proxy, either in

writing or by vote at a meeting called for that purpose at which the holders of Preferred Stock shall vote together as a single class.

(b) Conversion of Preferred Stock.

(i) Each share of Series A Preferred Stock shall be convertible into the number of shares of Common Stock which results from dividing the Series A Conversion Price (as defined herein) per share in effect at the time into the Original Series A Purchase Price; and

(ii) Each share of Series B Preferred Stock shall be convertible into the number of shares of Common Stock which results from dividing the Series B Conversion Price (as defined herein) per share in effect at the time into the Original Series B Purchase Price.

(c) Conversion Price.

(i) The conversion price per share for the Series A Preferred Stock shall initially be $1.00 (the "Series A Conversion Price") and shall be subject to adjustment from time to time as provided herein; and

(ii) The conversion price per share for the Series B Preferred Stock shall initially be $ 1.23 (the "Series B Conversion Price" and, together with the Series A Conversion Price, the "Conversion Price") and shall be subject to adjustment from time to time as provided herein.

(d) Adjustment for Stock Splits and Combinations. If outstanding shares of the Common Stock of the Corporation shall be subdivided into a greater number of shares, or a dividend in Common Stock or other securities of the Corporation convertible into or exchangeable for Common Stock (in which latter event the number of shares of Common Stock issuable upon the conversion or exchange of such securities shall be deemed to have been distributed), shall be paid in respect to the Common Stock of the Corporation, the Series A Conversion Price and the Series B Preferred Conversion Price in effect immediately prior to such subdivision or at the record date of such dividend shall be proportionately reduced, and conversely, if outstanding shares of the Common Stock of the Corporation shall be combined into a smaller number of shares, the Series A Conversion Price and the Series B Conversion Price in effect immediately prior to such combination shall be proportionately increased.

Any adjustment to the Series A Conversion Price or the Series B Conversion Price under this Section 5(d) shall become effective at the close of business on the date the subdivision or combination referred to herein becomes effective.

(e) Reorganizations, Mergers, Consolidations or Reclasstifications. In the event of any capital reorganization, any reclassification of the Common Stock (other than a change in par value or as a result of a stock dividend, subdivision, split-up or combination of shares), the consolidation or merger of the Corporation with or into another Person (excluding a consolidation or merger described in Section 2(d) of this Article IV) (collectively referred to hereinafter as "Reorganizations"), the holders of the Series A Preferred Stock and the Series B Preferred Stock shall thereafter be entitled to receive, and provision shall be made therefor in any agreement relating to a Reorganization, upon conversion of the Series A Preferred Stock and the Series B Preferred Stock the kind and number of shares of Common Stock or other securities or property (including cash) of the Corporation, or other corporation resulting from such consolidation or surviving such merger to which a holder of the number of shares of the Common Stock of the Corporation which the Series A Preferred Stock and the Series B Preferred Stock entitled the holder thereof to convert to immediately prior to such Reorganization would have been entitled to receive with respect to such Reorganization; and in any such case appropriate adjustment shall

be made in the application of the provisions herein set forth with respect to the rights and interests thereafter of the holders of the Series A Preferred Stock and the Series B Preferred Stock, to the end that the provisions set forth herein (including the specified changes and other adjustments to the Conversion Price) shall thereafter be applicable, as nearly as reasonably may be, in relation to any shares, other securities or property thereafter receivable upon conversion of the Series A Preferred Stock and the Series B Preferred Stock. The provisions of this Section 5(e) shall similarly apply to successive Reorganizations.

(f) Sale of Additional Shares.

(i) If at any time or from time to time following the date of the initial issuance of shares of Series B Preferred Stock the Corporation shall issue or sell Additional Shares of Common Stock other than as a dividend or other distribution on any class of stock and other than as a subdivision or combination of shares of Common Stock as provided in Section 5(d) above, for a consideration per share less than the then existing Series A Conversion Price and/or the then existing Series B Conversion Price, then, and in each such case, the then existing Series A Conversion Price and/or the then existing Series B Conversion Price, as the case may be, shall be reduced, as of the opening of business on the date of such issuance or sale, to a price determined by multiplying the applicable Conversion Price by a fraction, the numerator of which shall be the number of shares of Common Stock outstanding immediately prior to such issuance (including shares of Common Stock issuable upon conversion of the Preferred Stock and the number of shares of Common Stock which could be obtained through the exercise or conversion of all other Rights outstanding on the date immediately prior to such issuance) plus the number of shares of Common Stock that the aggregate consideration received by the Corporation for such issuance would purchase at the applicable Conversion Price; and the denominator of which shall be the number of shares of Common Stock outstanding immediately prior to such issuance (including shares of Common Stock issuable upon conversion of the Preferred Stock and the number of shares of Common Stock which could be obtained through the exercise or conversion of all other Rights outstanding on the date immediately prior to such issuance) plus the number of shares of Additional Shares of Common Stock actually issued in such issuance.

(ii) For the purpose of making any adjustment in either the Series A Conversion Price or the Series B Conversion Price, or number of shares of Common Stock issuable upon conversion of either the Series A Preferred Stock or Series B Preferred Stock, as provided above, the consideration received by the Corporation for any issue or sale of securities shall:

(a) To the extent it consists of cash, be computed at the net amount of cash received by the Corporation after deduction of any expenses payable directly or indirectly by the Corporation and any underwriting or similar commissions, compensations, discounts or concessions paid or allowed by the Corporation in connection with such issue or sale;

(b) To the extent it consists of property other than cash, the consideration other than cash shall be computed at the fair market value thereof as determined in good faith by the Board of Directors, at or about, but as of, the date of the adoption of the resolution specifically authorizing such issuance or sale, irrespective of any accounting treatment thereof; provided, however, that such fair market value as determined by the Board of Directors, when added to any cash consideration received in connection with such issuance or sale, shall not exceed the aggregate market price of the Additional Shares of Common Stock being issued, as of the date of the adoption of such resolution; and

(c) If Additional Shares of Common Stock, Convertible Securities (as defined below) or Rights (as defined below) are issued,or sold together with other stock or securities

or other assets of the Corporation for consideration which covers both, the consideration received for the Additional Shares of Common Stock, Convertible Securities or Rights shall be computed as that portion of the consideration so received which is reasonably determined in good faith by the Board of Directors to be allocable to such Additional Shares of Common Stock, Convertible Securities or Rights.

(iii) For the purpose of making any adjustment in either the Series A Conversion Price or Series B Conversion Price provided in Section 5(f) hereof, if at any time, or from time to time, the Corporation issues any stock or other securities convertible into Additional Shares of Common Stock (such stock or other securities being hereinafter referred to as "Convertible Securities") or issues any Rights to purchase Additional Shares of Common Stock or Convertible Securities, then, and in each such case, if the Effective Conversion Price (as hereinafter defined) of such Rights or Convertible Securities shall be less than the Series A Conversion Price and/or Series B Conversion Price in effect immediately prior to the issuance of such Rights or Convertible Securities, the Corporation shall be deemed to have issued at the time of the issuance of such Rights or Convertible Securities the maximum number of Additional Shares of Common Stock issuable upon exercise or conversion thereof and to have received in consideration for the issuance of such shares an amount equal to the aggregate Effective Conversion Price of such Rights or Convertible Securities. For the purposes of this Section 5(f)(iii), "Effective Conversion Price" shall mean an amount equal to the sum of the lowest amount of consideration, if any, received or receivable by the Corporation with respect to any one (1) Additional Share of Common Stock upon issuance of the Rights or Convertible Securities and upon their exercise or conversion, respectively. No further adjustment of the Series A Conversion Price or Series B Conversion Price adjusted upon the issuance of such Rights or Convertible Securities shall be made as a result of the actual issuance of Additional Shares of Common Stock on the exercise of any such Rights or the conversion of any such Convertible Securities. If any such Rights or the conversion privilege represented by any such Convertible Securities shall expire without having been exercised, such Series A Conversion Price or Series B Conversion Price, as applicable, as adjusted upon the issuance of such Rights or Convertible Securities shall be readjusted to the Series A Conversion Price or Series B Conversion Price, as applicable, which would have been in effect had such adjustment been made on the basis that the only Additional Shares of Common Stock so issued were the Additional Shares of Common Stock, if any, actually issued or sold on the exercise of such Rights or on the conversion of such Convertible Securities, and such Additional Shares of Common Stock, if any, were issued or sold for the consideration actually received by the Corporation upon such exercise, plus the consideration, if any, actually received by the Corporation for the granting of all such Rights, whether or not exercised, plus the consideration received for issuing or selling the Convertible Securities actually converted plus the consideration, if any, actually received by the Corporation (other than by cancellation of liabilities or obligations evidenced by such Convertible Securities) on the conversion of such Convertible Securities.

(g) Additional Shares of Common Stock. "Additional Shares of Common Stock" as used in this Section 5 shall mean all shares of Common Stock issued or deemed to be issued by the Corporation, whether or not subsequently reacquired or retired by the Corporation, other than:

(i) shares of Common Stock issued upon the conversion of any shares of the Company's Preferred Stock;

(ii) shares of Common Stock issued or issuable to employees or officers or directors or outside consultants or contractors of the Corporation or any Subsidiary pursuant to a plan, agreement or arrangement duly approved by the Board of Directors;

(iii) shares of Common Stock issued or issuable pursuant to the exercise of options, warrants or convertible securities outstanding as the date hereof;

(iv) shares of Common Stock and/or options, warrants or other Common Stock purchase rights issued in connection with the Corporation obtaining lease financing, whether issued to a lessor, guarantor or other Person, provided that such issuance is pursuant to an agreement or arrangement duly approved by the Board of Directors; and

(v) shares of Common Stock issued to effect any stock split, stock dividend or recapitalization of the Corporation.

(h) Common Stock. "Common Stock" as used in this Section 5 shall mean any shares of any class of the Corporation's capital stock other than the Preferred Stock. The Common Stock issuable upon conversion of the Preferred Stock, however, shall be the Common Stock of the Corporation as constituted on the date of initial issuance of the Series B Preferred Stock, except as otherwise provided in this Section 5.

(i) Certificate of Adjustment. In each case of an adjustment or readjustment of the Series A Conversion Price or Series B Conversion Price or the number of shares of Common Stock or other securities issuable upon conversion of the Series A Preferred Stock or the Series B Preferred Stock, the Corporation, at its expense, shall cause the Chief Financial Officer of the Corporation to compute such adjustment or readjustment in accordance with this Restated Certificate of Incorporation and prepare a certificate showing such adjustment or readjustment, and shall mail such certificate, by first-class mail, postage prepaid, to each registered holder of the Series A Preferred Stock or the Series B Preferred Stock at the holder's address as shown on the Corporation's stock transfer books. The certificate shall set forth such adjustment or readjustment, showing in detail the facts upon which such adjustment or readjustment is based, including a statement of (i) the consideration received or to be received by the Corporation for any Additional Shares of Common Stock issued or sold or deemed to have been issued or sold; (ii) Conversion Price at the time in effect for the Series A Preferred Stock or the Series B Preferred Stock, respectively; and (iii) the number of Additional Shares of Common Stock and the type and amount, if any, of other property which at the time would be received upon conversion of the Series A Preferred Stock or Series B Preferred Stock. Such notice may be given in advance of such adjustment or readjustment and may be included as part of a notice required to be given pursuant to Section 5(j) below.

(j) Notices of Record Date. In the event the Corporation shall propose to take any action of the type or types requiring an adjustment to the Conversion Price of the Series A Preferred Stock or the Series B Preferred Stock, or the number or character of the Series A Preferred Stock or the Series B Preferred Stock as set forth herein, the Corporation shall give notice to the holders of the Series A Preferred Stock or the Series B Preferred Stock as applicable in the manner set forth in Section 5(i) above, which notice shall specify the record date, if any, with respect to any such action and the date on which such action is to take place. Such notice shall also set forth such facts with respect thereto as shall be reasonably necessary to indicate the effect of such action (to the extent such effect may be known at the date of such notice) on the Series A Conversion Price or Series B Conversion Price and the number, kind or class of shares or other securities or property which shall be deliverable upon the occurrence of such action or deliverable upon the conversion of Series A Preferred Stock or Series B Preferred Stock. In the case of any action which would require the fixing of a record date, such notice shall be given at least ten (10) days prior to the date so fixed, and in case of all other action, such notice shall be given at least twenty (20) days prior to the taking of such proposed action. Notwithstanding the requirements of this Section 5(j), this Section 5(j) shall not be applicable and no such notice shall be required with respect to any action that is, or has been, approved by the holders of at least a majority of the outstanding shares of Preferred Stock voting or consenting together as a single class and to the exclusion of all other classes of capital stock of the Corporation.

(k) Reservation of Stock Issuable Upon Conversion. The Corporation shall at all times reserve and keep available out of its authorized but unissued shares of Common Stock, solely for the purpose of effecting the conversion of the shares of Series A Preferred Stock and Series B Preferred Stock, such number of its shares of Common Stock as shall from time to time be sufficient to effect a conversion of all outstanding shares of Series A Preferred Stock and Series B Preferred Stock, and if at any time the number of authorized but unissued shares of Common Stock shall not be sufficient to effect the conversion of all then outstanding shares of Series A Preferred Stock and Series B Preferred Stock, the Corporation shall promptly seek such corporate action as may, in the opinion of its counsel, be necessary to increase its authorized but unissued shares of Common Stock to such number of shares as shall be sufficient for such purpose. In the event of the consolidation or merger of the Corporation with another corporation where the Corporation is not the surviving corporation, effective provisions shall be made in the certificate or articles of incorporation, merger or consolidation, or otherwise of the surviving corporation so that such corporation will at all times reserve and keep available a sufficient number of shares of Common Stock or other securities or property to provide for the conversion of Series A Preferred Stock and Series B Preferred Stock in accordance with the provisions of this Section 5.

(l) Payment of Taxes. The Corporation shall pay all taxes and other governmental charges (other than any income or other taxes imposed upon the profits realized by the recipient) that may be imposed in respect of the issue or delivery of shares of Common Stock or other securities or property upon conversion of shares of Series A Preferred Stock and Series B Preferred Stock, excluding any tax or other charge imposed in connection with any transfer involved in the issue and delivery of shares of Common Stock or other securities in a name other than that in which the shares of Series A Preferred Stock and Series B Preferred Stock so converted were registered.

(m) Status of Converted Stock. In the event any shares of Series A Preferred Stock and Series B Preferred Stock shall be converted pursuant to Section 5 hereof, the shares so converted shall be cancelled and shall not be issuable by the Corporation.

(n) No Impairment. This Corporation will not through any reorganization, recapitalization, transfer of assets, consolidation, merger, dissolution, issue or sale of securities or any other voluntary action, avoid or seek to avoid the observance or performance of any of the terms to be observed or performed under this Section 5 by this Corporation, but will at all times in good faith assist in the carrying out of all the provisions of this Section 5 and in the taking of all such action as may be necessary or appropriate in order to protect the Conversion Rights of the holders of Preferred Stock against impairment.

6. Common Stock.

(a) Dividend Rights. The holders of the Common Stock shall be entitled to receive, when and as declared by the Board of Directors, out of any assets of the Corporation legally available therefor, such dividends as may be declared from time to time by the Board of Directors on a parity with the holders of the Preferred Stock and any such dividend shall be distributed ratably among the holders of the Preferred Stock as if all such class of Preferred Stock were to convert into Common Stock.

(b) Liquidation Rights. Upon the liquidation, dissolution or winding up of the Corporation, the assets of the Corporation shall be distributed as provided in Section 2 of this Article IV.

(c) Redemption. The Common Stock is not redeemable.

(d) Voting Rights. The holder of each share of Common Stock shall have the right to one (1) vote, and shall be entitled to notice of any stockholders' meeting in accordance with the By-

laws of the Corporation, and shall be entitled to vote upon such matters and in such manner as may be provided by this Restated Certificate of Incorporation and law; provided, however, that the holders of Common Stock shall not be entitled to vote on any matter that relates solely to changes in the rights, preferences and privileges associated with the Preferred Stock. The number of authorized shares of Common Stock may be increased or decreased (but not below the number of shares thereof then outstanding) by the affirmative vote of the holders of shares of stock of the Corporation representing a majority of the votes represented by all outstanding shares of stock of the Corporation entitled to vote, irrespective of the provisions of Section 242(b)(2) of the Delaware General Corporation Law.

7. Special Mandatory Conversion in connection with Additional Closing under the Series B Preferred Stock Purchase Agreement.

(a)If any holder of shares of Series B Preferred Stock fails, either directly or through its affiliates, to purchase all shares of Series B Preferred Stock required to be purchased by such holder at any Additional Closing pursuant to that certain Series B Preferred Stock Purchase Agreement by and among the Corporation and certain investors set forth therein (the "Additional Closing"), then, effective as of the Additional Closing, all of such holder's then issued and outstanding shares of Series B Preferred Stock shall automatically and without further action on the part of such holder be converted into such number of shares of Common Stock into which such shares of Series B Preferred Stock are then convertible pursuant to Section 5 of this Article IV. Upon conversion pursuant to this Section 7, the shares of Series B Preferred Stock so converted shall be canceled and not subject to reissuance.

(b) The holder of any shares of Series B Preferred Stock converted pursuant to this Section 7 shall deliver to the Corporation during regular business hours at the office of any transfer agent of the Corporation for the Series B Preferred Stock, or at such other place as may be designated by the Corporation, the certificate or certificates representing the shares so converted, duly endorsed or assigned in blank or to the Corporation. As promptly thereafter as is practicable, the Corporation shall issue and deliver to such holder, at the place designated by such holder, a certificate or certificates for the number of full shares of Common Stock to which such holder is entitled. The person in whose name the certificate for such shares of Common Stock is to be issued shall be deemed to have become a holder of record of Common Stock on the effective date of such conversion of the Series B Preferred Stock, unless the transfer books of the Corporation are closed on that date, in which case such person shall be deemed to have become a holder of record of Common Stock on the next succeeding date on which the transfer books are open.

8. Miscellaneous.

(a) Definitions.

(i) "Additional Shares of Common Stock" shall have that meaning set forth in Section 5(g) hereof.

(ii) "Affiliate" with respect to any Person, means any other Person directly or indirectly controlling, controlled by or under common control with, such Person. For purposes of this definition, "control" (including with correlative meanings, the terms "controlling", "controlled by" or "under common control with"), as used with respect to any Person, shall mean the possession, directly or indirectly, of the power to direct or cause the direction of the management and policies of such Person, whether through the ownership of voting securities or by contract or otherwise.

(iii) "Associate" has the meaning given such term in Rule 12b-2 under the Securities Exchange Act of 1934, as amended, and the rules and regulations thereunder.

(iv) "Business Day" means a day other than a Saturday, Sunday or any other day on which commercial banks are authorized or obligated to be closed in New York City.

(v) "Common Stock" shall have that meaning set forth in Section 5(h) hereof.

(vi) "Conversion Price" shall have that meaning set forth in Section 5(c) hereof.

(vii) "Conversion Rights" shall have that meaning set forth in Section 5 hereof.

(viii) "Convertible Securities" shall have that meaning set forth in Section 5(f)(iii) hereof.

(ix) "Effective Conversion Price" shall have that meaning set forth in Section 5(f)(iii) hereof.

(x) "Family Group" means an individual's spouse and the individual's or the individual's spouse's descendants (whether natural or adopted) and any trust, family limited partnership or family limited liability company solely for the benefit of the individual and/or the individual's spouse and/or the individual's or the individual's spouse's descendants, ascendants and/or the individual's siblings.

(xi) "Liquidation Preference" shall have that meaning set forth in Section 2(e) hereof.

(xii) "MEP" means the Management Equity Plan of the Corporation, as amended from time to time.

(xiii) "Original Series A Purchase Price" shall mean $1.00.

(xiv) "Original Series B Purchase Price" shall mean $1.23.

(xv) "Person" shall mean an individual, a corporation, a partnership, a trust or unincorporated organization or any other entity or organization.

(xvi) "Preferred Holder Restricted Person" means any holder of Preferred Stock or any Affiliate thereof, or the general partner, managing partner, managing member or investment manager of any thereof, or any officer, director or private equity professional thereof.

(xvii) "Qualified Public Offering" means a firmly underwritten public offering of the Corporation's Common Stock on a Form S-l Registration Statement, or any similar form of registration statement, adopted by the Securities and Exchange Commission (the "Commission") from and after the date hereof, filed with the Commission under the Securities Act of 1933, as amended, with respect to which the Corporation receives gross proceeds of at least $30,000,000 (prior to deduction for underwriters' discounts and expenses relating to such public offering, including without limitation, fees of the Corporation's counsel) and the price to the public is at least $3.69 per share (equitably adjusted for all stock splits, sub-divisions, stock dividends, combinations and the like).

(xviii) "Right" shall mean any option, warrant, or other right to acquire capital stock or any "phantom stock", stock appreciation right or other similar right.

(xix) "Series A Preferred Stock" shall have that meaning set forth in the first paragraph of this Article IV.

(xx) "Series B Preferred Stock" shall have that meaning set forth in the first paragraph of this Article IV.

(xxi) "Subsidiary" means any corporation of which equity securities possessing a majority of the ordinary voting power in electing the board of directors are, at the time as of which such determination is being made, owned by the Corporation either directly or indirectly through one or more Subsidiaries.

(b) Notices. All notices referred to herein, except as otherwise expressly provided, shall be made by registered or certified mail, return receipt requested, postage prepaid and shall be deemed to have been given when so mailed.

(c) Conflicts. So long as any of the Preferred Stock is outstanding, in the event of any conflict between the provisions of this Article IV and the remainder of this Restated Certificate of Incorporation or the By-laws of the Corporation (both as presently existing or hereafter amended and supplemented), the provisions of this Article IV shall be and remain controlling.

V

BOARD POWER REGARDING BY-LAWS

In furtherance and not in limitation of the powers conferred by statute, the Board of Directors is expressly authorized to make, repeal, alter, amend and rescind the By-laws of the Corporation without the vote or assent of the stockholders.

VI

INDEMNIFICATION

1. To the maximum extent permitted by applicable law, the Corporation shall indemnify any person who was or is a party or is threatened to be made a party to any threatened, pending, or completed action, suit or proceeding, whether civil, criminal, administrative or investigative (other than an action by or in the right of the Corporation) by reason of the fact that he or she is or was a director, officer, employee or agent of the Corporation, or is or was serving at the request of the Corporation as a director, officer, employee or agent of another corporation, partnership, joint venture, trust or other enterprise, against expenses (including attorneys' fees), judgments, fines and amounts paid in settlement actually and reasonably incurred by him or her in connection with such action, suit or proceeding if he or she acted in good faith and in a manner he or she reasonably believed to be in or not opposed to the best interests of the Corporation, and, with respect to any criminal action or proceeding, had no reasonable cause to believe his or her conduct was unlawful. The termination of any action, suit or proceeding by judgment, order, settlement, conviction, or upon a plea of nolo contendere or its equivalent, shall not, of itself, create a presumption that the person did not act in good faith and in a manner which he or she reasonably believed to be in or not opposed to the best interests of the Corporation, and, with respect to any criminal action or proceeding, had reasonable cause to believe that his or her conduct was unlawful.

2. To the maximum extent permitted by applicable law, the Corporation shall indemnify any person who was or is a party or is threatened to be made a party to any threatened, pending or completed action or suit by or in the right of the Corporation to procure a judgment in its favor by reason of the fact that he is or was a director, officer, employee or agent of the Corporation, or is or was serving at the request of the Corporation as a director, officer, employee or agent of another corporation, partnership, joint venture, trust or other enterprise against expenses (including attorneys' fees) actually and reasonably incurred by him or her in connection with the defense or settlement of such action or suit if he or she acted in good faith and in a manner he or she reasonably believed to be in or not opposed to the best interests of the Corporation and except that no indemnification shall be made in respect of any claim, issue or matter as to which such person shall have been adjudged to be liable to the Corporation unless and only to the extent that the Court of Chancery of the State of Delaware or the court in which such action or suit was brought shall determine upon application that, despite the adjudication of liability but in view of all the circumstances of the case, such person is fairly and reasonably entitled to indemnity for such expenses which the Court of Chancery or such other court shall deem proper.

3. To the extent that a present or former director or officer of the Corporation has been successful on the merits or otherwise in defense of any action, suit or proceeding referred to in subsections (1) and (2) above, or in defense of any claim, issue or matter therein, he or she shall be indemnified against expenses (including attorneys' fees) actually and reasonably incurred by him or her in connection therewith.

4. Any indemnification under subsections (1) and (2) above (unless ordered by a court) shall be made by the Corporation only as authorized in the specific case upon a determination that indemnification of the present or former director, officer, employee or agent is proper in the circumstances because he or she has met the applicable standard of conduct set forth in subsections (1) and (2) above. Such determination shall be made, with respect to a person who is a director or officer at the time of such determination, (i) by a majority vote the directors who are not parties to such action, suit or proceeding, even though less than a quorum, or (ii) by a committee of such directors designated by majority vote of such directors, even though less than a quorum, or (iii) if there are no such directors, or if such directors so direct, by independent legal counsel in a written opinion, or (iv) by the stockholders.

5. Expenses (including attorney's fees) incurred by an officer or director in defending any civil, criminal, administrative or investigative action, suit or proceeding may be paid by the Corporation in advance of the final disposition of such action, suit or proceeding upon receipt of an undertaking by or on behalf of such director of officer to repay such amount if it shall ultimately be determined that he or she is not entitled to be indemnified by the Corporation pursuant to this Article VI or as otherwise authorized by law. Such expenses incurred by former directors and officers or other employees and agents may be so paid upon such terms and conditions, if any, as the Corporation deems appropriate.

6. The indemnification and advancement of expenses provided by or granted pursuant to the other subsections of this Article VI shall not be deemed exclusive of any other rights to which those seeking indemnification or advancement of expenses may be entitled under any by-law, agreement, vote of stockholders or disinterested directors or otherwise, both as to action in his or her official capacity and as to action in another capacity while holding such office.

7. The Corporation may purchase and maintain insurance on behalf of any person who is or was a director, officer, employee or agent of the Corporation, or is or was serving at the request of the Corporation as a director, officer, employee or agent of another corporation, partnership, joint venture, trust or other enterprise against any liability asserted against him or her and incurred by him or her in any such capacity, or arising out of his or her status as such, whether or not the Corporation would have the

power to indemnify him or her against such liability under the provisions of the General Corporation Law of the State of Delaware.

8. For purposes of the Article VI, references to "the Corporation" shall include, in addition to the resulting corporation, any constituent corporation (including any constituent of a constituent) absorbed in a consolidation or merger which, if its separate existence had continued, would have had power and authority to indemnify its directors, officers, employees or agents so that any person who is or was a director, officer, employee or agent of such constituent corporation or is or was serving at the request of such constituent corporation as a director, officer, employee or agent of another corporation, partnership, joint venture, trust or other enterprise, shall stand in the same position under the provisions of this Article VI with respect to the resulting or surviving corporation as he or she would have with respect to such constituent corporation if its separate existence had continued.

9. For purposes of this Article VI, references to "other enterprises" shall include employee benefit plans; references to "fines" shall include any excise taxes assessed on a person with respect to any employee benefit plan; and references to "serving at the request of the Corporation" shall include any service as a director, officer, employee or agent of the Corporation which imposes duties on, or involves service by, such director, officer, employee or agent with respect to an employee benefit plan, its participants, or beneficiaries; and a person who acted in good faith and in a manner he or she reasonably believed to be in the interest of the participants and beneficiaries of an employee benefit plan shall be deemed to have acted in a manner "not opposed to the best interests of the Corporation", as referred to in this Article VI.

10. The indemnification and advancement of expenses provided by, or granted pursuant to this Article VI shall, unless otherwise provided when authorized or ratified, continue as to a person who has ceased to be a director, officer, employee or agent and shall inure to the benefit of the heirs, executors and administrators of such a person.

VII

1. A director of the Corporation shall not be personally liable 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 Corporation, (ii) for acts or omissions not in good faith or which involve intentional misconduct, knowing violation of law, (iii) under Section 174 of the General Corporation Law of the State of Delaware, or (iv) for any transaction from which the director derived any improper personal benefit.

2. Any repeal or modification of this Article VII shall not adversely affect any right or protection of a director of the Corporation existing at the time of such repeal or modification.

VIII

MANAGEMENT OF THE AFFAIRS OF THE CORPORATION

1. The business and affairs of the Corporation shall be managed by its Board of Directors, which may exercise all the powers of the Corporation and do all such lawful acts and things that are not conferred upon or reserved to the stockholders by law, by this Certificate of Incorporation or by the Bylaws of the Corporation.

2. Election of directors of the Corporation need not be by written ballot, except and to the extent provided in the Bylaws of the Corporation.

3. Except as may be otherwise expressly provided in the Bylaws of the Corporation, the Board of Directors of the Corporation is expressly authorized to adopt, amend or repeal the Bylaws of the Corporation.

IX

PRIVATE PROPERTY OF STOCKHOLDERS

The private property of the stockholders of the Corporation shall not be subject to the payment of corporate debts to any extent whatsoever.

X

CORPORATE POWER

The Corporation reserves the right to amend, alter, change or repeal any provision contained in this Restated Certificate of Incorporation, in the manner now or hereafter prescribed by statute, and all rights conferred on stockholders herein are granted subject to this reservation.

IN WITNESS WHEREOF, this Restated Certificate of Incorporation which restates and amends the provisions of the Certificate of Incorporation of the Corporation, and which has been duly adopted in accordance with Sections 228, 242 and 245 of the General Corporation Law of the State of Delaware and has been executed by William D. Clark, its authorized officer, this 28th day of September, 2004.

VANDA PHARMACEUTICALS INC.

By: /s/ William D.Clark

    Name: William D. Clark
    Title: Authorized Officer

EXHIBIT 3.2

CERTIFICATE OF AMENDMENT
OF THE SECOND RESTATED CERTIFICATE OF INCORPORATION
OF VANDA PHARMACEUTICALS INC.

Vanda Pharmaceuticals Inc. (the "Corporation"), a corporation organized and existing under and by virtue of the General Corporation Law of the State of Delaware

DOES HEREBY CERTIFY:

FIRST: The name of the Corporation is Vanda Pharmaceuticals Inc., and that the Corporation was originally incorporated pursuant to the General Corporation Law on November 13, 2002.

SECOND: The Board of Directors of the Corporation adopted a resolution setting forth a proposed amendment to the Second Restated Certificate of Incorporation of the Corporation (the "Certificate"), declaring said amendment to be advisable and in the best interests of the Corporation and its stockholders and authorizing the appropriate officers of the Corporation to solicit the consent of the stockholders to such amendment. The proposed amendment is to replace the first paragraph of Article IV of the Certificate in its entirety with the following:

> "The total number of shares of capital stock that the Corporation shall have authority to issue is: (i) 50,000,000 shares of Common Stock, par value $0.001 per share (the "Common Stock") and (ii) 40,081,308 shares of Preferred Stock, par value $0.001 per share, of which 10,000,000 shares shall be Series A Preferred Stock (the "Series A Preferred Stock") and 30,081,308 shares shall be Series B Preferred Stock (the "Series B Preferred Stock" and, together with the Series A Preferred Stock, the "Preferred Stock")."

THIRD: That thereafter said amendment was duly adopted in accordance with the provisions of Section 242 of the General Corporation Law of the State of Delaware by written consent of the stockholders holding the requisite number of shares required by statute given in accordance with and pursuant to Section 228 of the General Corporation Law of the State of Delaware.

State of Delaware
Secretary of State
Division of Corporations
Delivered 10:33 AM 03/22/2005
FILED 10:33 AM 03/22/2005
SRV 050233926 - 3590747 FILE

IN WITNESS WHEREOF, Vanda Pharmaceuticals Inc. has caused this Certificate of Amendment to be signed by its Chief Executive Officer, as of this 22nd day of March, 2005.

By: /s/ Mihales Polymeropoulos

Name: Mihales Polymeropoulos
Title: Chief Executive Officer

EXHIBIT 3.3

CERTIFICATE OF AMENDMENT
OF THE SECOND RESTATED CERTIFICATE OF INCORPORATION
OF VANDA PHARMACEUTICALS INC.

Vanda Pharmaceuticals Inc., a corporation organized and existing under and by virtue of the General Corporation Law of the State of Delaware (the "General Corporation Law").

DOES HEREBY CERTIFY:

FIRST: The name of this corporation is Vanda Pharmaceuticals Inc., and that this corporation was originally incorporated pursuant to the General Corporation Law on November 13, 2002 under the name Vanda Pharmaceuticals Inc.

SECOND: The Board of Directors of this corporation adopted resolutions setting forth a proposed amendment to the Second Restated Certificate of Incorporation of this corporation (the "Restated Certificate"), declaring said amendment to be advisable and in the best interests of this corporation and its stockholders and authorizing the appropriate officers of this corporation to solicit the consent of the stockholders to such amendment. The proposed amendment is to effect the following amendment to the Restated Certificate:

I. Replace the first paragraph of Article IV of the Restated Certificate in its entirety with the following paragraph:

> "The total number of shares of capital stock that the Corporation shall have authority to issue is: (i) Seventy Million (70,000,000) shares of Common Stock, par value $0.01 per share (the "Common Stock") and (ii) Fifty-Two Million Two Hundred Seventy-Six Thousand Four Hundred Thirty-Seven (52,276,437) shares of Preferred Stock, par value $0.01 per share, of which Ten Million (10,000,000) shares shall be Series A Preferred Stock (the "Series A Preferred Stock") and Forty-Two Million Two Hundred Seventy-Six Thousand Four Hundred Thirty-Seven (42,276,437) shares shall be Series B Preferred Stock (the "Series B Preferred Stock" and, together with the Series A Preferred Stock, the "Preferred Stock")."

THIRD: That thereafter said amendment was duly adopted in accordance with the provisions of Section 242 of the General Corporation Law of the State of Delaware by written consent of the stockholders holding the requisite number of shares required by statute given in accordance with and pursuant to Section 228 of the General Corporation Law of the State of Delaware.

State of Delaware
Secretary of State
Division of Corporations
Delivered 01:11 PM 12/09/2005
FILED 01:09 PM 12/09/2005
SRV 051003929 - 3590747 FILE

IN WITNESS WHEREOF, Vanda Pharmaceuticals Inc., has caused this Certificate of Amendment to be signed by its President as of December 9, 2005.

/s/ Mihael Polymeropoulos

Name: Mihael Polymeropoulos
Title: President

EXHIBIT 3.5

BYLAWS
OF
VANDA PHARMACEUTICALS INC.

ARTICLE I

OFFICES

SECTION 1.1. Registered Office.

The address of the registered office of Vanda Pharmaceuticals Inc. (the "Corporation") in the State of Delaware is National Corporate Research, Ltd., 615 South Dupont Highway, in the City of Dover, County of Kent. The name of the Corporation's registered agent at such address is National Corporate Research, Ltd.

SECTION 1.2. Other Offices.

The Corporation may also have an office or offices at any other place or places within or without the State of Delaware.

ARTICLE II

MEETINGS OF STOCKHOLDERS

SECTION 2.1. Annual Meetings.

The annual meeting of the stockholders for the election of directors, and for the transaction of such other business as may properly come before the meeting, shall be held at such place, either within or without the State of Delaware, on such date and at such hour as shall be fixed by resolution of the Board of Directors of the Corporation (the "Board") and designated in the notice or waiver of notice thereof; provided, however, that no annual meeting of stockholders need be held if all actions, including the election of directors, required by the General Corporation Law of the State of Delaware (the "General Corporation Law") to be taken at such annual meeting are taken by written consent in lieu of meeting pursuant to Section 9 hereof.

SECTION 2.2. Special Meetings.

A special meeting of the stockholders for any purpose or purposes may be called by the Board, the Chairman of the Board, the President or the Secretary of the Corporation or by the recordholders of at least 25% of the shares of common stock of the Corporation issued and outstanding ("Shares") and entitled to vote thereat, to be held at such place, within or without the State of Delaware, on such date and at such hour as shall be designated in the notice or waiver or notice thereof.

SECTION 2.3. Notice Of Meetings.

Except as otherwise provided by law, written notice of each annual or special meeting of stockholders stating the place, date and hour of the meeting and, in the case of a special meeting, the purpose or purposes for which the meeting is held, shall be given personally or by first class mail to each stockholder entitled to vote at such meeting, not less than 10 nor more than 60 calendar days before the date of the meeting. If mailed, such notice shall be deemed to be given when deposited in the United States mail, postage prepaid, directed to the stockholder at such stockholder's address as it appears on the records of the Corporation. If, prior to the time of mailing, the Secretary shall have received from any stockholder entitled to vote a written request that notices intended for such stockholder are to be mailed to some address other than the address that appears on the records of the Corporation, notices intended for such stockholder shall be mailed to the address designated in such request.

Notice of a special meeting may be given by the person or persons calling the meeting, or, upon the written request of such person or persons, such notice shall be given by the Secretary of the Corporation on behalf of such person or persons. If the person or persons calling a special meeting of stockholders give notice thereof, such person or persons shall forward a copy thereof to the Secretary. Every request to the Secretary for the giving of notice of a special meeting of stockholders shall state the purpose or purposes of such meeting.

SECTION 2.4. Waiver Of Notice.

Notice of any annual or special meeting of stockholders need not be given to any stockholder entitled to vote at such meeting who files a written waiver of notice with the Secretary, signed by the person entitled to notice, whether before or after the meeting. Neither the business to be transacted at, nor the purpose of, any meeting of stockholders need be specified in any written waiver of notice. Attendance of a stockholder at a meeting, in person or by proxy, shall constitute a waiver of notice of such meeting, except as provided by law.

SECTION 2.5. Adjournments.

When a meeting is adjourned to another date, hour or place, notice need not be given of the adjourned meeting if the date, hour and place thereof are announced at the meeting at which the adjournment is taken. If the adjournment is for more than 30 calendar days, or if after the adjournment a new record date is fixed for the adjourned meeting, a notice of the adjourned meeting shall be given to each stockholder of record entitled to vote at the adjourned meeting. At the adjourned meeting any business may be transacted which might have been transacted at the original meeting.

SECTION 2.6. Quorum.

Except as otherwise provided by law or the Certificate of Incorporation, whenever a class of stock of the Corporation is entitled to vote as a separate class, or whenever classes of stock of the Corporation are entitled to vote together as a single class, on any matter brought before any meeting of the stockholders, whether annual or special, holders of shares entitled to cast a majority of the votes entitled to be cast by all the holders of the shares of stock of such class

voting as a separate class, or classes voting together as a single class, as the case may be, outstanding and entitled to vote thereat, present in person or by proxy, shall constitute a quorum at any such meeting of the stockholders. If, however, such quorum shall not be present or represented at any such meeting of the stockholders, the stockholders entitled to vote thereat may adjourn the meeting from time to time in accordance with Section 5 of this Article II until a quorum shall be present or represented.

SECTION 2.7. Voting.

Except as otherwise provided by law or the Certificate of Incorporation, when a quorum is present with respect to any matter brought before any meeting of the stockholders, the vote of the holders of shares entitled to cast a majority of the votes entitled to be cast by all the holders of the shares constituting such quorum shall decide any such matter.

SECTION 2.8. Proxies.

Each stockholder entitled to vote at a meeting of stockholders or to express consent or dissent to corporate action in writing without a meeting may authorize another person or persons to act for such stockholder by proxy. Such proxy shall be filed with the Secretary before such meeting of stockholders or such corporate action without a meeting, at such time as the Board may require. No proxy shall be voted or acted upon after three years from its date, unless the proxy provides for a longer period.

SECTION 2.9. Stockholders' Consent In Lieu Of Meeting.

Any action required by the General Corporation Law to be taken at any annual or special meeting of stockholders, and any action which may be taken at any annual or special meeting of stockholders, may be taken without a meeting, without prior notice and without a vote, if a consent in writing, setting forth the action so taken, shall be signed by the recordholders of Shares having not less than the minimum number of votes necessary to authorize or take such action at a meeting at which the recordholders of all Shares entitled to vote thereon were present and voted.

ARTICLE III

BOARD OF DIRECTORS

SECTION 3.1. General Powers.

The business and affairs of the Corporation shall be managed by the Board, which may exercise all such powers of the Corporation and do all such lawful acts and things as are not by law or by the Certificate of Incorporation directed or required to be exercised or done by the stockholders.

SECTION 3.2. Number And Term Of Office.

The number of directors shall be eight. None of the directors need be stockholders of the Corporation. Except or otherwise provided in the Certificate of Incorporation, directors shall be

elected at the annual meeting of the stockholders by the holders of the outstanding shares of capital stock of the Corporation entitled to vote thereat, and each Director shall hold office until his successor is elected by the holders of the outstanding shares of capital stock, or until his earlier death or resignation or removal in the manner hereinafter provided or as provided in the Certificate of Incorporation.

SECTION 3.3. Resignation.

Any director may resign at any time by giving written notice to the Board, the President or the Secretary of the Corporation. Such resignation shall take effect at the time specified therein or, if the time is not specified, upon receipt by the Corporation thereof; and, unless otherwise specified therein, acceptance of such resignation shall not be necessary to make it effective.

SECTION 3.4. Meetings.

(a) Annual Meetings. As soon as practicable after each annual election of directors, the Board shall meet for the purpose of organization and the transaction of other business, unless it shall have transacted all such business by written consent pursuant to Section 5 of this Article III.

(b) Other Meetings. Other meetings of the Board shall be held at such times as the Board or the Chairman of the Board shall from time to time determine.

(c) Notice of Meetings. The Secretary shall give notice to each director of each special meeting, which notice shall state the time, place and purpose of such meeting. Notice of each such meeting shall be given to each director prior to such meeting. A waiver of notice by the person entitled thereto, whether before or after the time of any such meeting, shall be deemed equivalent to notice. Attendance of a person at a meeting shall constitute a waiver of notice of such meeting.

(d) Place of Meetings. The Board may hold its meetings at such place or places, within or without the State of Delaware, as the Board or the Chairman of the Board may from time to time determine, or as shall be designated in the respective notices or waivers of notice thereof.

(e) Quorum and Manner of Acting. A majority of the total number of directors shall constitute a quorum for the transaction of business at any meeting of the Board, and the vote of a majority of those directors present at any such meeting at which a quorum is present shall be necessary for the passage of any resolution or act of the Board, except as otherwise expressly required by law or these Bylaws. In the absence of a quorum for any such meeting, a majority of the directors present thereat may adjourn such meeting from time to time until a quorum shall be present.

(f) Organization. At each meeting of the Board, one of the following shall act as chairman of the meeting and preside, in the following order of precedence:

(i) the Chairman of the Board;

(ii) the President; or

(iii) any director chosen by a majority of the directors present.

The Secretary or, in the case of his absence, any person (who shall be an Assistant Secretary, if an Assistant Secretary is present) whom the chairman shall appoint shall act as secretary of such meeting and keep the minutes thereof.

SECTION 3.5. Directors' Consent in Lieu Of Meeting.

Any action required or permitted to be taken at any meeting of the Board or of any committee thereof may be taken without a meeting if all members of the Board or such committee, as the case may be, consent thereto in writing, and the writing or writings are filed with the minutes of the proceedings of the Board or committee.

SECTION 3.6. Action By Means Of Telephone Or Similar Communications Equipment.

Any one or more members of the Board, or of any committee designated by the Board, may participate in a meeting of the Board or any such committee by means of conference telephone or similar communications equipment by means of which all persons participating in the meeting can hear one another, and participation in a meeting by such means shall constitute presence in person at such meeting.

ARTICLE IV

OFFICERS

SECTION 4.1. Executive Officers.

The executive officers of the Corporation shall be a Chairman of the Board, a President, a Secretary and a Treasurer and may include one or more Vice Presidents one or more Assistant Secretaries and one or more Assistant Treasurers. Any two or more offices may be held by the same person.

SECTION 4.2. Authority And Duties.

All officers, as between themselves and the Corporation, shall have such authority and perform such duties in the management of the Corporation as may be provided in these Bylaws or, to the extent not so provided, by resolution of the Board.

SECTION 4.3. Term Of Office; Resignation And Removal.

All officers shall be elected or appointed by, or in such manner as shall be determined by, the Board and shall hold office for such term as may be determined by the Board. Each officer shall hold office until his successor has been elected or appointed and qualified or his earlier death or resignation or removal in the manner hereinafter provided. The Board may require any officer to give security for the faithful performance of his duties.

Any officer may resign at any time by giving written notice to the Board or to the President or the Secretary of the Corporation, and such resignation shall take effect at the time specified therein or, if the time when it shall become effective is not specified therein, at the time it is accepted by action of the Board. Except as aforesaid, acceptance of such resignation shall not be necessary to make it effective.

All officers and agents elected or appointed by the Board shall be subject to removal at any time, with or without cause, by the Board or by the stockholders of the Corporation entitled to vote.

SECTION 4.4. Vacancies.

Any vacancy occurring in any office of the Corporation, for any reason, shall be filled by action of the Board. Any officer appointed or elected by the Board to fill any vacancy shall serve only until such time as the unexpired term of his predecessor expires unless reelected or reappointed by the Board.

SECTION 4.5. Chairman Of The Board.

The Chairman of the Board shall have the power to call special meetings of the stockholders, to call special meetings of the Board and to preside at all meetings of the stockholders and all meetings of the Board.

SECTION 4.6. President.

The President shall be the chief executive officer of the Corporation and shall have general and active management and control of the business and affairs of the Corporation subject to the control of the Board, and shall see that all orders and resolutions of the Board are carried into effect.

SECTION 4.7. Vice Presidents.

Vice Presidents, if any, in order of their seniority or in any other order determined by the Board, shall generally assist the President and perform such other duties as the Board or the President shall prescribe, and in the absence or disability of the President, perform the duties and exercise the powers of the President.

SECTION 4.8. Treasurer.

The Treasurer, if any, shall have the care and custody of all the funds of the Corporation and shall deposit the same in such banks or other depositories as the Board, or any officer or officers, or any officer and agent jointly, duly authorized by the Board, shall, from time to time, direct or approve. He shall disburse the funds of the Corporation under the direction of the Board, the Chairman of the Board or the President. He shall keep a full and accurate account of all moneys received and paid on account of the Corporation and shall render a statement of his accounts whenever the Board shall require. He shall perform all other necessary acts and duties in connection with the administration of the financial affairs of the Corporation and shall generally perform all the duties usually appertaining to the office of treasurer of a corporation.

SECTION 4.9. Assistant Treasurers.

Assistant Treasurers, if any, in order of their seniority or in any other order determined by the Board, shall generally assist the Treasurer and perform such other duties as the Board or the Treasurer shall prescribe, and, in the absence or disability of the Treasurer, shall perform the duties and exercise the powers of the Treasurer.

SECTION 4.10. Secretary.

The Secretary shall, to the extent practicable, attend all meetings of the Board and all meetings of the stockholders and shall record all votes and the minutes of all proceedings in a book to be kept for that purpose, and shall perform like duties for any standing committees when required. He shall give or cause to be given notice of all meetings of the stockholders and of the Board, and shall perform such other duties as may be prescribed by the Board or the President, under whose supervision he shall act. He shall keep in safe custody the seal of the Corporation and affix the same to any duly authorized instrument requiring it and, when so affixed, it shall be attested by his signature or by the signature of the Treasurer or an Assistant Secretary or an Assistant Treasurer. He shall keep in safe custody the certificate books and stockholder records and such other books and records as the Board may direct and shall perform all other duties incident to the office of Secretary and such other duties as from time to time may be assigned to him by the President or the Board.

SECTION 4.11. Assistant Secretaries.

Assistant Secretaries, if any, in order of their seniority or in any other order determined by the Board, shall generally assist the Secretary and perform such other duties as the Board or the Secretary shall prescribe, and, in the absence or disability of the Secretary, shall perform the duties and exercise the powers of the Secretary.

SECTION 4.12. Compensation.

The Board shall have the power to fix the compensation of all officers of the Corporation.

ARTICLE V

CONTRACTS, CHECKS, DRAFTS, BANK ACCOUNTS, ETC.

SECTION 5.1. Execution Of Documents.

The Board shall designate the officers, employees and agents of the Corporation who shall have power to execute and deliver deeds, contracts, mortgages, bonds, debentures, checks, drafts and other orders for the payment of money and other documents for and in the name of the Corporation, and each such officer, employee and agent, without further action by the Board, may delegate such power (including authority to redelegate) by any means, written or oral, to other officers, employees or agents of the Corporation; and, unless so designated or expressly authorized by these Bylaws, no officer or agent or employee shall have any power or authority to bind the Corporation by any contract or engagement or to pledge its credit or to render it liable pecuniarily for any purpose or to any amount.

SECTION 5.2. Deposits.

All funds of the Corporation not otherwise employed shall be deposited from time to time to the credit of the Corporation or otherwise as the Board, or any officer of the Corporation to whom power in this respect shall have been given by the Board, shall direct.

SECTION 5.3. Proxies In Respect Of Stock Or Other Securities Of Other Corporations.

The Board shall designate the officers of the Corporation who shall have authority from time to time to appoint an agent or agents of the Corporation to exercise in the name and on behalf of the Corporation the powers and rights that the Corporation may have as the holder of stock or other securities in any other corporation, and to vote or consent in respect of such stock or securities. Such designated officers may instruct the person or persons so appointed as to the manner of exercising such powers and rights, and such designated officers may execute or cause to be executed in the name and on behalf of the Corporation and under its corporate seal, or otherwise, such written proxies, powers of attorney or other instruments as they may deem necessary or proper in order that the Corporation may exercise such powers and rights.

ARTICLE VI

SHARES AND TRANSFER OF SHARES

SECTION 6.1. Stock Certificates; Uncertificated Shares.

(a) The shares of the Corporation shall be evidenced by certificates; provided, however, that the Board may provide by resolution or resolutions that some or all of any or all classes or series of stock of the Corporation shall be uncertificated shares. Any such resolution shall not apply to shares evidenced by a certificate until such certificate is surrendered to the Corporation. Notwithstanding the adoption of such a resolution by the Board, every holder of stock evidenced by certificates, and upon request every holder of uncertificated shares, shall be entitled to have a certificate signed by, or in the name of the Corporation by, the Chairman of the Board, or the President or a Vice President, and by the Treasurer or an Assistant Treasurer, or the Secretary or an Assistant Secretary of the Corporation evidencing the number of shares registered in certificate form. Any or all the signatures on the certificate may be a facsimile. In case any officer, transfer agent or registrar who has signed or whose facsimile signature has been placed upon a certificate shall have ceased to be such officer, transfer agent or registrar before such certificate is issued, it may be issued by the Corporation with the same effect as if such person were such officer, transfer agent or registrar at the date of issue.

(b) Except as otherwise provided in section 202 of the General Corporation Law, there shall be set forth on the face or back of any certificate that the Corporation shall issue to evidence any class or series of stock, a statement that the Corporation will furnish without charge to each stockholder who so requests the powers, designations, preferences and relative, participating, optional, or other special rights of each class of stock or series thereof and the qualifications, limitations or restrictions of such preferences and/or rights. Within a reasonable time after the issuance or transfer of uncertificated stock, the Corporation shall send to the

registered owner thereof a written notice containing the information required to be set forth or stated on certificates pursuant to section 151 of the General Corporation Law or section 156, 202(a) or 218(a) of the General Corporation Law or with respect to section 151 of the General Corporation Law a statement that the Corporation will furnish without charge to each stockholder who so requests the powers, designations, preferences and relative participating, optional or other special rights of each class of stock or series thereof and the qualifications, limitations or restrictions of such preferences and/or rights. Except as otherwise expressly provided by law, the rights and obligations of the holders of uncertificated stock and the rights and obligations of the holders of certificates evidencing stock of the same class and series shall be identical.

SECTION 6.2. Stock Ledger.

A stock ledger in one or more counterparts shall be kept, in which shall be recorded the name of each person, firm or corporation owning the shares evidenced by each certificate for stock or shares of uncertificated stock of the Corporation issued, the number of shares of stock evidenced by each such certificate and the number of shares of uncertificated stock, the date thereof and, in the case of cancellation, the date of cancellation. Except as otherwise expressly required by law, the person in whose name shares of stock stand on the stock ledger of the Corporation shall be deemed the owner thereof for all purposes as regards the Corporation.

SECTION 6.3. Transfer Of Stock.

(a) Except as otherwise provided by the General Corporation Law, the transfer of shares of stock and the certificates evidencing such shares of stock or uncertificated stock of the Corporation shall be governed by Article 8 of Subtitle 1 of Title 6 of the Delaware Code (the Uniform Commercial Code), as amended from time to time.

(b) Registration of transfers of shares of stock of the Corporation shall be made only on the books of the Corporation upon request or instruction of the registered owner thereof, or of his attorney thereunto authorized by power of attorney duly executed and filed with the Secretary of the Corporation, and, in the case of certificated shares, upon the surrender of the certificate or certificates for any such certificated shares of stock properly endorsed or accompanied by a stock power duly executed.

SECTION 6.4. Addresses Of Stockholders.

Each stockholder shall designate to the Secretary of the Corporation an address at which notices of meetings and all other corporate notices may be served or mailed to him, and, if any stockholder shall fail to so designate such an address, corporate notices may be served upon him by mail directed to him at his post office address, if any, as the same appears on the share record books of the Corporation or at his last known post office address.

SECTION 6.5. Lost. Destroyed And Mutilated Certificates.

A holder of any shares of stock of the Corporation evidenced by certificates shall promptly notify the Corporation of any loss destruction or mutilation of any certificate or

certificates evidencing all or any such shares of stock. The Board may, in its discretion, cause the Corporation to issue a new certificate or new uncertificated shares in place of any certificate theretofore issued by it and alleged to have been mutilated, lost, stolen or destroyed, upon the surrender of the mutilated certificates or, in the case of loss or destruction of the certificate, upon satisfactory proof of such loss or destruction, and the Board may, in its discretion, require the owner of the lost or destroyed certificate or his legal representative to give the Corporation a bond sufficient to indemnify the Corporation against any claim made against it on account of the alleged loss, theft or destruction of any such certificate or the issuance of such new certificate or uncertificated shares.

SECTION 6.6. Regulations.

The Board may make such rules and regulations as it may deem expedient, not inconsistent with these Bylaws, concerning the issue, transfer and registration of transfer of shares of capital stock of the Corporation.

ARTICLE VII

SEAL

The Board may provide a corporate seal, which shall be in the form of a circle and shall bear the full name of the Corporation and the words and figures "CORPORATE SEAL 2002 DELAWARE".

ARTICLE VIII

FISCAL YEAR

The fiscal year of the Corporation shall end on December 31 of each year, unless changed by resolution of the Board.

EXHIBIT 4.1

VANDA PHARMACEUTICALS INC.

2004 SECURITYHOLDER AGREEMENT

THIS 2004 SECURITYHOLDER AGREEMENT (the "AGREEMENT") is entered into as of September 28, 2004 among VANDA PHARMACEUTICALS INC., a Delaware corporation (the "COMPANY"), and each of the other parties signatory hereto.

RECITALS

A. The Company, the Care Capital Securityholder and the EDB Securityholder previously entered into that certain Securityholder Agreement dated as of March 12, 2003 (the "ORIGINAL SECURITYHOLDER AGREEMENT").

B. The Securityholders are purchasing shares of the Company's Series B Preferred Stock pursuant to that certain Series B Preferred Stock Purchase Agreement dated as of September 28, 2004 (the "2004 PURCHASE AGREEMENT").

C. The obligations in the 2004 Purchase Agreement are conditioned upon the execution and delivery of this Agreement.

D. The Company and the Securityholders now desire to amend and restate the Original Securityholder Agreement in its entirety.

NOW, THEREFORE, in consideration of the foregoing and the mutual agreements herein contained, the parties hereto agree:

SECTION 1. CERTAIN DEFINITIONS.

1.1 DEFINITIONS. For the purposes of this Agreement, the following terms have the following meanings:

"AFFILIATE", with respect to any Person, means any other Person directly or indirectly controlling, controlled by or under common control with, such Person. For purposes of this definition, "control" (including with correlative meanings, the terms "controlling", "controlled by" or "under common control with"), as used with respect to any Person, shall mean the possession, directly or indirectly, of the power to direct or cause the direction of the management and policies of such Person, whether through the ownership of voting securities or by contract or otherwise.

"AFFILIATED GROUP", with respect to any Person, means such Person and each Affiliate and Associate of such Person and each other Person with whom such Person is acting "as a partnership, limited partnership, syndicate, or other group for the purpose of acquiring, holding, or disposing of" Shares (within the meaning of Section 13(d)(3) of the 1934 Act, regardless of whether the Company shall at any time be subject to the requirements of the 1934 Act).

"ASSOCIATE" has the meaning given such term in Rule 12b-2 under the 1934 Act.

"BENEFICIAL OWNER" or "BENEFICIALLY OWN" has the meaning given such term in Rule 13d- 3 under the 1934 Act, and, with respect to any options or rights to acquire any Security, shall be determined without regard to whether any such Security is "in the money."

"BOARD OF DIRECTORS" means the Board of Directors of the Company.

"BUSINESS DAY" means any day other than a Saturday, Sunday or other day on which commercial banks are authorized or obligated to be closed in New York City.

"CARE CAPITAL SECURITYHOLDER" means Care Capital Investments II, LP, a Delaware limited partnership, and Care Capital Offshore Investments II, LP, a Cayman Islands exempted limited partnership.

"CAUSE" means, with respect to any individual, (i) any willful violation of any federal, state, foreign or other law or regulation applicable to the business or affairs of the Company or any of its subsidiaries or Affiliates, or the commission of any felony or other crime involving moral turpitude, or any willful perpetration of a common law fraud; or (ii) any other misconduct that is materially injurious to the financial condition or business reputation of, or is otherwise materially injurious to, the Company or any of its subsidiaries or Affiliates.

"CERTIFICATE" means the Certificate of Incorporation of the Company, as amended from time to time.

"CODE" means the Internal Revenue Code of 1986, as amended.

"COMMISSION" means the Securities and Exchange Commission, and any successor commission or agency having similar powers.

"COMMON SHARE" means any share of Common Stock.

"COMMON STOCK" means the Common Stock, par value $.01 per share, of the Company.

"COMPANY" means Vanda Pharmaceuticals Inc., a Delaware corporation, and any successor thereto, whether by merger or otherwise.

"EDB SECURITYHOLDER" means BioMedical Sciences Investment Fund Pte Ltd.

"ENCUMBRANCE" means any lien, security interest, pledge, claim, option, right of first refusal, marital right or other encumbrance with respect to any Share.

"IPO" means the initial Public Offering of Shares after the date hereof.

"LAW" means any federal, state, local or foreign statute, law, ordinance, regulation, rule, code, order, other requirement or rule of law.

"MEDI GROUP" shall mean (i) MEDI Ventures, (ii) MedImmune, and (iii) any successors or permitted assignees of any of the foregoing.

"MEDI VENTURES" shall mean MedImmune Ventures, Inc., a Delaware corporation, including any successor thereto or any permitted assignee of the interest, in whole or in part, of MEDI Ventures under this Agreement.

"MEDIMMUNE" shall mean MedImmune, Inc., a Delaware corporation, including any of its successors or permitted assigns.

"MEP" means the Management Equity Plan of the Company, as amended, from time to time.

"1933 ACT" means the Securities Act of 1933, as amended, and the rules and regulations thereunder.

"1934 ACT" means the Securities Exchange Act of 1934, as amended, and the rules and regulations thereunder.

"OUTSTANDING," with respect to any Shares, means, as of any date of determination, all Shares that have been issued on or prior to such date, other than Shares repurchased or otherwise reacquired by the Company, or any controlled Affiliate thereof, on or prior to such date.

"PARTICIPANT" has the meaning assigned in the MEP.

"PERMITTED TRANSFEREE" means: (a) any Securityholder's Affiliate (including, without limitation, in the case of MEDI Ventures, any member of the MEDI Group); (b) in the case of any Securityholder who is a natural person, (i) the spouse, parents and lineal descendants (in each case, whether natural or adopted) of such Securityholder, (ii) a Person to whom Shares are transferred by such Securityholder by will or the laws of descent and distribution, or (iii) a trust administered and controlled by such Securityholder that is established for the exclusive benefit of such Securityholder or his or her Permitted Transferees; (c) the Company or any subsidiary thereof; (d) in the case of any Securityholder which is a grantor trust, its grantor; or (e) any Person with respect to which the Board of Directors shall have adopted a resolution by a vote of 66-2/3% of its members stating that the Board of Directors has no objection if a Sale of Shares is made to such Person.

"PERSON" means an individual, a partnership, a joint venture, a corporation, an association, a trust, an individual retirement account or any other entity or organization, including a government or any department or agency thereof.

"PREFERRED SECURITYHOLDER" means each Securityholder that owns shares of Preferred Stock.

"PREFERRED SECURITYHOLDER RESTRICTED PERSON" means any Preferred Securityholder or any Affiliate thereof, or the general partner, managing partner, managing member or investment manager of any thereof, or any officer, director or private equity professional thereof.

"PREFERRED SHARE" means any share of Preferred Stock.

"PREFERRED STOCK" means any of the Company's Series A Preferred Stock or Series B Preferred Stock.

"PUBLIC COMPANY" means a company as to which the aggregate number of Common Shares that have been sold in Public Offerings shall equal not less than 25% of the Common Shares then outstanding.

"PUBLIC OFFERING" means an underwritten public offering of equity securities of the Company pursuant to an effective registration statement under the 1933 Act.

"REGISTRABLE SHARES" means (a) Common Shares issued pursuant to the Care Capital Securityholder and the EDB Securityholder pursuant to the 2003 Stock Subscription Agreements; (b) Common Shares issued upon the conversion of Preferred Shares; (c) any other Common Shares issued to a Securityholder after the date hereof, whether or not upon conversion of any Preferred Share, so long as the Board of Directors shall have determined prior to such issuance that such Common Shares shall be "Registrable Shares"; and (d) any Shares issued or issuable in respect of Shares referred to in clauses (a), (b) or (c) above by way of a stock dividend or a stock split or in connection with a combination or subdivision of shares, reclassification, recapitalization, merger, consolidation or other reorganization of the Company. As to any particular Registrable Shares that have been issued, such securities shall cease to be Registrable Shares when (i) a registration statement with respect to the sale of such securities shall have become effective under the 1933 Act and such securities shall have been disposed of under such registration statement, (ii) they shall have been distributed to the public pursuant to Rule 144, (iii) they shall have been otherwise transferred or disposed of, and new certificates, in the case of certificated shares, therefor not bearing a legend to the effect set forth in the first paragraph of the form of legend required by Section 4.2(a) restricting further transfer shall have been delivered by the Company, and subsequent transfer or disposition of them shall not require their registration or qualification under the 1933 Act or any similar state law then in force or (iv) they shall have ceased to be outstanding.

"REGISTRATION EXPENSES" means all out-of-pocket expenses incident to the Company's performance of or compliance with Section 5, including, without limitation, all registration and filing fees (including filing fees with respect to the National Association of Securities Dealers, Inc.), all fees and expenses of complying with state securities or "blue sky" laws (including reasonable fees and disbursements of underwriters' counsel in connection with any "blue sky" memorandum or survey), all printing expenses, all listing fees, all registrars' and transfer agents' fees, all "road show" expenses of the Company and the underwriters, the fees and disbursements of counsel for the Company and of its independent public accountants, including the expenses of any special audits and/or "cold comfort" letters required by or incident to such performance and compliance, the reasonable fees and disbursements of one outside counsel retained by the holders of Registrable Shares being registered (which counsel shall be satisfactory to the holders of a majority of the shares of Registrable Shares being registered), but excluding underwriting discounts and commissions and applicable transfer taxes, if any, which shall be borne by the sellers of the Registrable Shares being registered in all cases.

"RESTRICTED SHARES" means all Shares other than (a) Shares that have been registered under a registration statement pursuant to the 1933 Act, (b) Shares with respect to which a Sale has been made in reliance on and in accordance with Rule 144 or other applicable exemption from registration under the 1933 Act or (c) Shares with respect to which the holder thereof shall have delivered to the Company either (i) an opinion, in form and substance satisfactory to the Company, of counsel, who shall be satisfactory to the Company, or (ii) a "no action" letter from the Commission, to the effect that subsequent transfers of such Shares may be effected without registration under the 1933 Act.

"RESTRICTED TRANSFEREE" means any Person described in the most recent list, if any, of Persons (which list will be entitled "LIST OF RESTRICTED TRANSFEREES") that shall have been approved by the Board of Directors and delivered by the Company to a Prospective Seller (as defined for purposes of Section 4.4) not later than ten Business Days after receipt by each Other Stockholder (as therein defined) and the Company of an Offer Notice (as therein defined).

"RULE 144" means Rule 144 (or any successor provision) under the 1933 Act.

"SALE" means (including with correlative meanings, the terms "SELL" or "SOLD") any sale, assignment, transfer, distribution (whether by a partnership to any of its partners or otherwise) or other disposition of Shares or of a participation therein.

"SECURITYHOLDER" means each Person (other than the Company) holding Shares that is a party to this Agreement, so long as such Person shall beneficially own any Shares (whether or not any such Person owns any Shares on the date hereof).

"SERIES A PREFERRED STOCK" means Series A Preferred Stock, par value $.01 per share, of the Company.

"SERIES B PREFERRED STOCK" means Series B Preferred Stock, par value $.01 per share, of the Company.

"SERIES B PREFERRED DIRECTOR" means the three members of the Board of Directors designated by holders of the outstanding shares of Series B Preferred Stock, voting together as a class and to the exclusion of all other classes of capital stock of the Company.

"SHARE" means any share of Common Stock or Preferred Stock.

"THIRD PARTY" means, with respect to any Securityholder, any other Person, other than the Company and its subsidiaries or any Affiliate of such Securityholder.

SECTION 2. CERTAIN GOVERNANCE MATTERS

2.1 Board of Directors Meetings; Director Compensation. The Company agrees to use its best efforts to ensure that each committee of the Board of Directors shall include at least one designee of the Series B Preferred Directors. The Company agrees that the Board of Directors shall meet at least quarterly, unless otherwise agreed by the Board of Directors. In the event that any non-employee director receives any compensation for serving on the Board of Directors, all non-employee directors shall be entitled to receive compensation therefor at the same rate and on the same terms. The Company shall reimburse the non-employee directors for their customary and reasonable expenses incurred in attending meetings of the Board of Directors (or meetings of committees thereof) in accordance with the Company's policy on reimbursement of such expenses.

2.2 Insurance. The Company shall maintain a directors' and officers' liability insurance policy upon such terms as may be determined by the Board of Directors.

2.3 Employee Stock Options. With respect to any Shares issued or options or rights granted to employees and consultants after the date hereof, unless otherwise approved by the Board of Directors, the Company shall cause each employee and consultant of the Company to enter into an agreement providing for vesting of such Shares or options or rights in accordance with the MEP, as in effect on the date hereof. No Shares or options or rights shall vest in the 12 months following the date of commencement of the employee's or consultant's services in the case of new hires, or the date of issuance or grant in the case of subsequent stock or option grants. Immediately after the Initial Closing (as such term is defined in the Purchase Agreement), the Company shall reserve an additional 3,337,114 Shares for issuance under the MEP.

2.4 Qualified Small Business Stock. The Company agrees to use its Best Efforts (as defined below) to cause its capital stock to be characterized as "qualified small business stock" as defined in Section 1202(c) of the Code ("QUALIFIED SMALL BUSINESS STOCK"), unless the Board of Directors

determines that such a characterization is not in the best interests of the Company. "Best efforts" shall mean only that the Company: (i) complies with any applicable filing or reporting requirements imposed by the Code on issuers of Qualified Small Business Stock; (ii) executes and delivers to each Securityholder, from time to time, such forms, documents, schedules and other instruments as may be reasonably requested thereby to cause the Securityholder's Shares of the Company to be characterized as Qualified Small Business Stock; and (iii) submits to the Securityholders and to the Internal Revenue Service any reports that may be required under Section 1202(d)(l)(C) of the Code and any related Treasury Regulations. The Company further agrees that, within 10 days after any Securityholder has delivered to the Company a written request therefor, the Company shall deliver to such Securityholder a written statement informing the Securityholder whether, in the Company's good-faith judgment after a reasonable investigation, such Securityholder's interest in the Company constitutes "qualified small business stock" as defined in Section 1202(c) of the Code, or would constitute "qualified small business stock," if determination of whether stock constitutes "qualified small business stock" were made by taking into account the modifications set forth in Section 1045(b)(4) of the Code. The Company's obligation to furnish a written statement pursuant to this Section 2.4 shall continue notwithstanding the fact that a class of the Company's stock may be traded on an established securities market.

2.5 Financial Statements and Reports to Stockholders; Budget. The Company agrees to deliver to each Preferred Securityholder:

(a) as soon as practicable after the end of each month, and in any event within 30 days (45 days in the case of the month ending each fiscal quarter) thereafter, consolidated balance sheets of the Company and its subsidiaries as of the end of each such month and consolidated statements of income and cash flow for such month and for the current fiscal year to date and which shall show an analysis of variances from the budget and the prior month (with the exception that no notes need be attached to such statements and year-end audit adjustments may not have been made);

(b) as soon as practicable after the end of each fiscal quarter of the Company, and in any event within 45 days thereafter, unaudited financial statements of the Company on a quarterly basis prepared in accordance with generally accepted accounting principles and fairly reflecting the fiscal affairs of the Company for such quarterly period and analyzing variances from the budget and the prior fiscal quarter (with the exception that no notes need be attached to such statements and year-end audit adjustments may not have been made);

(c) as soon as practicable after the end of each fiscal year of the Company, and in any event within 120 days thereafter, an audited consolidated balance sheet of the Company as of the end of such year and audited consolidated statements of income, stockholders' equity and cash flows for such year, which year-end financial reports shall be (i) in reasonable detail, (ii) prepared in accordance with generally accepted accounting principles, and (iii) accompanied by the opinion of independent public accountants of recognized standing selected by the Company; and

(d) within 30 days prior to the end of each fiscal year, an operating budget and plan respecting the next fiscal year that will be subject to the approval of the Board of Directors.

2.6 Right of First Refusal, Co-Sale and Drag-Along Provisions. Following the Initial Closing, the Company shall require all purchasers (other than purchasers under the 2004 Purchase Agreement) from the Company of shares of Common Stock who, following such purchase, shall hold greater than 1 % of Common Stock (calculated on a fully-diluted basis), to agree to the terms and conditions set forth in the attached Exhibit 2.6.

2.7 Inspection. The Company shall permit each Preferred Securityholder, at such Securityholder's expense, to visit and inspect the Company's properties, to examine its books of account and records and to discuss the Company's affairs, finances and accounts with its officers, all at such reasonable times as may be requested by each such Securityholder; provided, however, that the Company shall not be obligated to provide access (i) to a competitor of the Company, any information which it reasonably considers to be a trade secret or confidential information; or (ii) to MEDI Ventures, any trade secret or confidential information if the Board of Directors determines in good faith that it would be contrary the Company's best interests to share such information with MEDI Ventures. The rights of a Preferred Securityholder under this Section 2.7 may not be assigned as part of such Securityholder's sale of any of the Registrable Securities except with the consent of the Company, which consent shall not be unreasonably withheld; provided, however, that notwithstanding the foregoing, (i) MEDI Ventures may assign these rights to any member of the MEDI Group and (ii) any Securityholder which is a grantor trust may transfer its rights to its grantor.

2.8 Employee Confidentiality Agreement. The Company shall require that each employee and consultant hired or engaged by the Company following the date hereof signs an employee confidentiality agreement, substantially in the form attached hereto as Exhibit 2.8 (unless such agreement shall be modified by the Company upon the approval of the Board of Directors (including a majority of the Series B Directors)). Further, within 15 days of the Initial Closing, the Company shall require that each of its current employees and consultants signs such an employee confidentiality agreement, substantially in the form attached hereto as Exhibit 2.8.

2.9 Securityholder Matters.

(a) This Agreement shall not impose any fiduciary duty on any Securityholder or its Affiliates in any such Securityholder's capacity as a Securityholder. To the maximum extent permitted by Law, each Securityholder hereby waives all fiduciary duties that, absent such waiver, may be implied by Law, and, in doing so, recognizes, acknowledges and agrees that its duties and obligations to each other Securityholder and to the Company are only as expressly set forth herein.

(b) Each Securityholder acknowledges that the other Securityholders and their Affiliates may own interests in and/or manage other businesses, including businesses that may compete with the Company or the other Securityholders. Each Securityholder and its Affiliates, and their respective officers, directors, Securityholders, partners, members, agents and employees, and each member of the Board of Directors (or observer thereon) designated by such Securityholder (collectively, a "CORPORATE OPPORTUNITIES GROUP"), shall not be prohibited or restricted from engaging or investing in, independently or with others, any business opportunity of any type or description, including, without limitation, those business opportunities that might be the same or similar to the Company's business. None of the Company, any Securityholder or such Securityholder's Corporate Opportunities Group shall have any right in or to such other business opportunities of any other Securityholder or such other Securityholder's Corporate Opportunities Group or to the income or proceeds derived therefrom. No Securityholder or its Corporate Opportunities Group shall be obligated to present any business opportunity to the Company or any other Securityholder or such other Securityholder's Corporate Opportunities Group, even if the opportunity is of the character that, if presented to the Company, could be undertaken by the Company or, if presented to any other Securityholder or other Securityholder Corporate Opportunities Group, could be undertaken by such Persons. Each Securityholder and its Corporate Opportunities Group shall have the right to hold any such business opportunity for its own account or to recommend such opportunity to Persons other than the Company, any other Securityholder or any Person in such other Securityholder's Corporate Opportunities Group.

(c) Notwithstanding the foregoing, nothing in this Section 2.9 shall relieve, limit, alter or otherwise change the fiduciary duty owed to the Company by any officer, director or stockholder who is not a Securityholder.

SECTION 3. PREEMPTIVE RIGHTS

3.1 Offer to Sell. Except in the case of Excluded Securities, the Company shall not issue, sell or exchange, or agree to issue, sell or exchange (i) any Common Shares, (ii) any Preferred Shares of the Company that by their terms are convertible into or exchangeable for Common Shares, or (iii) any option, warrant or other right to subscribe for, purchase or otherwise acquire any equity security of the Company specified in the foregoing clause (i) or (ii), in each such case for the purpose of financing the business of the Company (an "EQUITY FINANCING"), unless in each case the Company shall have first offered to sell to the Securityholders (for purposes of this Section 3, each an "OFFEREE" and, together, the "OFFEREES") such Offeree's Section 3 Proportionate Percentage of such securities (for purposes of this Section 3, the "OFFERED SECURITIES"), at a price and on such other material terms and conditions as are generally applicable to such Equity Financing and which shall have been specified by the Company in writing and delivered to each Offeree (for purposes of this Section 3, the "OFFER"). The Offer shall by its terms remain open and irrevocable for a period of 20 Business Days from the date it is delivered by the Company to the Offerees. For purposes of this Section 3, the "SECTION 3 PROPORTIONATE PERCENTAGE" means, as of any date of determination, the percentage figure equal to the ratio between the number of Common Shares beneficially owned by an Offeree of the Company and the aggregate number of Common Shares outstanding (and issuable upon the exercise of all convertible securities outstanding).

3.2 Acceptance of Offer. Each Offeree shall have the right and option, for a period of 20 Business Days after delivery by the Company of the Offer, to accept any or all its Offered Securities on the terms stated in the Offer. Acceptance shall be made by delivering, within the 20 Business Day period of the Offer, a written notice (for purposes of this Section 3, a "NOTICE OF ACCEPTANCE") to the Company, which notice shall set forth the portion of the Offered Securities that such Offeree elects to purchase. Such Offer, or any portion thereof, may be irrevocably rejected at any time within such 20 Business Day period by written notice to the Company by the Offeror.

3.3 Overallotment Securities. If any Offeree fails to properly accept all of its Offered Securities, then such unaccepted Offered Securities shall become the "OVERALLOTMENT SECURITIES." Each Offeree that properly accepts all of its Offered Securities (a "FULLY-EXERCISING OFFEREE") shall have the right, at the time it accepts and for a period of 10 days thereafter (collectively, the "OVERALLOTMENT PERIODS"), to purchase a portion of the Overallotment Securities on a pro rata basis according to such Fully-Exercising Offeree's Section 3 Proportionate Percentage.

3.4 Remaining Securities. Upon expiration of the Overallotment Periods, the Company shall have 90 days to sell all or any part of the remaining Overallotment Securities (the "REMAINING SECURITIES") to any other Person or Persons, upon terms and conditions in all material respects, including, without limitation, price, which are not materially more favorable, in the aggregate, to such other Person or Persons and not materially less favorable to the Company than those set forth in the Offer. Upon the closing of the sale to such other Person or Persons of all the Remaining Securities, which closing shall include full payment to the Company, (i) the Offerees shall purchase from the Company, and the Company shall sell to the Offerees, the Offered Securities with respect to which Notices of Acceptance were delivered to the Company by the Offerees for the price and at the terms specified in the Offer, and (ii) the Fully-Exercising Offerees shall purchase from the Company, and the Company shall sell to the Fully-Exercising Offerees, the Overallotment Securities.

3.5 Excluded Securities. The rights of the Offerees under this Section 3 shall not apply to the following securities (the "EXCLUDED SECURITIES"):

(a) securities issued in connection with a Public Offering or securities issued in a Rule 144A offering;

(b) Common Shares issued, or stock options granted, or Common Shares issuable upon exercise of stock options granted, pursuant to the MEP;

(c) securities issued as a stock dividend or upon any stock split or other subdivision or combination of Shares;

(d) the issuance of any Common Shares upon the exercise, conversion or exchange of any option, warrant, convertible or exchangeable security or other right to subscribe for, purchase or otherwise acquire any security of the Company;

(e) securities issued (i) in connection with any acquisition of the stock, assets or business of a Person, or (ii) in respect of the initiation of a joint venture or strategic alliance with another Person, in each case, which has been approved by the Board of Directors; and

(f) any securities offered or sold after an IPO.

3.4 Board of Directors Determination. The Board of Directors shall be entitled to make any determination required or permitted to be made under this Section 3, including any determination of compliance with the provisions hereof by any Person, and any such determination shall be final and binding on the Company and all stockholders.

SECTION 4. RESTRICTIONS ON TRANSFER.

4.1 General Restriction. Each Securityholder agrees that it will not, directly or indirectly, offer, sell, assign, transfer, grant or sell a participation in, pledge or otherwise dispose of any Shares (or solicit any offers to buy or otherwise acquire, or take a pledge of, any Shares) in any manner that would conflict with or violate the 1933 Act or this Agreement.

4.2 Legends.

(a) To the extent required by, or advisable to comply with, the 1933 Act or other applicable law, the Company shall affix to each certificate evidencing outstanding Shares that is issued to any Securityholder a legend in substantially the following form:

"THE SECURITIES EVIDENCED BY THIS CERTIFICATE HAVE NOT BEEN REGISTERED UNDER THE SECURITIES ACT OF 1933, AS AMENDED. NO REGISTRATION OF TRANSFER OF SUCH SECURITIES WILL BE MADE ON THE BOOKS OF THE ISSUER UNLESS SUCH TRANSFER IS MADE IN CONNECTION WITH AN EFFECTIVE REGISTRATION STATEMENT UNDER SUCH ACT OR PURSUANT TO AN EXEMPTION FROM THE REGISTRATION REQUIREMENTS OF SUCH ACT OR SUCH ACT DOES NOT APPLY.

THE SECURITIES EVIDENCED BY THIS CERTIFICATE ARE SUBJECT TO CERTAIN RESTRICTIONS ON TRANSFER AS SET FORTH IN A SECURITYHOLDER AGREEMENT DATED AS OF SEPTEMBER 28, 2004, A COPY OF WHICH IS ON FILE AT

THE PRINCIPAL EXECUTIVE OFFICES OF THE ISSUER. NO REGISTRATION OF TRANSFER OF SUCH SECURITIES WILL BE MADE ON THE BOOKS OF THE ISSUER UNLESS AND UNTIL SUCH RESTRICTIONS SHALL HAVE BEEN COMPLIED WITH."

(b) In the event that any Shares shall cease to be Restricted Shares, the Company shall, upon the written request of the holder thereof, issue to such holder a new certificate evidencing such Shares without the first paragraph of the legend required by Section 4.2(a) endorsed thereon. In the event that any Shares shall cease to be subject to the restrictions on transfer set forth in this Agreement, the Company shall, upon the written request of the holder thereof, issue to such holder a new certificate evidencing such Shares without the second paragraph of the legend required by Section 4.2(a).

4.3 Certain Restrictions on Transfer. Each Securityholder agrees that it will not, directly or indirectly, make any Sale or create, incur or assume any consensual Encumbrance with respect to any Shares held by such Securityholder, other than: (a) any Sale that is made in compliance with the procedures, and subject to the limitations, set forth in Section 4.4; (b) any Sale that is made in compliance with the procedures, and subject to the limitations, set forth in Section 4.5; (c) any Sale pursuant to a Public Offering in accordance with Section 5; or (d) any Sale to a Permitted Transferee. Notwithstanding the foregoing, except as otherwise expressly provided herein, all Sales permitted by the foregoing clauses (a) through (d) shall be subject to, and shall not be made other than in compliance with, the provisions of Sections 4.1, 4.2, 4.6 and 4.7.

4.4 Right of First Refusal.

(a) If any Securityholder receives from or otherwise negotiates with a Third Party a bona fide financed offer to purchase (for purposes of Sections 4.4 and 4.5, an "OFFER") any of the Shares owned or held by such Securityholder, and such Securityholder intends to pursue a sale of such Shares to such Third Party, such Securityholder (for purposes of Sections 4.4 and 4.5, the "PROSPECTIVE SELLER") shall provide the Company and each Securityholder that owns Shares (for purposes of Sections 4.4 and 4.5, the "OTHER SECURITYHOLDERS") written notice of such Offer (for purposes of Sections 4.4 and 4.5, an "OFFER NOTICE"). The Offer Notice shall identify the Third Party making the Offer, the number of Shares with respect to which the Prospective Seller has such an Offer (for purposes of Sections 4.4 and 4.5, the "OFFERED SHARES"), the price per Share at which a sale is proposed to be made (for purposes of Sections 4.4 and 4.5, the "OFFER PRICE"), the form of consideration to be paid and all the other material terms and conditions of the Offer.

(b) The receipt of an Offer Notice by each Other Securityholder and the Company from a Prospective Seller shall constitute an offer by such Prospective Seller to sell to each Other Securityholder (other than the Prospective Seller and its Affiliates) and the Company the Offered Shares at the Offer Price in cash (in an amount equal to the cash consideration specified in such Offer Notice or, if such consideration is not cash, an amount equal to the fair market value of such noncash consideration as determined in good faith by the Board of Directors). Such offer shall be irrevocable for 20 Business Days after receipt of such Offer Notice (for purposes of Sections 4.4 and 4.5, the "NOTICE PERIOD") by each such Other Securityholder and the Company. During the Notice Period, each such Other Securityholder and the Company shall, subject to the priorities set forth in the next succeeding paragraph, have the right to accept such offer as to all or a portion of the Offered Shares by giving a written notice of acceptance (for purposes of this Section 4.4, the "NOTICE OF ACCEPTANCE") to the Prospective Seller prior to the expiration of the Notice Period (for the purposes of this Section 4.4, any such Other Securityholder or the Company so accepting such offer, an "ACCEPTING PARTY"). In the event that within five Business Days prior to the expiration of the Notice Period, the Prospective Seller shall not have received Notices of Acceptance for all the Offered Shares, the Prospective Seller shall notify each such Other Securityholder

of such fact and shall provide each thereof an opportunity to submit an additional Notice of Acceptance of any such Offered Shares.

Each such Other Securityholder and the Company shall be entitled to accept such offer from the Prospective Seller in the following order of priority: First, the Company shall be entitled to accept such offer for any or all of the Offered Shares; second, if the Company shall not have accepted such offer for all the Offered Shares, each such Other Securityholder shall be entitled to accept such offer for not more than the portion of the remaining Offered Shares determined on a pro rata basis based on the ratio of the number of Common Shares then beneficially owned by such Other Securityholder to the number of Common Shares then beneficially owned by all such Other Securityholders; and third, if one or more such Other Securityholders and the Company have not accepted such offer for all the Offered Shares, each such Other Securityholder shall then be entitled to accept such offer for not more than the portion of the remaining Offered Shares determined on a pro rata basis based on the ratio of (i) the number of Offered Shares specified in such Other Securityholder's Notice of Acceptance in respect of which such Other Securityholder shall not be entitled to accept the Prospective Seller's offer as a result of the application of clause second above to (ii) the number of Offered Shares specified in all such Other Securityholders' Notices of Acceptance in respect of which such Other Securityholders shall not be entitled to accept the Prospective Seller's offer as a result of the application of clause second above (it being understood that each such Other Securityholder shall be entitled to indicate its interest in accepting more than its pro rata share of the remaining Offered Shares and to accept the Prospective Seller's offer with respect to such additional Offered Shares if all the Offered Shares are not otherwise accepted pursuant to clause first, second and third). If the Company or any such Other Securityholder so accepts the Prospective Seller's offer, such Person will purchase for cash from the Prospective Seller, and the Prospective Seller will sell to such Accepting Party, such number of Offered Shares as to which such Accepting Party shall have accepted the Prospective Seller's offer. The price per Share to be paid by such Accepting Party shall be the Offer Price specified in the Offer Notice. The Notice of Acceptance shall specify (i) such Accepting Party's acceptance of the Prospective Seller's offer and (ii) the number of Offered Shares to be purchased by such Accepting Party.

(c) The consummation of any such purchase by and sale to any Accepting Party shall take place on such date, not later than 30 Business Days after receipt of the Notice of Acceptance from such Accepting Party by the Prospective Seller, as such Accepting Party and the Prospective Seller shall select. Upon the consummation of such purchase and sale, the Prospective Seller shall (i) deliver to the Accepting Party certificates (in the case of certificated shares) evidencing the Offered Shares purchased and sold duly endorsed in blank or accompanied by written instruments of transfer in form satisfactory to such Accepting Party duly executed by the Prospective Seller, or an instruction (in the case of uncertificated shares) to register such Offered Shares purchased and sold in a manner satisfactory to the Accepting Party, and (ii) shall assign all its rights under this Agreement with respect to the Offered Shares purchased and sold pursuant to an instrument of assignment reasonably satisfactory to such Accepting Party.

(d) In the event that (i) each such Other Securityholder and the Company shall have received an Offer Notice from a Prospective Seller but the Prospective Seller shall not have received from the Company and one or more Other Securityholders Notices of Acceptance as to all the Offered Shares prior to the expiration of the Notice Period or (ii) an Accepting Party shall have given a Notice of Acceptance to the Prospective Seller but shall have failed to consummate, other than as a result of the fault of the Prospective Seller, a purchase of the Offered Shares with respect to which such Notice of Acceptance was given within 45 days after receipt of the Notice of Acceptance by the Prospective Seller, such Prospective Seller shall have the right to reject any or all Notices of Acceptance theretofore received from the Other Securityholders and the Company, and nothing in this Section 4.4 shall limit the right of the Prospective Seller to make a sale of the Offered Shares so long as all the Offered Shares that are sold

or otherwise disposed of by the Prospective Seller (which number of Offered Shares shall be not less than the number of Offered Shares specified in such Offer Notice) are sold for the consideration specified in such Offer Notice (A) within 60 days after the date of receipt of such Offer Notice by each such Other Securityholder and the Company, (B) at an amount not less than the Offer Price included in such Offer Notice and (C) to the Third Party making the Offer (so long as none of such Third Parties is a Restricted Transferee).

(e) In the event that each such Other Securityholder and the Company shall have received an Offer Notice from a Prospective Seller but shall not have given a Notice of Acceptance for all the Offered Shares to the Prospective Seller prior to the expiration of the Notice Period following receipt of such Offer Notice and such Prospective Seller shall not have sold the remaining Offered Shares before the expiration of the 60 day period in accordance with paragraph (d) above, then such Prospective Seller shall not give another Offer Notice for a period of 90 days from the last day of such 60 day period.

(f) Anything in this Section 4.4 or in Section 4.3 to the contrary notwithstanding, the provisions of this Section 4.4 will not be applicable to any Sale or Encumbrance described in clauses (b) through (e) of Section 4.3.

4.5 Right to Participate in Certain Dispositions.

(a) So long as any Securityholder (and its Affiliates) shall beneficially own, in the aggregate, at least 10% of the Common Shares outstanding or issuable upon the exercise or conversion of any outstanding options or other rights to acquire Common Shares, no such Securityholder shall in any transaction or series of related transactions, directly or indirectly, sell or otherwise dispose of for value any Shares held by it to any Third Party or Parties, unless the terms and conditions of such sale or other disposition shall include an offer to include, at the option of each of the Other Securityholders, in such sale or other disposition to the Third Party or Third Parties, such Other Securityholder's Pro Rata Portion (as hereinafter defined) of the Offered Shares on the terms set forth in this Section 4.5.

(b) If, so long as any Securityholder (and its Affiliates) shall beneficially own, in the aggregate, at least 10% of the Common Shares outstanding or issuable upon the exercise or conversion of any outstanding options to acquire Common Share, any such Securityholder receives from a Third Party or Parties an Offer to acquire the Offered Shares, thus becoming a Prospective Seller in accordance with the definition of Section 4.4, and such Prospective Seller intends to pursue a sale of such Shares to such Third Party or Parties, the Prospective Seller shall send the Offer Notice to each of the Other Securityholders not later than the 20th Business Day prior to the consummation of the sale or other disposition contemplated by the Offer. The Offer Notice shall identify the Offered Shares, the price offered for such Offered Shares, all other material terms and conditions of the Offer and, in the case of an Offer in which the consideration payable for Shares consists in whole or in part of consideration other than cash, such information relating to such other consideration as the Company may reasonably determine. During the Notice Period, each Other Securityholder shall have the right and option to notify the Prospective Seller of such Other Securityholder's interest in selling or otherwise disposing of up to its Pro Rata Portion of the Offered Shares pursuant to the Offer. Each Other Securityholder desiring to exercise such option shall, prior to the expiration of the Notice Period, provide the Prospective Seller with a written notice specifying the number of Shares as to which such Other Securityholder has an interest in selling or otherwise disposing of pursuant to the Offer (for purposes of this Section 4.5, a "NOTICE OF INTEREST"), and shall deliver to the Prospective Seller (A) the certificate or certificates (in the case of certificated shares) evidencing the Shares to be sold or otherwise disposed of pursuant to such Offer by such Other Securityholder duly endorsed in blank or accompanied by written instruments of transfer in form satisfactory to the Prospective Seller executed by such Other Securityholder, or an instruction (in the case of uncertificated shares) to register the transfer of the Shares or be sold or otherwise disposed of

pursuant to such Offer by such Other Securityholders in a form satisfactory to the Prospective Seller executed by such Other Securityholder, (B) an instrument of assignment reasonably satisfactory to the Prospective Seller assigning, as of the consummation of the sale or other disposition to the Third Party or Parties, all such Other Securityholder's rights hereunder with respect to the Shares to be sold or otherwise disposed of, and (C) a special irrevocable power-of-attorney authorizing the Prospective Seller to sell or otherwise dispose of such Shares pursuant to the terms of the Offer and to take all such actions as shall be necessary or appropriate in order to consummate such sale or other disposition. Delivery of such certificate or certificates evidencing the Shares to be sold (or such instruction), the instrument of assignment and the special irrevocable power-of-attorney authorizing the Prospective Seller to sell or otherwise dispose of such Shares shall constitute an irrevocable election by such Other Securityholder to authorize and permit the Prospective Seller to sell such Shares pursuant to the Offer.

(c) Promptly after the consummation of the sale or other disposition of the Shares of the Prospective Seller and the Other Securityholders to the Third Party or Parties pursuant to the Offer, the Prospective Seller shall remit to each of the Other Securityholders the total sales price of the Shares of such Other Securityholders sold or otherwise disposed of pursuant thereto.

(d) If at the end of the Notice Period, any Other Securityholder shall not have given a Notice of Interest (and delivered all other required documents) with respect to some or all of its Pro Rata Portion of the Offered Shares, such Other Securityholder will be deemed to have waived all its rights under this Section 4.5 with respect to the sale or other disposition pursuant to the Offer of the portion of its Pro Rata Portion of the Offered Shares with respect to which a Notice of Interest shall not have been given. If, at the end of the 60 day period following the giving of the Offer Notice, the Prospective Seller has not completed the sale of all the Offered Shares and the Shares with respect to which Other Securityholders shall have given Notices of Interest pursuant to this Section 4.5, the Prospective Seller shall return to such Other Securityholders all certificates evidencing the unsold Shares that such Other Securityholders delivered for sale or other disposition pursuant to this Section 4.5 (or any such instructions) and such Other Securityholders' related instruments of assignment and powers-of-attorney.

(e) Except as expressly provided in this Section 4.5, the Prospective Seller shall have no obligation to any Other Securityholder with respect to the sale or other disposition of any Shares owned by such Other Securityholder in connection with this Section 4.5. Anything herein to the contrary notwithstanding and irrespective of whether any Notice of Interest shall have been given, the Prospective Seller shall have no obligation to any Other Securityholder to sell or otherwise dispose of any offered Shares pursuant to this 4.5 or as a result of any decision by the Prospective Seller not to accept or consummate any Offer or sale or other disposition with respect to the offered Shares (it being understood that any and all such decisions shall be made by the Prospective Seller in its sole discretion). No Other Securityholder shall be entitled to sell or otherwise dispose of Shares directly to any Third Party or Parties pursuant to an Offer (it being understood that all such sales and other dispositions shall be made only on the terms and pursuant to the procedures set forth in this Section 4.5).

(f) For purposes of this Section 4.5, "PRO RATA PORTION" means, with respect to each Other Securityholder, a number of Shares of the same class, series or type as the Offered Shares (subject to the next succeeding sentence) equal to the product of (a) the total number of Offered Shares, times (b) a fraction, the numerator of which shall be the fair market value (as determined by the Board of Directors in good faith)of the total number of Shares owned by such Other Securityholder, and the denominator of which shall be the fair market value (as determined by the Board of Directors in good faith) of the total number of Shares outstanding. Anything in this Section 4.5 to the contrary notwithstanding, in the event any such Other Securityholder shall have an insufficient number of Shares of the class, series or type of the Offered Shares necessary to exercise its rights under this Section 4.5 in full, such Other Securityholder may substitute therefor Shares of any other class, series or type with an aggregate fair market value that,

when added to the fair market value of the number of Shares of the same class, series or type as the Offered Shares owned by such Other Securityholder, shall permit such Other Securityholder to dispose of its entire Pro Rata Portion in the Offer pursuant to this Section 4.5.

(g) Anything in this Section 4.5 or in Section 4.3 to the contrary notwithstanding, the provisions of this Section 4.5 will not be applicable to any Sale of Shares described in clause (c) or (e) of Section 4.3. Nothing in this Section 4.5 shall affect any of the obligations of any of the Securityholders under any other provision of this Agreement.

4.6 Certain Persons to Execute Agreement.

(a) Each Securityholder agrees that it will not make any Sale or create, incur or assume any Encumbrance with respect to any Shares held by such Securityholder, unless, prior to the consummation of any such Sale or the creation, incurrence or assumption of any such Encumbrance, the Person to whom such Sale is proposed to be made or the Person in whose favor such Encumbrance is proposed to be created, incurred or assumed (for purposes of this Section 4.6, a "PROSPECTIVE TRANSFEREE") (i) executes and delivers to the Company an agreement, in form and substance satisfactory to the Company, whereby such Prospective Transferee confirms that, with respect to the Shares that are the subject of such Sale or Encumbrance, it shall be deemed to be a "Securityholder" for the purposes of this Agreement and agrees to be bound by all the terms of this Agreement to which the transferor Securityholder is a party and (ii) unless such Prospective Transferee is a recognized institutional investor, delivers to the Company an opinion of counsel, satisfactory in form and substance to the Company, to the effect that the agreement referred to above that is delivered by such Prospective Transferee is a legal, valid and binding obligation of such Prospective Transferee enforceable against such Prospective Transferee in accordance with its terms. Upon the execution and delivery by such Prospective Transferee of the agreement referred to in clause (i) of the next preceding sentence and, if required, the delivery of the opinion of counsel referred to in clause (ii) of the next preceding sentence, such Prospective Transferee shall be deemed a "Securityholder" for the purposes of this Agreement, and shall have the rights and be subject to the obligations of a Securityholder hereunder with respect to the Shares held by such Prospective Transferee or in respect of which such Encumbrance shall have been created, incurred or assumed.

(b) In the event that the Company shall issue any Shares, or make a Sale of any issued Shares, to any Person, the Company shall require such Person to execute and deliver to the Company an agreement, in form and substance satisfactory to the Company, whereby such Person confirms that, with respect to the Shares that are the subject of such Sale, it shall be deemed to be a "Securityholder" for purposes of this Agreement and agrees to be bound by all the terms of this Agreement, such Person shall thereupon be deemed a "Securityholder" for purposes of this Agreement, and shall have the rights and be subject to the obligations of a Securityholder hereunder with respect to the Shares held by such Person.

(c) Anything in this Section 4.6 or in Section 4.3 or 4.4 to the contrary notwithstanding, the provisions of this Section 4.6 will not be applicable to any Sale of Shares pursuant to and in accordance with Section 5.

4.7 Improper Transfer. Any attempt to sell, assign, transfer, grant or sell a participation in, pledge or otherwise dispose of any Shares not in compliance with this Agreement shall be null and void and neither the Company nor any transfer agent shall give any effect in the Company's stock records to such attempted sale, assignment, transfer, grant or sale of a participation, pledge or other disposition.

SECTION 5. REGISTRATION RIGHTS.

5.1 Registration Upon Request.

(a) Upon the written request of the holder or holders of at least 25% of the Registrable Shares then outstanding requesting that the Company effect the registration under the 1933 Act of all or part of the Registrable Shares held by such holder or holders and specifying the intended method or methods of disposition of such Registrable Shares, the Company will promptly give written notice of such requested registration to all holders of Registrable Shares and thereupon will use its best efforts to effect the registration under the 1933 Act, as expeditiously as is reasonable, of:

(i) the Registrable Shares that the Company has been so requested to register by such holder or holders, for disposition in accordance with the intended method of disposition stated in such request; and

(ii) all other Registrable Shares that the Company has been requested to register by the holders of Registrable Shares by written request delivered to the Company within 20 Business Days after the giving of such written notice by the Company (which request shall specify the intended method of disposition of such Registrable Shares), all to the extent requisite to permit the disposition (in accordance with the intended methods thereof as aforesaid) of the Registrable Shares so to be registered; provided, however, that:

(A) the Company shall not be required to effect any registration pursuant to this Section 5.1, unless it shall already be a Public Company;

(B) the Company shall not at any time be required to effect any registration pursuant to this Section 5.1 unless the requests from holders of Registrable Shares for such registration cover an aggregate number of Registrable Shares with an aggregate market value on the date of the initial request for such registration of at least $5 million;

(C) the Company shall not be required to effect a registration pursuant to this Section 5.1, other than with a registration statement on Form S-3 or a similar short-form registration statement, within a period of 12 months after the effective date of any other registration statement relating to any registration request under this Section 5.1 or to any registration of which prior notice shall have been given to all holders of outstanding Registrable Shares pursuant to Section 5.3 that was not effected with a registration statement on Form S-3 or a similar short-form registration statement;

(D) if the Company shall have previously effected a registration pursuant to this Section 5.1 or shall have previously effected a registration of which prior notice shall have been given to all holders of outstanding Registrable Shares pursuant to Section 5.3, the Company shall not be required to effect a registration pursuant to this Section 5.1 until a period of 6 months shall have elapsed from the effective date of the most recent such registration; and

(E) with respect to any registration statement filed, or to be filed, pursuant to this Section 5.1, if the Board of Directors determines that, in its judgment, it would (because of the existence of plans or negotiations regarding any material acquisition involving, or the sale or recapitalization of, the Company or any of its subsidiaries or any material financing activity, or the existence of material non-public

information about the Company, or the unavailability of any required financial statements, or any other event or condition of similar significance to the Company and its subsidiaries, taken as a whole) be significantly disadvantageous (a "DISADVANTAGEOUS CONDITION") to the Company and its Affiliates, taken as a whole, for such a registration statement to become effective, or to be maintained effective, the Company shall, notwithstanding any other provision of this Section 5, be entitled, upon the giving of a written notice (a "DELAY NOTICE") to such effect to each holder of Registrable Shares included or to be included in such registration statement, to cause such registration statement to be withdrawn and the effectiveness of such registration statement terminated, or, in the event no registration statement has yet been filed, shall be entitled not to file any such registration statement, until, in the judgment of the Board of Directors, such Disadvantageous Condition no longer exists (notice of which the Company shall promptly deliver to the holders of Registrable Shares with respect to which any such registration statement has been filed, or was to have been filed), but in no event for longer than 90 days after the date of the Delay Notice. Upon receipt of any notice of the existence of a Disadvantageous Condition, such holders of Registrable Shares selling securities pursuant to an effective registration statement will forthwith discontinue use of the prospectus contained in such registration statement and, if so directed by the Company, each such holder of Registrable Shares will deliver to the Company all copies of the prospectus then covering such Registrable Shares current at the time of receipt of such notice, and, in the event no registration statement has yet been filed, all drafts of the prospectus covering such Registrable Shares. Notwithstanding the foregoing provisions of this subparagraph (E), no registration statement filed and subsequently withdrawn by reason of any existing or anticipated Disadvantageous Condition as hereinabove provided shall count as one of the two (2) registration statements referred to in the limitation in Section 5.1 (b), or count against the limitation in Section 5.1(a)(ii)(C) or 5.1(a)(ii)(D). The Company may not give a Delay Notice more than once in any period of 12 consecutive months.

(b) Anything herein to the contrary notwithstanding, the Company shall not be obligated to file more than two registration statements pursuant to this Section 5.1 that are initiated by the Securityholders.

(c) The Company shall pay all Registration Expenses in connection with two registrations of Registrable Shares effected by it that are initiated by the Securityholders in each case pursuant to this 5.1.

(d) In connection with any firm commitment underwriting pursuant to this Section 5.1, the Company will not register securities for sale for the account of any Persons other than the Company and holders of Registrable Shares.

(e) In connection with any underwritten offering with respect to which holders of Registrable Shares shall have requested registration pursuant to this Section 5.1, the holders of a majority of the Registrable Shares participating in such offering shall have the right to select the managing underwriter with respect to such offering.

5.2 Request for Registration on Form S-3. Subject to the terms of this Agreement, in the event that the Company receives from the holder or holders of at least 25% of the Registrable Shares then outstanding, a written request that the Company effect any registration on Form S-3 (or any successor form to Form S-3 regardless of its designation) under the 1933 Act at a time when the Company is eligible to register securities on Form S-3 (or any successor form to Form S-3 regardless of

its designation) for an offering of Registrable Shares which such holder or holders in their good faith discretion determine would have an anticipated offering price of at least $ 1 million, the Company will promptly give written notice of the proposed registration to the holder or holders and will as soon as practicable use its best efforts to effect registration of the Registrable Shares specified in such request, together with all or such portion of the Registrable Shares of any holder or holders joining in such request as are specified in a written request delivered to the Company within 20 days after written notice from the Company of the proposed registration. There shall be no limit to the number of occasions on which the Company shall be obligated to effect registration under this Section 5.2, but the Company shall not be obligated to effect more than one such registrations in any 12 month period. The Company agrees to keep a registration made pursuant to the provisions of this Section 5.2 effective until the earlier to occur of 90 days following the date such registration becomes effective or until the holder or holders have completed the distribution described in the registration statement relating thereto. Notwithstanding the foregoing, the Company shall not be obligated to effect any registration pursuant to this Section 5.2:

(a) if Form S-3 is not available for such offering by the holder or holders;

(b) if the holder or holders, together with the holders of any other securities of the Company entitled to inclusion in such registration, propose to sell Registrable Shares and such other securities (if any) at an aggregate price to the public of less than $ 1 million before deduction of underwriting discounts and selling commissions;

(c) if within 30 days of receipt of a written request from any holder or holders pursuant to this Section 5.2, the Company gives notice to such holder or holders of the Company's intention to make a public offering within 90 days;

(d) if the Company shall furnish to the holder or holders a certificate signed by the President of the Company stating that, in the good faith judgment of the Board of Directors, it would be seriously detrimental to the Company for any registration to be effected as requested under this Section 5.2, the Company shall have the right to defer the filing of a registration statement with respect to such offering for a period of not more than 90 days from delivery of the request of the holder or holders requesting such registration; provided, however, that the Company may not utilize this right more than once in any twelve (12)-month period; or

(e) in any particular jurisdiction in which the Company would be required to qualify to do business or to execute a general consent to service of process in effecting such registration, qualification or compliance.

5.3 Incidental Registration.

(a) If, at any time after the Company has completed an IPO, the Company proposes to register (other than pursuant to Section 5.1) any of its authorized but unissued Common Shares under the 1933 Act on a form and in a manner that would permit registration of Registrable Shares for sale to the public under the 1933 Act, it will each such time give prompt written notice to all holders of Registrable Shares of its intention to do so, describing such securities and specifying the form and manner and the other relevant facts involved in such proposed registration (including, without limitation, whether or not such registration will be in connection with an underwritten offering of its Common Stock and, if so, the identity of the managing underwriter and whether such offering will be pursuant to a "best efforts" or "firm commitment" underwriting). Upon the written request of any such holder of Registrable Shares delivered to the Company within 20 Business Days after such notice shall have been given to such holder (which request shall specify the Registrable Shares intended to be disposed of by such holder and the intended method of disposition thereof), the Company will use its best efforts to effect the registration

under the 1933 Act, as expeditiously as is reasonable, of all Registrable Shares that the Company has been so requested to register by the holders of Registrable Shares, to the extent requisite to permit the disposition (in accordance with the intended methods thereof as aforesaid) of the Registrable Shares so to be registered; provided, however, that:

(i) if, at any time after giving such written notice of its intention to register any of such securities and prior to the effective date of the registration statement filed in connection with such registration, the Company shall determine for any reason not to register such securities, the Company may, at its election, give written notice of such determination to each holder of Registrable Shares that has requested to register Registrable Shares and thereupon the Company shall be relieved of its obligation to register any Registrable Shares in connection with such registration (but not from its obligation to pay the Registration Expenses in connection therewith to the extent provided in Section 5.3(b)), without prejudice, however, to the rights of any one or more holders to request such registration be effected as a registration under Section 5.1;

(ii) if (A) the registration so proposed by the Company involves an underwritten offering of the securities so to be registered, to be distributed by or through one or more underwriters of recognized standing under underwriting terms appropriate for such a transaction, and (B) the managing underwriter of such underwritten offering selected by the Company shall advise the Company that, in its judgment, the number of securities proposed to be included in such offering by the Company (for purposes of this Section 5.3(a), "Company Securities") and the number of shares of Registrable Shares held by all Securityholders proposed to be included in such offering by the holder or holders thereof should be limited, then the Company will promptly advise each such holder of Registrable Shares thereof and the number of Shares proposed to be included in such registration shall be included in the following order of priority:

(i) first, the Company Securities;

(ii) second, the Registrable Shares requested to be included in such registration that are held by the Securityholders (or, if necessary, such Registrable Shares pro rata among the holders thereof based upon the number of Registrable Shares owned by each such holder); and

(iii) third, any other Registrable Shares.

(iii) the Company shall not be obligated to effect any registration of Registrable Shares under this Section 5.3 that is incidental to the registration of any of its securities in connection with any merger, acquisition, exchange offer, dividend reinvestment plan or stock option or other employee benefit plan.

(b) No registration of Registrable Shares effected under this Section 5.3 shall relieve the Company of its obligation to effect registrations of Registrable Shares upon the request of one or more holders pursuant to Section 5.1.

(c) The Company will pay all Registration Expenses in connection with each registration of Registrable Shares effected by it pursuant to this Section 5.3.

(d) In the event that the managing underwriter advises the Securityholders requesting the registration of Registrable Shares pursuant to Section this 5.3 in writing that in its judgment, the

number of shares of Registrable Shares proposed to be included in such offering by the holder or holders thereof should be limited, the managing underwriter (subject to the allocation priority set forth in Section 5.3(a)) may:

i. in the case of an IPO, exclude some or all Registrable Shares from such Registration and underwriting; and

ii. in the case of any subsequent registered public offering of the Company's securities, limit the number of shares of Registrable Shares to be included in such registration and underwriting to not less than twenty-five percent (25%) of the securities included in such registration (based on aggregate market values).

5.4 Registration Procedures.

(a) If and whenever the Company is required to use its best efforts to effect the registration of any Registrable Shares under the 1933 Act as provided in Section 5.1 or 5.3, the Company will as expeditiously as is reasonable:

(i) prepare and file with the Commission on any appropriate form a registration statement with respect to such Registrable Shares and use its best efforts to cause such registration statement to become effective;

(ii) prepare and file with the Commission such amendments (including post-effective amendments) and supplements to such registration statement and the prospectus used in connection therewith as may be necessary to keep such registration statement effective and to comply with the provisions of the 1933 Act with respect to the disposition of all Registrable Shares and other securities covered by such registration statement until the earlier of (A) such time as all such Registrable Shares and other securities have been disposed of in accordance with the intended methods of disposition by the seller or sellers thereof set forth in such registration statement and (B) the expiration of 20 Business Days from the date such registration statement first becomes effective as may be determined by the holders of Registrable Shares covered by such registration statement by notice to the Company prior to the date such registration statement becomes effective;

(iii) furnish to each seller of such Registrable Shares such number of conformed copies of such registration statement and of each such amendment and supplement thereto (in each case including all exhibits), such number of copies of the prospectus included in such registration statement (including each preliminary prospectus and any summary prospectus), in conformity with the requirements of the 1933 Act, such documents incorporated by reference in such registration statement or prospectus, and such other documents, as such seller may reasonably request in order to facilitate the sale or disposition of such Registrable Shares;

(iv) use its best efforts to register or qualify all Registrable Shares and other securities covered by such registration statement under such other securities or "blue sky" laws of such jurisdictions as each seller shall reasonably request, and do any and all other acts and things that may be necessary to enable such seller to consummate the disposition in such jurisdictions of its Registrable Shares covered by such registration statement, except that the Company shall not for any such purpose be required to qualify generally to do business as a foreign corporation in any jurisdiction wherein it is not so qualified, or to subject itself to taxation in respect of doing business in any such jurisdiction, or to consent to general service of process in any such jurisdiction;

(v) furnish to each seller of Registrable Shares a signed counterpart, addressed to such seller, of (A) an opinion of counsel for the Company, dated the effective date of such registration statement (or, if such registration includes an underwritten public offering, dated the date of the closing under the underwriting agreement), and (B) if available, a "cold comfort" letter signed by the independent public accountants who have issued a report on the Company's financial statements included in such registration statement, covering substantially the same matters with respect to such registration statement (and the prospectus included therein) and, in the case of such accountants' letter, with respect to events subsequent to the date of such financial statements, as are customarily covered in opinions of issuer's counsel and in accountants' letters delivered to underwriters in underwritten public offerings of securities and, in the case of the accountants' letter, such other financial matters as such seller may reasonably request;

(vi) immediately notify each seller of Registrable Shares covered by such registration statement at any time when a prospectus relating thereto is required to be delivered under the 1933 Act, of the happening of any event as a result of which the prospectus included in such registration statement, as then in effect, includes an untrue statement of a material fact or omits to state any material fact required to be stated therein or necessary to make the statements therein not misleading in the light of the circumstances then existing or if it is necessary to amend or supplement such prospectus to comply with law, and at the request of any such seller prepare and furnish to such seller a reasonable number of copies of a supplement to or an amendment of such prospectus as may be necessary so that, as thereafter delivered to the purchasers of such Registrable Shares, such prospectus shall not include an untrue statement of a material fact or omit to state a material fact required to be stated therein or necessary to make the statements therein not misleading in the light of the circumstances then existing and shall otherwise comply in all material respects with law and so that such prospectus, as amended or supplemented, will comply with law;

(vii) otherwise use its best efforts to comply with all applicable rules and regulations of the Commission, and make available to its security holders, as soon as reasonably practicable, an earnings statement covering the period of at least 12 months, beginning with the first month of the first fiscal quarter after the effective date of such registration statement, which earnings statement shall satisfy the provisions of Section 11(a) of the 1933 Act;

(viii) use its best efforts to list such securities on each securities exchange on which Common Shares are then listed, if such securities are not already so listed and if such listing is then permitted under the rules of such exchange, and provide a transfer agent and registrar for such Registrable Shares not later than the effective date of such registration statement; and

(ix) issue to any underwriter to which any holder of Registrable Shares may sell such Registrable Shares in connection with any such registration (and to any direct or indirect transferee of any such underwriter) certificates evidencing shares of Class A Common Stock without the legends described in Section 4.2(a).

The Company may require each seller of Registrable Shares as to which any registration being effected to furnish the Company with such information regarding such seller and the distribution of such securities as the Company may from time to time reasonably request in writing and as shall be required by law or by the Commission in connection therewith.

(b) Whenever a registration requested by one or more holders pursuant to Section 5.1 for an underwritten offering, only shares constituting Registrable Shares that are to be distributed by the

underwriters and such unissued securities of the Company as the Company may elect to include in such offering may be included in such registration. If (i) the registration so requested by holders of Registrable Shares pursuant to Section 5.1 involves an underwritten offering of such securities, to be distributed (on a firm commitment basis) by or through one or more underwriters of recognized standing under underwriting terms appropriate for such a transaction, and (ii) the managing underwriter of such offering shall advise the Company that, in its judgment, the number of shares of Registrable Shares held by all Securityholders proposed to be included in such offering by the holder or holders thereof (for purposes of Section 5.4(b), "COMPANY SECURITIES") should be limited, then the Company will promptly advise each such holder of Registrable Shares thereof, and the number of Shares proposed to be included in such registration shall be included in the following order of priority:

(i) first, the Registrable Shares requested to be included in such registration that are held by the Securityholders (or, if necessary, such Registrable Shares pro rata among the holders thereof based upon the number of Registrable Shares owned by each such holder);

(ii) second, the Company Securities; and

(iii) third, any other Registrable Shares.

(c) Whenever a registration requested by one or more holders pursuant to Section 5.1 is for an underwritten offering, only shares constituting Registrable Shares that are to be distributed by the underwriters and such unissued securities of the Company as the Company may elect to include in such offering may be included in such registration.

(d) If requested by the underwriters for any underwritten offering of Registrable Shares on behalf of a holder or holders of Registrable Shares pursuant to a registration requested under Section 5.1, the Company will enter into an underwriting agreement with such underwriters for such offering, such agreement to contain such representations and warranties by the Company and such other terms and conditions as are customarily contained in underwriting agreements with respect to secondary distributions, including, without limitation, indemnities to the effect and to the extent provided in Section 5.6.

(e) If any registration pursuant to Section 5.1 or 5.3 shall be in connection with an underwritten public offering, each holder of Registrable Shares agrees by acquisition of such Registrable Shares, if so required by the managing underwriters, not to effect any public sale or distribution (including any sale pursuant to Rule 144) of Registrable Shares (other than as part of such underwritten public offering) within 10 days prior to the effective date of the registration statement with respect to such underwritten public offering or 180 days after the effective date of such registration statement.

(f) The Company agrees, if so required by the managing underwriters in connection with an underwritten offering of Registrable Shares pursuant to Section 5.1 or 5.3, not to effect any public sale or distribution of any of its equity securities or securities convertible into or exchangeable or exercisable for any of such equity securities during the 10 days prior to and the 180 days after the effective date of any registration statement with respect to such underwritten public offering, except as part of such underwritten offering or except in connection with a stock option plan, stock purchase plan, savings or similar plan, or an acquisition, merger or exchange offer.

5.5 Preparation; Reasonable Investigation. In connection with the preparation and filing of each registration statement registering Registrable Shares under the 1933 Act, the Company will give the holders of Registrable Shares on whose behalf such Registrable Shares are to be so registered and their underwriters, if any, and their respective counsel and accountants, the opportunity to participate

in the preparation of such registration statement, each prospectus included therein or filed with the Commission, and each amendment thereof or supplement thereto, and will give each of them such access to its books and records and such opportunities to discuss the business of the Company with its officers and the independent public accountants who have issued a report on its financial statements as shall be necessary, in the opinion of such holders and such underwriters or their respective counsel, to conduct a reasonable investigation within the meaning of the 1933 Act.

5.6 Indemnification.

(a) In the event of any registration of any equity securities of the Company under the 1933 Act, the Company will indemnify and hold harmless, in the case of any registration statement filed pursuant to Section 5.1, 5.2 or 5.3, the seller of any Registrable Shares covered by such registration statement, its directors and officers, general and limited partners, members and Affiliates (and directors and officers thereof and, if such seller is a portfolio or investment fund, its investment advisors), each other Person who participates as an underwriter in the offering or sale of such securities, each officer and director of each such underwriter, and each other Person, if any, who controls such seller or any such underwriter within the meaning of Section 15 of the 1933 Act or Section 20 of the 1934 Act (collectively, the "Indemnified Persons"), against any losses, claims, damages, liabilities and expenses, joint or several, to which such Indemnified Persons may become subject under the 1933 Act or otherwise (collectively, "Losses"), insofar as such Losses (or actions or proceedings in respect thereof) arise out of or are based upon (i) any untrue statement or alleged untrue statement of any material fact contained in any registration statement under which such securities were registered under the 1933 Act, any preliminary prospectus, final prospectus or summary prospectus included therein, or any amendment or supplement thereto, or any document incorporated by reference therein, or (ii) any omission or alleged omission to state therein a material fact required to be stated therein or necessary to make the statements therein not misleading, and the Company will reimburse such Indemnified Persons for any legal, accounting, consulting, expert or any other expenses reasonably incurred by them in connection with investigating or defending any such Loss; provided, however, that the Company shall not be liable in any such case to the extent that any such Loss (or action or proceeding in respect thereof) or expense arises out of or is based upon an untrue statement or alleged untrue statement or omission or alleged omission made in such registration statement, any such preliminary prospectus, final prospectus, summary prospectus, amendment or supplement in reliance upon and in conformity with written information furnished to the Company for use in the preparation thereof by such Indemnified Persons, as the case may be. Such indemnity shall remain in full force and effect regardless of any investigation made by or on behalf of such Indemnified Persons and shall survive the transfer of such securities by such seller.

(b) The Company may require, as a condition to including any Registrable Shares in any registration statement filed pursuant to Section 5.1, 5.2 or 5.3, that the Company shall have received an undertaking satisfactory to it from (i) the prospective seller of such securities, to indemnify and hold harmless (in the same manner and to the same extent as set forth in 5.6(a), except that any such prospective seller shall not in any event be liable to the Company pursuant thereto for an amount in excess of the net proceeds of sale of such prospective seller's Registrable Shares so to be sold) the Company, each such underwriter of such securities, each officer and director of each such underwriter and each other Person, if any, who controls the Company or any such underwriter within the meaning of Section 15 of the 1933 Act or Section 20 of the 1934 Act, and (ii) each such underwriter of such securities, to indemnify and hold harmless (in the same manner and to the same extent as set forth in 5.6(a)) the Company, each officer and director of the Company, each prospective seller, each officer and director of each prospective seller and each other Person, if any, who controls the Company or any such prospective seller within the meaning of Section 15 of the 1933 Act or Section 20 of the 1934 Act, with respect to any statement in or omission from such registration statement, any preliminary prospectus, final prospectus or summary prospectus included therein, or any amendment or supplement thereto, if such

statement or omission was made in reliance upon and in conformity with written information furnished by such prospective seller or such underwriter, as the case may be, to the Company for use in the preparation of such registration statement, preliminary prospectus, final prospectus, summary prospectus, amendment or supplement. Such indemnity shall remain in full force and effect regardless of any investigation made by or on behalf of the Company or any such director, officer or controlling Person and shall survive the transfer of such securities by such seller.

(c) Promptly after receipt by an Indemnified Person of notice of the commencement of any action or proceeding (including any governmental investigation) involving a claim referred to in Section 5.6(a) or (b), such Indemnified Person will, if a claim in respect thereof is to be made against an indemnifying party, give written notice to the latter of the commencement of such action; provided, however, that the failure of any Indemnified Person to give notice as provided herein shall not relieve the indemnifying party of its obligations under the preceding provisions of this Section 5.6, except to the extent that the indemnifying party is actually prejudiced by such failure to give notice. In case any such action is brought against an Indemnified Person, unless in such Indemnified Person's reasonable judgment a conflict of interest between such Indemnified Person and such indemnifying party may exist in respect of such claim (in which case, the indemnifying party shall not be liable for the fees and expenses of more than one counsel for all sellers of Registrable Shares, or more than one counsel for the underwriters in connection with any one action or separate but similar or related actions), the indemnifying party will be entitled to participate in and to assume the defense thereof, jointly with any other indemnifying party similarly notified, to the extent that it may wish with counsel reasonably satisfactory to such Indemnified Person, and after notice from the indemnifying party to such Indemnified Person of its election so to assume the defense thereof, the indemnifying party will not be liable to such indemnified party for any legal or other expenses subsequently incurred by the latter in connection with the defense thereof.

5.7 Contribution.

(a) If the indemnification provided for in Section 5.6 is unavailable to the Indemnified Person or indemnifying parties in respect of any Losses referred to therein, then each such Indemnified Person and the Company shall contribute to the amount of such Losses (a) as between the Company and the holders of Registrable Shares covered by a registration statement, on the one hand, and the underwriters, on the other, in such proportion as is appropriate to reflect the relative benefits received by the Company and such holders, on the one hand, and the underwriters, on the other, from the offering of the Registrable Shares, or if such allocation is not permitted by applicable law, in such proportion as is appropriate to reflect not only the relative benefits but also the relative fault of the Company and such holders, on the one hand, and of the underwriters, on the other, in connection with the statements or omissions that resulted in such losses, claims, damages or liabilities, as well as any other relevant equitable considerations, and (b) as between the Company, on the one hand, and each holder of Registrable Shares covered by a registration statement, on the other, in such proportion as is appropriate to reflect the relative fault of the Company and of each such holder in connection with such statements or omissions, as well as any other relevant equitable considerations; provided, however, that in no instance shall the maximum contribution of any holder of Registrable Shares exceed the net proceeds received by such holder of Registrable Shares in the transaction which subjects such holder of Registrable Shares to the provisions of this Section 5.7. The relative benefits received by the Company and such holders, on the one hand, and the underwriters, on the other, shall be deemed to be in the same proportion as the total proceeds from the offering (net of underwriting discounts and commissions but before deducting expenses) received by the Company and such holders bear to the total underwriting discounts and commissions received by the underwriters. The relative fault of the Company and such holders, on the one hand, and of the underwriters, on the other, shall be determined by reference to, among other things, whether the untrue or alleged untrue statement of a material fact or the omission or alleged omission to

state a material fact relates to information supplied by the Company and such holders or by the underwriters. The relative fault of the Company, on the one hand, and of each such holder, on the other, shall be determined by reference to, among other things, whether the untrue or alleged untrue statement of a material fact relates to information supplied by such party, and the parties' relative intent, knowledge, access to information and opportunity to correct or prevent such statement or omission.

(b) The Company and the holders of Registrable Shares agree that it would not be just and equitable if contribution pursuant to this Section 5.7 were determined by pro rata allocation (even if the underwriters were treated as one entity for such purpose) or by any other method of allocation that does not take account of the equitable considerations referred to in the next preceding paragraph. The amount paid or payable by an Indemnified Person as a result of the losses, claims, damages or liabilities referred to in the next preceding paragraph shall be deemed to include, subject to the limitations set forth above, any legal or other expenses reasonably incurred by such Indemnified Person in connection with investigating or defending any such action or claim. Notwithstanding the provisions of this 5.7, no underwriter shall be required to contribute any amount in excess of the amount by which the total price at which the Registrable Shares underwritten by it and distributed to the public were offered to the public exceeds the amount of any damages that such underwriter has otherwise been required to pay by reason of such untrue or alleged untrue statement or omission or alleged omission, and no holder of Registrable Shares shall be required to contribute any amount in excess of the amount by which the total price at which the Registrable Shares of such holder were offered to the public exceeds the amount of any damages that such holder has otherwise been required to pay by reason of such untrue or alleged untrue statement or omission or alleged omission. No person guilty of fraudulent misrepresentation (within the meaning of Section 11(f) of the 1933 Act) shall be entitled to contribution from any person who was not guilty of such fraudulent misrepresentation. Each Securityholder's obligation to contribute pursuant to this Section 5.7 is several in the proportion that the proceeds of the offering received by such Securityholder bears to the total proceeds of the offering received by all the Securityholders and not joint.

5.8 Holdback Agreement.

(a) If the Company at any time shall register Registrable Shares under the 1933 Act (including any registration pursuant to Sections 5.1 or 5.3) for sale to the public, the Securityholders shall not sell publicly or privately, make any short sale of, grant any option for the purchase of, or otherwise dispose publicly of, any Registrable Shares (other than those Registrable Shares included in such registration pursuant to Sections 5.1 or 5.3) without the prior written consent of the Company, for a period as shall be determined by the relevant managing underwriter, which period shall begin not more than 10 days prior to the initial filing of the registration statement pursuant to which such public offering shall be made and shall not last more than 180 days after the effective date of such registration statement.

(b) The selling restrictions of this Section 5.8 shall apply (i) only in the event of an IPO, and (ii) only to the extent that the similar selling restrictions apply equally to all of the Company's directors, officers and 1% stockholders.

5.9 Nominees of Beneficial Owners. In the event that any Registrable Shares are held by a nominee for the beneficial owner thereof, the beneficial owner thereof may, at its election, be treated as the holder of such Registrable Shares for purposes of any request or other action by any holder or holders of Registrable Shares pursuant to this Agreement or any determination of any number or percentage of shares of Registrable Shares held by any holder or holders of Registrable Shares contemplated by this Agreement. If the beneficial owner of any Registrable Shares so elects, the Company may require assurances reasonably satisfactory to it of such owner's beneficial ownership of such Registrable Shares.

SECTION 6. MISCELLANEOUS.

6.1 Termination.

(a) This Agreement shall terminate on the later of the 10th anniversary of the execution and delivery hereof or 5 years after an IPO; provided, however, that, notwithstanding the foregoing, Sections 4.6 and 6.9 shall terminate upon an IPO, so long as thereafter the Company shall be a Public Company.

(b) Subject to Section 6.1(a), at any time within 2 years prior to the tenth anniversary of the date hereof, or the expiration of any extension of such initial term of this Agreement, the parties hereto may, by written agreement, extend the duration of Section 2.1 for an additional period not exceeding 10 years from the expiration date of this Agreement as originally fixed or as last extended, as the case may be.

6.2 Certain Representations. Each of the parties hereto represents that this Agreement has been duly authorized, executed and delivered by it and constitutes its legal, valid and binding obligation, enforceable against it in accordance with its terms. Such representation shall survive the execution and delivery hereof, regardless of any investigation made by any party hereto or on such party's behalf.

6.3 Certain Remedies. Without intending to limit the remedies available to any of the parties hereto, each of the parties hereto agrees that damages at law will be an insufficient remedy in the event such party violates the terms hereof and each of the parties hereto further agrees that each of the other parties hereto may apply for and have injunctive or other equitable relief in any court of competent jurisdiction to restrain the breach or threatened breach of, or otherwise specifically to enforce, any of such party's agreements set forth herein.

6.4 Amendments and Waivers. Any term of this Agreement may be amended and the observance of any such term may be waived (either generally or in a particular instance and either retroactively or prospectively) only with the written consent of (i) the Company (by an affirmative vote of 66-2/3% of the members of the Board of Directors), and (ii) Preferred Securityholders holding a majority of the Shares held by the Preferred Securityholders. Each Securityholder shall be bound by any amendment or waiver authorized by this Section 6.4, whether or not such Securityholder shall have consented thereto.

6.5 Notice. Any notice required or permitted hereunder shall be given in writing and shall be conclusively deemed effectively given upon personal delivery, or 5 days after deposit in the United States mail, by registered or certified mail, postage prepaid, addressed (i) if to the Company, to the address as set forth below the Company's name on the signature page of this Agreement, and (ii) if to a Securityholder, to the address set forth below the Securityholder's name on the signature page of this Agreement, or at such other address as the Company or Securityholder may designate by 3 days' advance written notice to the other parties hereto.

6.6 Benefit; Successors and Assigns. Except as otherwise provided herein, this Agreement shall be binding upon and shall inure to the benefit of the parties hereto and their respective successors and permitted assigns. No Securityholder may assign any of its rights under Sections 2.1, 2.5, 2.7, 3, 4.4, 5.1, or 5.3 without the prior written consent of the Company; provided, however, that MEDI Ventures may assign any of its rights under this Agreement to any member of the MEDI Group without the prior written consent of the Company; and provided, further, that without the prior written consent of the Company, (i) any Securityholder which is a partnership may transfer such Securityholder's rights

under this Agreement to such Securityholder's Affiliates, partners and/or limited partners; (ii) any Securityholder which is a limited liability company may transfer such Securityholder's rights under this Agreement to such Securityholder's Affiliates and/or constituent members; and (iii) any Securityholder which is a grantor trust may transfer its rights to its grantor provided that, in each of (i), (ii) and (iii) the transferee of such rights agrees to be bound by the rights and restrictions of this Agreement. This Agreement shall not inure to the benefit of any Prospective Transferee unless such Prospective Transferee shall have complied with the terms of Section 4.6. Except as expressly provided in Sections 5.7 and 5.8, nothing in this Agreement either express or implied is intended to confer on any person other than the parties hereto and their respective successors and permitted assigns, any rights, remedies or obligations under or by reason of this Agreement.

6.7 Aggregation of Stock. All Restricted Shares and Registrable Shares held or acquired by affiliated Persons shall be aggregated for the purpose of determining the availability of any rights under this Agreement.

6.8 Miscellaneous. This Agreement amends and restates in its entirety the Original Securityholder Agreement, which agreement shall be of no further force or effect. Further, this Agreement sets forth the entire agreement and understanding among the parties hereto, and supersedes all prior agreements and understandings, relating to the subject matter hereof. The parties hereto acknowledge that each of them has been represented by counsel in connection herewith and the transactions contemplated hereby. Accordingly, any rule of law or any legal decision that would require interpretation of any claimed ambiguity herein against the party that drafted it has no application and is expressly waived. This Agreement shall be governed by, and construed in accordance with, the law of the State of New York. The headings in this Agreement are for purposes of reference only and shall not limit or otherwise affect the meaning hereof. This Agreement may be executed in any number of counterparts, each of which shall be deemed to be an original, but all of which together shall constitute one agreement.

6.9 Investor Ownership Level. Each of the Securityholders and the Company hereby agree that in the event that the Outstanding Securities (as defined below) represent greater than 17.99% of the Company's outstanding capital stock on a fully-diluted basis (the "THRESHOLD LEVEL") as a result of any adjustment to the Conversion Price (as such term is defined in the Certificate) or otherwise, the Company and each such Securityholder shall take all necessary or desirable actions within its or their control to allow MEDI Ventures to receive, in lieu of any such Outstanding Securities which would cause such MEDI Venture's aggregate holdings to exceed the Threshold Level or in exchange for any such Outstanding Securities which exceed the Threshold Level if and to the extent that such Outstanding Securities are then beneficially owned by MEDI Ventures, Non-Voting Preferred Shares as described below. As used in this Section 6.9, "OUTSTANDING SECURITIES" shall mean the aggregate number of shares of Common Stock held by MEDI Ventures on a fully diluted basis assuming the exercise, exchange or conversion of (i) any and all options, warrants or other rights requiring the Company to issue to MEDI Ventures any shares of Common Stock and (ii) any other securities (including the Series B Preferred Stock or any other series of Preferred Stock) of the Company held by MEDI Ventures exercisable or exchangeable for, or convertible into, shares of Common Stock. In such event, the Company shall authorize a new series of non-voting Preferred Stock, the rights and preferences of which shall be substantially identical to those of the shares held by MEDI Ventures, except that such shares shall have no voting rights and except that such shares shall be automatically converted into shares of Non-Voting Common Stock (as defined below) upon the conversion of all outstanding shares of Series B Preferred Stock (the "NON-VOTING PREFERRED SHARES"). The Non-Voting Preferred Shares shall be convertible upon the same terms as other preferred stock into a new series of Common Stock the rights and preferences of which shall be substantially identical to those of the Common Stock, except that such shares shall have no voting rights (the "NON-VOTING COMMON STOCK"). Each share of Non-Voting Common Stock shall convert into one share of Common Stock upon an initial public offering by the

Company of its Common Stock. MEDI Ventures will agree that in any instance that applicable law provides a right of the Non-Voting Common Stock to vote as a class or any matter, MEDI Ventures will vote its shares of Non-Voting Common Stock in accordance with the vote of a majority in interest of the Series B Preferred Stock, subject in all respects to the provisions of this Agreement. It is hereby agreed and acknowledged that the rights of MEDI Ventures and the obligations of the Company and each other Securityholder set forth herein shall be exercisable solely at the discretion of MEDI Ventures. The Company agrees that it shall use its best efforts to obtain the consent of any future holder of 1% or more of any of the Company's outstanding capital stock to the provisions set forth herein.

[REMAINDER OF PAGE LEFT BLANK INTENTIONALLY]

IN WITNESS WHEREOF, the parties hereto have executed this Agreement as of the date and year first above written.

COMPANY:

VANDA PHARMACEUTICALS INC.

By: /s/ Mihael Polymeropoulos

Name: Chief Executive Officer
Title:

Address:

VANDA PHARMACEUTICALS INC.
2004 SECURITYHOLDER AGREEMENT
COUNTERPART SIGNATURE PAGE

IN WITNESS WHEREOF, the parties hereto have executed this Agreement as of the date and year first above written.

SECURITYHOLDER:

DOMAIN PARTNERS VI, L.P.

By: One Palmer Square Associates VI, L.L.C., its General Partner

By: /s/ Kathleen K. Schoemaker

Kathleen K. Schoemaker
Managing Member

Address: c/o Domain Associates, L.L.C.
One Palmer Square, Suite 515
Princeton, New Jersey 08542
Attn: Jesse I. Treu
Fax No.: (609)683-9789

With a copy to: Domain Associates, L.L.C.
One Palmer Square, Suite 515
Princeton, New Jersey 08542
Attn: Kathleen K. Schoemaker
Fax No.: (609)683-9789

IN WITNESS WHEREOF, the parties hereto have executed this Agreement as of the date and year first above written.

SECURITYHOLDER:

DP VI ASSOCIATES, L.P.

By: One Palmer Square Associates VI, L.L.C.,
its General Partner

By: /s/ Kathleen K. Schoemaker

Kathleen K. Schoemaker
Managing Member

Address: c/o Domain Associates, L.L.C.
One Palmer Square, Suite 515
Princeton, New Jersey 08542
Attn: Jesse I. Treu
Fax No.: (609)683-9789

With a copy to: Domain Associates, L.L.C.
One Palmer Square, Suite 515
Princeton, New Jersey 08542
Attn: Kathleen K. Schoemaker
Fax No.: (609)683-9789

IN WITNESS WHEREOF, the parties hereto have executed this Agreement as of the date and year first above written.

SECURITYHOLDER:

PROSPECT VENTURE PARTNERS II, L.P.

By: Prospect Management Co. II, LLC, its General Partner

By: /s/ Jim Tananbaum
_____
Jim Tananbaum
Managing Member

Address: 435 Tasso Street, Suite 200
Palo Alto, CA 94301

VANDA PHARMACEUTICALS INC.
2004 SECURITYHOLDER AGREEMENT
COUNTERPART SIGNATURE PAGE

IN WITNESS WHEREOF, the parties hereto have executed this Agreement as of the date and year first above written.

SECURITYHOLDER:

PROSPECT ASSOCIATES II, L.P.

By: Prospect Management Co. II, LLC, its General Partner

By: /s/ Jim Tananbaum
_____
Jim Tananbaum
Managing Member

Address: 435 Tasso Street, Suite 200
Palo Alto, CA 94301

VANDA PHARMACEUTICALS INC.
2004 SECURITYHOLDER AGREEMENT
COUNTERPART SIGNATURE PAGE

IN WITNESS WHEREOF, the parties hereto have executed this Agreement as of the date and year first above written.

SECURITYHOLDER:

RHO VENTURES IV (QP), L.P.

By: Rho Management Ventures IV, L.L.C., its General Partner

By: /s/ Mark Leschly
_____
Name: Mark Leschly
Title: Managing Member

Address: 152 West 57th Street
New York, NY 10019

VANDA PHARMACEUTICALS INC.
2004 SECURITYHOLDER AGREEMENT
COUNTERPART SIGNATURE PAGE

IN WITNESS WHEREOF, the parties hereto have executed this Agreement as of the day and year first above written.

SECURITYHOLDER:

RHO VENTURES IV GMBH & CO. BETEILIGUNGS KG

By: Rho Capital Partners Verwaltungs GmbH,
its General Partner

By: /s/ Mark Leschly

Name: Mark Leschly
Title: Managing Member

Address: 152 West 57th Street
New York, NY 10019

IN WITNESS WHEREOF, the parties hereto have executed this Agreement as of the day and year first above written.

SECURITYHOLDER:

RHO VENTURES IV, L.P.

By: Rho Management Ventures IV, L.L.C., its General Partner

By: /s/ Mark Leschly

Name: Mark Leschly
Title: Managing Member

Address: 152 West 57th Street
New York, NY 10019

IN WITNESS WHEREOF, the parties hereto have executed this Agreement as of the day and year first above written.

SECURITYHOLDER:

RHO MANAGEMENT TRUST I

By: Rho Capital Partners, Inc., as
Investment Adviser

By: /s/ Mark Leschly

Name: Mark Leschly
Title:

Address: 152 West 57th Street
New York, NY 10019

VANDA PHARMACEUTICALS INC.
2004 SECURITYHOLDER AGREEMENT
COUNTERPART SIGNATURE PAGE

IN WITNESS WHEREOF, the parties hereto have executed this Agreement as of the date and year first above written.

SECURITYHOLDER:

MEDIMMUNE VENTURES, INC.

By: /s/ Edward T. Mathers

Name: Edward T. Mathers
Title: V.P., Corporate Development

Address: One MedImmune Way
Gaithersburg, MD 20878

VANDA PHARMACEUTICALS INC.
2004 SECURITYHOLDER AGREEMENT
COUNTERPART SIGNATURE PAGE

IN WITNESS WHEREOF, the parties hereto have executed this Agreement as of the date and year first above written.

SECURITYHOLDERS:

CARE CAPITAL INVESTMENTS II, LP

By: Care Capital, LLC, as general partner of
Care Capital Investments II, LP

By: /s/ David Ramsay
_____

Name: David Ramsay
Its:

Address: 47 Hulfish Street, Suite 310
Princeton, NJ 08542
Fax No.: (609)683-5787

IN WITNESS WHEREOF, the parties hereto have executed this Agreement as of the date and year first above written.

SECURITYHOLDERS:

CARE CAPITAL OFFSHORE INVESTMENTS II, LP

By: Care Capital, LLC, as general partner of
Care Capital Offshore Investments II, LP

By: /s/ David Ramsay

Name: David Ramsay
Its:

Address: 47 Hulfish Street, Suite 310
Princeton, NJ 08542
Fax No.: (609)683-5787

IN WITNESS WHEREOF, the parties hereto have executed this Agreement as of the date and year first above written

SECURITYHOLDER:

BIOMEDICAL SCIENCES INVESTMENT FUND PTE LTD

By: /s/ Chu Suee Yeok

Name: Chu Suee Yeok
Title: Director

Address: 20 Biopolis Way
#09-01 Centros
Singapore 138668
Fax No.: 65-63957796
Attn: Lily Chan, PhD, General Manager

EXHIBIT 4.2

THIS WARRANT AND THE SHARES OF COMMON STOCK ISSUABLE UPON EXERCISE OF THIS WARRANT HAVE NOT BEEN REGISTERED UNDER THE SECURITIES ACT OF 1933, AS AMENDED, AND MAY NOT BE SOLD, OFFERED FOR SALE, PLEDGED OR HYPOTHECATED IN THE ABSENCE OF AN EFFECTIVE REGISTRATION STATEMENT UNDER SAID ACT AND APPLICABLE STATE SECURITIES LAWS RELATING TO SUCH SECURITIES OR AN OPINION OF COUNSEL REASONABLY SATISFACTORY TO VANDA PHARMACEUTICALS INC. THAT SUCH REGISTRATION IS NOT REQUIRED. THIS WARRANT HAS BEEN REGISTERED UNDER DELAWARE SECURITIES LAW.

CLASS A COMMON STOCK PURCHASE WARRANT

February 20, 2004

VANDA PHARMACEUTICALS INC., a corporation organized under the laws of the State of Delaware (the "Company"), hereby certifies that, for value received, INVESTMENT OPPORTUNITIES I, LLC, or registered assigns (the "Holder"), is entitled, subject to the terms set forth below, to purchase from the Company at any time after the date hereof, and before 5:00 p.m., Eastern Standard Time, on the tenth anniversary of the date hereof (the "Expiration Date"), One Thousand Two Hundred Fifteen (1,215) fully paid and nonassessable shares of Class A Common Stock (as hereinafter defined), $0.01 par value, at a purchase price per share of $40.00 (such purchase price per share as adjusted from time to time as herein provided is referred to herein as the "Purchase Price"). The number and character of such shares of Class A Common Stock and the Purchase Price are subject to adjustment as provided herein.

As used herein the following terms, unless the context otherwise requires, have the following respective meanings:

(a) The term "Company" shall include Vanda Pharmaceuticals Inc. and any corporation which shall succeed or assume the obligations of such company hereunder.

(b) The term "Class A Common Stock" means the Company's Class A Common Stock, $0.01 par value per share, as authorized on the date of this Agreement.

(c) The term "Common Stock" includes (i) the Company's Class A Common Stock, and (ii) any other securities into which or for which any of the securities described herein may be converted or exchanged pursuant to a plan of recapitalization, reorganization, merger, sale of assets, or otherwise.

1. Exercise.

1.1. Full Exercise.

(a) This Warrant may be exercised in full by the Holder upon surrender of this Warrant, with the subscription agreement required by the Company, in the form attached hereto as Exhibit A, duly completed and executed by the Holder, to the Company at its principal office, accompanied by payment, as permitted below, of the amount obtained by

multiplying the number of shares of Class A Common Stock for which this Warrant is then exercisable by the Purchase Price then in effect.

(b) Payment for the Class A Common Stock may be made wholly or partly in cash or by allowing the Company to deduct from the number of shares of Class A Common Stock, deliverable upon exercise of this Warrant, a number of such shares which has an aggregate Fair Market Value determined as of the date of exercise of this Warrant equal to the aggregate Purchase Price of the Class A Common Stock.

(c) Fair Market Value of a share of Class A Common Stock as of the date of exercise of this Warrant (the "Determination Date") shall mean:

a. If the Common Stock underlying the Class A Common Stock is traded on an exchange, or is quoted on the National Association of Securities Dealers, Inc. Automated Quotation ("NASDAQ") National Market System, then the average of the closing or last sale price, respectively, reported for the five (5) business days immediately preceding the Determination Date.

b. If the Common Stock underlying the Class A Common Stock is not traded on an exchange or on the NASDAQ National Market System but is traded in the over-the-counter market, "pink sheets" or other similar organization (including the Bulletin Board), then the average of the closing bid and asked prices (or, if such prices are not available, then the last sale price) reported for the five (5) business days in which trading has occurred immediately preceding the Determination Date.

c. If the Common Stock underlying the Class A Common Stock is not traded as provided above, then the price shall be determined in good faith by the Board of Directors of the Company whose determination shall be final.

1.2. Partial Exercise. This Warrant may be exercised in part (but not for a fractional share) by surrender of this Warrant in the manner and at the place provided in Section 1.1, except that the amount payable by the Holder on such partial exercise shall be the amount obtained by multiplying (a) the number of shares of Class A Common Stock designated by the Holder in the subscription form by (b) the Purchase Price then in effect. The method of payment shall be as permitted by Section 1.1. On any such partial exercise, the Company, at its expense, will forthwith issue and deliver to the Holder a new Warrant of like tenor, in the name of the Holder hereof or as the Holder (upon payment by such Holder of any applicable transfer taxes) may request, subject to compliance with applicable securities laws, for the number of shares of Class A Common Stock for which such Warrant may still be exercised.

2. Delivery of Stock Certificates etc. on Exercise. The Company agrees that the shares of Class A Common Stock purchased upon exercise of this Warrant shall be deemed to be issued to the Holder as the record owner of such shares as of the close of business on the date on which this Warrant shall have been surrendered, payment made for such shares as aforesaid AND ANY OTHER CONDITIONS FOR THE VALID EXERCISE THEREOF SHALL HAVE BEEN SATISFIED. As soon as practicable after the exercise of this Warrant in full, and in any event within ten (10) business days thereafter, the Company will cause to be issued in the name of and delivered to the Holder,

subject to compliance with applicable securities laws, a certificate or certificates for the number of duly and validly issued, fully paid, and nonassessable shares of Class A Common Stock to which the Holder shall be entitled on such exercise, plus, in lieu of any fractional share to which the Holder would otherwise be entitled, cash equal to such fraction multiplied by the then fair market value of one full share, as determined by the Company in its sole discretion, together with any other stock or other securities and property (including cash, where applicable) to which the Holder is entitled upon such exercise.

3. Transfer. Subject to compliance with the Securities Act of 1933, as amended (the "Securities Act"), this warrant is transferable in whole or in part, at the offices of the Company by the Holder, in person or by duly authorized attorney, upon presentation of this Warrant certificate and executed transfer instructions giving the name, address and taxpayer identification number of the transferee. Notwithstanding the previous sentence, this Warrant is transferable to affiliates of NDA Partners LLC only after the Holder gives at least three (3) days' prior notice to the Board of Directors of the Company. Each holder of this Warrant, by holding it, agrees that this Warrant, when endorsed in blank, may be deemed negotiable, and that the Holder thereof, when the Warrant shall have been so endorsed, may be treated by the Company and all other persons dealing with the Warrant as the absolute owner thereof for any purpose and as the person entitled to exercise the rights represented by the Warrant, or to the transfer thereof on the books of the Company, any notice to the contrary notwithstanding.

4. Adjustment for Reorganization. Consolidation, Merger, etc.

4.1. Reorganization. Consolidation. Merger, etc. In case at any time or from time to time, the Company shall (a) effect a reorganization, (b) consolidate with or merge into any other person, or (c) transfer all or substantially all of its properties or assets to any other person under any plan or arrangement contemplating the dissolution of the Company, then, in each such case, proper and adequate provision shall be made by the Company whereby the Holder, on the exercise hereof as provided in Section 1 at any time after the consummation of such reorganization, consolidation or merger or the effective date of such dissolution, as the case may be, shall receive, in lieu of the Class A Common Stock issuable on such exercise prior to such consummation or such effective date, the stock and other securities and property (including cash) to which the Holder would have been entitled upon such consummation or in connection with such dissolution, as the case may be, if the Holder had so exercised this Warrant, immediately prior thereto, all subject to further adjustment thereafter as provided in Section 5.

4.2. Continuation of Terms. Upon any reorganization, consolidation, merger or transfer referred to in this Section 4, this Warrant shall continue in full force and effect, and its term shall not be shortened, and the terms hereof shall be applicable to the shares of stock and other securities and property receivable on the exercise of this Warrant after the consummation of such reorganization, consolidation, or merger, as the case may be, and shall be binding upon the issuer of any such stock or other securities, including, in the case of any such transfer, the person acquiring all or substantially all of the properties or assets of the Company, whether or not such person shall have expressly assumed the terms of this Warrant.

5. Adjustment for Dividends in Other Stock, Property, Reclassification, etc. In case at any time or from time to time, the Holders of securities then comprising Class A Common

Stock, as a class of stockholders, shall have received, or (on or after the record date fixed for the determination of stockholders eligible to receive) shall have become entitled to receive, without payment therefor,

(a) Other or additional stock or other securities or property (other than cash) by way of dividend, or

(b) Any cash (excluding cash dividends payable solely out of earnings or earned surplus of the Company) by way of a dividend, or

(c) Other or additional stock or other securities or property (including cash) by way of spin-off, split-up, reclassification, recapitalization, combination of shares or similar corporate rearrangement, other than additional shares of Class A Common Stock issued as a stock dividend or in a stock split,

then and in each such case the Holder, on the exercise hereof as provided in Section 1, shall be entitled to receive the amount of stock and other securities and property (including cash in the cases referred to in subdivisions (b) and (c) of this Section 5) which the Holder would hold on the date of such exercise if on the date hereof the Holder had been the holder of record of the number of shares of Class A Common Stock called for on the face of this Warrant and had thereafter, during the period from the date hereof to and including the date of such exercise, retained such shares and all such other or additional stock and other securities and property (including cash in the cases referred to in subdivisions (b) and (c) of this Section 5) receivable by the Holder as aforesaid during such period, giving effect to all adjustments called for during such period by Sections 5 and 6.

6. Extraordinary Events Regarding Class A Common Stock. In the event that the Company shall (a) issue additional shares of the Class A Common Stock as a dividend or other distribution on outstanding Class A Common Stock, (b) subdivide its outstanding shares of Class A Common Stock, or (c) combine its outstanding shares of the Class A Common Stock into a smaller number of shares of the Class A Common Stock, then, in each such event, the Purchase Price shall, simultaneously with the happening of such event, be adjusted by multiplying the then Purchase Price by a fraction, the numerator of which shall be the number of shares of Class A Common Stock outstanding immediately prior to such event and the denominator of which shall be the number of shares of Class A Common Stock outstanding immediately after such event, and the product so obtained shall thereafter be the Purchase Price then in effect. The Purchase Price, as so adjusted, shall be readjusted in the same manner upon the happening of any successive event or events described herein in this Section 6. The number of shares of Class A Common Stock that the Holder shall thereafter, on the exercise hereof as provided in Section 1, be entitled to receive shall be increased to a number determined by multiplying the number of shares of Class A Common Stock that would otherwise (but for the provisions of this Section 6) be issuable on such exercise by a fraction of which (a) the numerator is the Purchase Price that would otherwise (but for the provisions of this Section 6) be in effect, and (b) the denominator is the Purchase Price in effect on the date of such exercise.

7. Piggyback Registration Rights With respect to the initial public offering of the Company's stock, the Company shall notify the Holder, and the Holder shall have the right to

participate with any other participating Company stockholder, subject at all times to any restrictions and limitations placed upon the participating stockholders generally by the Company's underwriters (including the underwriter's determination that such offering will not include a piggyback offering by stockholders based upon then current market conditions). With respect to any subsequent public offering of the Company's stock, the Company shall notify the Holder, and the Holder shall have the right to participate pro-rata with any other participating Company stockholder, on a fully diluted basis. The Company shall use its reasonable best efforts to include the Holder's shares of Common Stock in the registration statement and to have the registration statement declared effective. All fees and expenses, including, but not limited to, attorneys fees and accounting fees, shall be borne by the Company with respect to any registration of the Holder's stock under this Section 8. All selling expenses and commissions relating solely to the Holder's stock shall be borne by the Holder.

8. Reporting Requirements. The Holder shall have the right to receive from the Company all quarterly and annual financial statements.

9. Reservation of Stock, etc. Issuable on Exercise of Warrant. The Company will at all times use commercially reasonable efforts to reserve and keep available, solely for issuance and delivery on the exercise of this Warrant, all shares of Class A Common Stock from time to time issuable on the exercise of this Warrant.

10. Replacement of Warrant. On receipt of evidence reasonably satisfactory to the Company of the loss, theft, destruction or mutilation of this Warrant and, in the case of any such loss, theft or destruction of this Warrant, on delivery of an indemnity agreement or security reasonably satisfactory in form and amount to the Company or, in the case of any such mutilation, on surrender and cancellation of this Warrant, the Company will execute and deliver, in lieu thereof, a new Warrant of like tenor.

11. [Deleted.]

12. Transfer on the Company's Books. Until this Warrant is transferred on the books of the Company, the Company may treat the registered Holder hereof as the absolute owner hereof for all purposes, notwithstanding any notice to the contrary. If the Holder desires to transfer this Warrant, he shall be required to have the Form of Transfer Endorsement, in the form of Exhibit B, attached hereto, fully executed and delivered to the Company.

13. Notices, etc. All notices and other communications from the Company to the Holder or the Holder to the Company shall be delivered by hand (which shall include overnight delivery by Federal Express or similar service) or mailed by first class registered mail, postage prepaid, to the Company at its principal office and to the Holder at such address as may have been furnished to the Company in writing by the Holder or, until the Holder furnishes to the Company an address, then to, and at the address of, the last Holder of this Warrant who has so

furnished an address to the Company. Notices shall be deemed given upon receipt, when delivered by hand, and 48 hours after mailing, when mailed.

14. Miscellaneous. This Warrant and any term hereof may be changed, waived, discharged or terminated only by an instrument in writing signed by the party against which enforcement of such change, waiver, discharge or termination is sought. This Warrant shall be construed and enforced in accordance with and governed by the laws OF MARYLAND. The heading in this Warrant are for purposes of reference only, and shall not limit or otherwise affect any of the terms herein. The invalidity or unenforceability of any provision hereof shall in no way affect the validity or enforceability of any other provision.

IN WITNESS WHEREOF, the Company has executed this Warrant as of the date first written above.

VANDA PHARMACEUTICALS INC.

By: /s/ Chip Clark

Name: Chip Clark
Title: Chief Bussiness Officer

Attest:

By: /s/ Earle Martin

Name: Earle Martin
Title: Manager

EXHIBIT A

FORM OF SUBSCRIPTION
(TO BE SIGNED ONLY ON EXERCISE OF WARRANT)

TO: VANDA PHARMACEUTICALS INC.

The undersigned, the Holder of the within Warrant, hereby irrevocably elects to exercise this Warrant for, and to purchase thereunder, _____ shares of Class A Common Stock of Vanda Pharmaceuticals Inc. and herewith makes payment of $_____therefor by delivery of a check or wire transfer in such amount hereby instructing Vanda Pharmaceuticals Inc. to deduct from the enclosed Warrant a number of shares of Class A Common Stock having aggregate Fair Market Value equal to $_____ as of the hereof, which amount represents the Purchase Price for the shares for which the within Warrant is hereby exercised, and which is equal to shares of Class A Common Stock, and requests that the certificates for such shares be issued in the name of the undersigned.

Dated: _____, _____

_____
(Signature must conform to name of Holder as Specified on the face of the Warrant)

_____
Address

EXHIBIT 4.3

COMMON STOCK WARRANT

NEITHER THIS WARRANT NOR THE SECURITIES ISSUABLE UPON EXERCISE OF THIS WARRANT HAVE BEEN REGISTERED UNDER THE SECURITIES ACT OF 1933, AS AMENDED. NO SALE OR DISPOSITION MAY BE EFFECTED EXCEPT IN COMPLIANCE WITH RULE 144 UNDER SAID ACT OR WITHOUT AN EFFECTIVE REGISTRATION STATEMENT RELATED THERETO OR AN OPINION OF COUNSEL FOR THE HOLDER, SATISFACTORY TO THE COMPANY, THAT SUCH REGISTRATION IS NOT REQUIRED UNDER THE ACT OR RECEIPT OF A NO-ACTION LETTER FROM THE SECURITIES AND EXCHANGE COMMISSION.

WARRANT TO PURCHASE 451 SHARES OF COMMON STOCK

Dated: October 28, 2003

THIS CERTIFIES THAT, for value received, Oxford Finance Corporation, ("Holder") is entitled to subscribe for and purchase Four Hundred Fifty One (451) shares of the fully paid and nonassessable Common Stock (the "Shares") of Vanda Pharmaceuticals Inc., a Delaware corporation (the "Company"), at the Warrant Price (as hereinafter defined), subject to the provisions and upon the terms and conditions hereinafter set forth. As used herein, the term "Common Stock" shall mean the Company's presently authorized Class A Common Stock, and any stock into which such Common Stock may hereafter be exchanged.

1. Warrant Price. The Warrant Price shall initially be Forty and 00/100 dollars ($40.00) per share, subject to adjustment as provided in Section 7 below.

2. Conditions to Exercise. The purchase right represented by this Warrant may be exercised at any time, or from time to time, in whole or in part during the term commencing on the date hereof and ending on the earlier of:

(a) 5:00 P.M. Eastern Standard time on the eighth annual anniversary of this Warrant Agreement; or

(b) The closing of the initial public offering of the Company's Common Stock pursuant to a registration statement under the Securities Act of 1933, as amended (the "Initial Public Offering"). The Company shall provide notice of the Initial Public Offering to the Holder at least 10 business days prior to the closing thereof; or

(c) The effective date of the merger of the Company with or into, the consolidation of the Company with, or the sale by the Company of all or substantially all of its assets or all or substantially all of its shares to another corporation or other entity (other than such a transaction wherein the shareholders of the Company retain or obtain a majority of the voting capital stock of the surviving, resulting, or purchasing corporation); provided that the Company shall notify the registered Holder of this Warrant of the proposed effective date of the merger, consolidation, or sale at least 10 business days prior to the effectiveness thereof.

In the event that, although the Company shall have given notice of a transaction pursuant to subparagraph (b) or subparagraph (c) hereof, the transaction does not close within 60 days of the day specified by the Company, unless otherwise elected by the Holder any exercise of the Warrant subsequent to the giving of such notice shall be rescinded and the Warrant shall again be exercisable until terminated in accordance with this Paragraph 2.

3. Method of Exercise; Payment; Issuance of Shares; Issuance of New Warrant.

(a) Cash Exercise. Subject to Section 2 hereof, the purchase right represented by this Warrant may be exercised by the Holder hereof, in whole or in part, by the surrender of this Warrant (with a duly executed Notice of Exercise in the form attached hereto) at the principal office of the Company (as set forth below) and by payment to the Company, by check, of an amount equal to the then applicable Warrant Price per share multiplied by the number of shares then being purchased. In the event of any exercise of the rights represented by this Warrant, certificates for the shares of stock so purchased shall be in the name of, and delivered to, the Holder hereof (subject to the terms of transfer contained herein and upon payment by such Holder hereof of any applicable transfer taxes). Such delivery shall be made within 10 days after exercise of the Warrant and at the Company's expense and, unless this Warrant has been fully exercised or expired, a new Warrant having terms and conditions substantially identical to this Warrant and representing the portion of the Shares, if any, with respect to which this Warrant shall not have been exercised, shall also be issued to the Holder hereof within 10 days after exercise of the Warrant.

(b) Net Issue Exercise. In lieu of exercising this Warrant pursuant to Section 3(a), Holder may elect to receive shares equal to the value of this Warrant (or of any portion thereof remaining unexercised) by surrender of this Warrant at the principal office of the Company together with notice of such election, in which event the Company shall issue to Holder the number of shares of the Company's Common Stock computed using the following formula:

$$X = \frac{Y (A-B)}{A}$$

Where X = the number of shares of Common Stock to be issued to Holder.

Y = the number of shares of Common Stock purchasable under this Warrant (at the date of exercise).

A = the Fair Market Value of one share of the Company's Common Stock (at the date of exercise).

B = Warrant Price (as adjusted to the date of exercise).

(c) Fair Market Value. For purposes of this Section 3, Fair Market Value of one share of the Company's Common Stock shall mean:

(i) In the event of an exercise in connection with an Initial Public Offering, the per share Fair Market Value for the Common Stock shall be the Offering Price at which the underwriters initially sell Common Stock to the public; or

(ii) The average of the closing bid and asked prices of the Common Stock quoted in the Over-The-Counter Market Summary, or the average of, the last reported sale price of the Common Stock or the closing price quoted on the Nasdaq National Market System ("NMS") or on any exchange on which the Common Stock is listed, whichever is applicable, as published in The Wall Street Journal over the ten (10) trading days prior to the date of determination of fair market value; or

(iii) In the event of an exercise in connection with a merger, acquisition or other consolidation in which the Company is not the surviving entity, as described in Section 2(c), the per share Fair Market Value for the Common Stock shall be the value to be received per share of Common Stock by all holders of the Common Stock in such transaction as determined by the Board of Directors; or

(iv) If the Common Stock is not publicly traded, the per share fair market value of the Common Stock shall be as determined in good faith by the Company's Board of Directors unless Holder elects to have such fair market value determined by an appraiser selected by the Company, which election must be made by Holder within ten (10) business days of the date the Company notifies Holder of the fair market value as determined by its Board of Directors. In the event of such an appraisal, the cost thereof shall be borne by the Holder unless such appraisal results in a fair market value in excess of 115% of that determined by the Company's Board of Directors, in which event the Company shall bear the cost of such appraisal.

In the event of 3(c)(iii) or 3(c)(iv), above, the Company shall deliver to the Holder a certificate setting forth in reasonable detail the basis for and method of determination of the per share Fair Market Value of the Common Stock. Such certificate must be made to Holder at least 10 business days prior to the proposed effective date of the merger, consolidation, sale, or other triggering event as defined in 3(c)(iii) and 3(c)(iv).

(d) Automatic Exercise. To the extent this Warrant is not previously exercised, it shall be automatically exercised in accordance with Sections 3(b) and 3(c) hereof (even if not surrendered) immediately before: (i) its expiration, or (ii) the consummation of any consolidation or merger of the Company, or any sale or transfer of a majority of the Company's assets or stock pursuant to Section 2(b) and 2(c).

4. Representations and Warranties of Holder and Restrictions on Transfer Imposed by the Securities Act of 1933.

(a) Representations and Warranties by Holder. The Holder represents and warrants to the Company with respect to this purchase as follows:

(i) The Holder has substantial experience in evaluating and investing in private placement transactions of securities of companies similar to the Company so that the Holder is capable of evaluating the merits and risks of its investment in the Company and has the capacity to protect its interests.

(ii) The Holder is acquiring the Warrant and the Shares of Common Stock issuable upon exercise of the Warrant (collectively, the "Securities") for investment for its own account and not with a view to, or for resale in connection with, any distribution thereof. The Holder understands that the Securities have not been registered under the Securities Act of 1933, as amended (the "Act") by reason of a specific exemption from the registration provisions of the Act, which depends upon, among other things, the bona fide nature of the investment intent as expressed herein. In this connection, the Holder understands that, in the view of the Securities and Exchange Commission (the "EC"), the statutory basis for such exemption may be unavailable if this representation was predicated solely upon a present intention to hold the Securities for the minimum capital gains period specified under tax statutes, for a deferred sale, for or until an increase or decrease in the market price of the Securities or for a period of one year or any other fixed period in the future.

(iii) The Holder acknowledges that the Securities must be held indefinitely unless subsequently registered under the Act or an exemption from such registration is available. The Holder is aware of the provisions of Rule 144 promulgated under the Act ("Rule 144") which permits limited resale of securities purchased in a private placement subject to the satisfaction of certain conditions, including, in case the securities have been held for more than one but less than two years, the existence of a public market for the shares, the availability of certain public information about the Company, the resale occurring not less than one years after a party has purchased and paid for the security to be sold, the sale being through a "broker's transaction" or in a transaction directly with a "market maker" (as provided by Rule 144(f)) and the number of shares or other securities being sold during any three-month period not exceeding specified limitations.

(iv) The Holder further understands that at the time the Holder wishes to sell the Securities there may be no public market upon which such a sale may be effected, and that even if such a public market exists, the Company may not be satisfying the current public information requirements of Rule 144, and that in such event, the Holder may be precluded from selling the Securities under Rule 144 unless a) a one-year minimum holding period has been satisfied and b) the Holder was not

at the time of the sale nor at any time during the three-month period prior to such sale an affiliate of the Company.

(v) The Holder has had an opportunity to discuss the Company's business, management and financial affairs with its management and an opportunity to review the Company's facilities. The Holder understands that such discussions, as well as the written information issued by the Company, were intended to describe the aspects of the Company's business and prospects which it believes to be material but were not necessarily a thorough or exhaustive description. The Company makes no representation or warranty to Holder with respect to any thereof.

(b) Legends. Each certificate representing the Securities shall be endorsed with the following legend:

THESE SECURITIES HAVE NOT BEEN REGISTERED UNDER THE SECURITIES ACT OF 1933 AND MAY NOT BE TRANSFERRED UNLESS COVERED BY AN EFFECTIVE REGISTRATION STATEMENT UNDER SAID ACT, A "NO ACTION" LETTER FROM THE SECURITIES AND EXCHANGE COMMISSION WITH RESPECT TO SUCH TRANSFER, A TRANSFER MEETING THE REQUIREMENTS OF RULE 144 OF THE SECURITIES AND EXCHANGE COMMISSION, OR (IF REASONABLY REQUIRED BY THE COMPANY) AN OPINION OF COUNSEL SATISFACTORY TO THE ISSUER TO THE EFFECT THAT ANY SUCH TRANSFER IS EXEMPT FROM SUCH REGISTRATION.

The Company need not enter into its stock register a transfer of Securities unless the conditions specified in the foregoing legend are satisfied. The Company may also instruct its transfer agent not to register the transfer of any of the Shares unless the conditions specified in the foregoing legend are satisfied.

(c) Removal of Legend and Transfer Restrictions. The legend relating to the Act endorsed on a certificate pursuant to paragraph 4(b) of this Warrant and the stop transfer instructions with respect to the Securities represented by such certificate shall be removed and the Company shall issue a certificate without such legend to the Holder of the Securities if (i) the Securities are registered under the Act and a prospectus meeting the requirements of Section 10 of the Act is available or (ii) the Holder provides to the Company an opinion of counsel for the Holder reasonably satisfactory to the Company, or a no-action letter or interpretive opinion of the staff of the SEC reasonably satisfactory to the Company, to the effect that public sale, transfer or assignment of the Securities may be, to the effect that public sale, transfer or assignment of the Securities may be made without registration and without compliance with any restriction such as Rule 144.

5. Condition of Transfer or Exercise of Warrant. It shall be a condition to any transfer or exercise of this Warrant that at the time of such transfer or exercise, the Holder shall provide the Company with a representation in writing that the Holder or transferee is acquiring this Warrant and the shares of Common Stock to be issued upon exercise, for investment purposes only and not with a view to any sale or distribution, or will provide the Company with a statement of pertinent facts covering any proposed distribution. As a further condition to any transfer of this Warrant or any or all of the shares of Common Stock issuable upon exercise of this Warrant, other than a transfer registered under the Act, the Company must have received a legal opinion, in form and substance satisfactory to the Company and its counsel, reciting the pertinent circumstances surrounding the proposed transfer and stating that such transfer is exempt from the registration and prospectus delivery requirements of the Act. Each certificate evidencing the shares issued upon exercise of the Warrant or upon any transfer of the shares (other than a transfer registered under the Act or any subsequent transfer of shares so registered) shall, at the Company's option, contain a legend in form and substance satisfactory to the Company and its counsel, restricting the transfer of the shares to sales or other dispositions exempt from the requirements of the Act.

As further condition to each transfer, the Holder shall surrender this Warrant to the Company and the transferee shall receive and accept a Warrant, of like tenor and date, executed by the Company.

6. Stock Fully Paid; Reservation of Shares. All Shares which may be issued upon the exercise of the rights represented by this Warrant will, upon issuance and payment of the exercise price therefor, be fully paid and nonassessable, and free from all taxes, liens, and charges with respect to the issue thereof. During the period within which the rights represented by this Warrant may be exercised, the Company will at all times have authorized, and reserved for issuance upon exercise of the purchase rights evidenced by this Warrant, a sufficient number of shares of its Common Stock to provide for the exercise of the rights represented by this Warrant.

7. Adjustment for Certain Events. In the event of changes in the outstanding Common Stock by reason of stock dividends, split-ups, reclassifications, recapitalizations, mergers, consolidations, combinations or exchanges of shares, reorganizations, liquidations, or the like, the number and class of shares available under the Warrant in the aggregate and the Warrant Price shall be correspondingly adjusted, as appropriate, by the Board of Directors of the Company. The adjustment shall be such as will give the Holder of this Warrant upon exercise for the same aggregate Warrant Price the total number, class and kind of shares as he would have owned had the Warrant been exercised prior to the event and had he continued to hold such shares until after the event requiring adjustment.

8. Notice of Adjustments. Whenever any Warrant Price shall be adjusted pursuant to Section 7 hereof, the Company shall prepare a certificate signed on the Company's behalf by the chief financial officer of the Company setting forth, in reasonable detail, the event requiring the adjustment, the amount of the adjustment, the method by which such adjustment was calculated, and the Warrant Price and number of shares issuable upon exercise of the Warrant after giving effect to such adjustment, and shall cause copies of such certificate to be mailed (by certified or

registered mail, return receipt required, postage prepaid) within thirty (30) days of such adjustment to the Holder of this Warrant as set forth in Section 18 hereof.

9. "Market Stand-Off" Agreement. Holder hereby agrees that for a period of up to 180 days following the effective date of the first registration statement of the Company covering common stock (or other securities) to be sold on its behalf of the Company in an underwritten public offering, it will not, to the extent requested by the Company and any underwriter, sell or otherwise transfer or dispose of (other than to donees or transferees who agree to be similarly bound) any of the Shares at any time during such period except common stock included in such registration.

10. Transferability of Warrant. This Warrant is transferable on the books of the Company at its principal office by the registered Holder hereof upon surrender of this Warrant properly endorsed, subject to compliance with Section 5 and applicable federal and state securities laws. Notwithstanding the previous sentence, this Warrant is transferable to affiliates of Oxford Finance Corporation only after the Holder gives at least three (3) days' prior notice to the Board of Directors of the Company. The Company shall issue and deliver to the transferee a new Warrant representing the Warrant so transferred. Upon partial transfer, the Company will issue and deliver to the Holder a new Warrant with respect to the Warrant not so transferred. Holder shall not have any right to transfer any portion of this Warrant to any direct competitor of the Company.

11. No Fractional Shares. No fractional share of Common Stock will be issued in connection with any exercise hereunder, but in lieu of such fractional share the Company shall make a cash payment therefor upon the basis of the Warrant Price then in effect.

12. Charges, Taxes and Expenses. Issuance of certificates for shares of Common Stock upon the exercise of this Warrant shall be made without charge to the Holder for any United States or state of the United States documentary stamp tax or other incidental expense within respect to the issuance of such certificate, all of which taxes and expenses shall be paid by the Company, and such certificates shall be issued in the name of the Holder.

13. No Shareholder Rights Until Exercise. This Warrant does not entitle the Holder hereof to any voting rights or other rights as a shareholder of the Company prior to the exercise hereof.

14. Loss, Theft, Destruction or Mutilation of Warrant. Upon receipt by the Company of evidence reasonably satisfactory to it of the loss, theft, destruction or mutilation of this Warrant, and, in the case of loss, theft, or destruction, of indemnity reasonably satisfactory to it, and, if mutilated, upon surrender and cancellation of this Warrant, the Company will execute and deliver a new Warrant, having terms and conditions substantially identical to this Warrant, in lieu hereof.

15. Registry of Warrant. The Company shall maintain a registry showing the name and address of the registered Holder of this Warrant. This warrant may be surrendered for exchange or exercise, in accordance with its terms, at such office or agency of the Company, and the

Company and Holder shall be entitled to rely in all respects, prior to written notice to the contrary, upon such registry.

16. Miscellaneous.

(a) Issue Date. The provisions of this Warrant shall be construed and shall be given effect in all respect as if it had been issued and delivered by the Company on the date hereof.

(b) Successors. This Warrant shall be binding upon any successors or permitted assigns of the Company.

(c) Governing Law. This Warrant shall be governed by and construed in accordance with the laws of the State of Maryland.

(d) Headings. The headings used in this Warrant are used for convenience only and are not to be considered in construing or interpreting this Warrant.

(e) Saturdays, Sundays, Holidays. If the last or appointed day for the taking of any action or the expiration of any right required or granted herein shall be a Saturday or a Sunday or shall be a legal holiday in the State of Maryland, then such action may be taken or such right may be exercised on the next succeeding day not a legal holiday.

17. No Impairment. The Company shall not by any action including, without limitation, amending its Sections or certificate of incorporation or by-laws, any reorganization, transfer of assets, consolidation, merger, share exchange dissolution, issue or sale of securities or any other voluntary action, avoid or seek to avoid the observance or performance of any of the terms of the Warrants, but shall at all times in good faith assist in the carrying out of all such terms and in the taking of all such actions as may be necessary or appropriate to protect the rights of the Holder(s) hereof against impairment. Without limiting the generality of the foregoing, the Company shall (a) not increase the par value of any shares of Common Stock issuable upon the exercise of the Warrants above the amount payable therefor upon such exercise, (b) take all such action as may be necessary or appropriate in order that the Company may validly issue fully paid and nonassessable shares of Common Stock upon the exercise of the Warrants, (c) obtain all such authorizations, exemptions or consents from any public regulatory body having jurisdiction thereof as may be necessary to enable the Company to perform its obligations under the Warrants and (d) not take or permit to be taken any action which would have the effect of shortening the period provided herein for exercise of the Warrants.

18. Addresses. Any notice required or permitted hereunder shall be in writing and shall be mailed by overnight courier, registered or certified mail, return receipt required, and postage prepaid, or otherwise delivered by hand or by messenger, addressed as set forth below, or at such other address as the Company or the Holder hereof shall have furnished to the other party.

If to the Company:	Vanda Pharmaceuticals Inc. 9620 Medical Center Drive, Suite 201, Rockville, MD 20850 Attn: Chief Executive Officer
If to the Holder:	Oxford Finance Corporation 133 N. Fairfax Street Alexandria, VA 22314 Attn: Chief Financial Officer

IN WITNESS WHEREOF, Vanda Pharmaceuticals Inc. has caused this Warrant to be executed by its officers thereunto duly authorized.

Dated as of October 28, 2003.

By: /s/ William D. Clark

Name: William D. Clark

Title: Director

NOTICE OF EXERCISE

TO: _____
_____
_____

1. The undersigned, Oxford Finance Corporation ("Holder") elects to acquire shares of the Common Stock of Vanda Pharmaceuticals Inc. (the "Company"), pursuant to the terms of the Stock Purchase Warrant dated October 28, 2003 (the "Warrant").

2. The Holder exercises its rights under the Warrant as set forth below:

( ) The Holder elects to purchase_____ shares of Common Stock as provided in Section 3(a), (c) and tenders herewith a check in the amount of $_____ as payment of the purchase price.

( ) The Holder elects to convert the purchase rights into shares of Common Stock as provided in Section 3(b), (c) of the Warrant.

3. The Holder surrenders the Warrant with this Notice of Exercise.

4. The Holder represents that it is acquiring the aforesaid shares of Common Stock for investment and not with a view to or for resale in connection with, distribution and that the Holder has no present intention of distributing or reselling the shares.

5. Please issue a certificate representing the shares of Common Stock in the name of the Holder or in such other name as is specified below:

Name: _____

Address: _____

Taxpayer ID.: _____

Oxford Finance Corporation

By: ______________________________

Name: ____________________________

Title: ___________________________

Date: ____________________________

EXHIBIT 10.1

VANDA PHARMACEUTICALS INC.

SECOND AMENDED AND RESTATED
MANAGEMENT EQUITY PLAN

TABLE OF CONTENTS

VANDA PHARMACEUTICALS INC.
SECOND AMENDED AND RESTATED MANAGEMENT EQUITY PLAN

SECTION 1. ESTABLISHMENT AND PURPOSE.

The purpose of the Plan is to offer selected persons an opportunity to acquire a proprietary interest in the success of the Company, or to increase such interest, by purchasing Shares of the Company's Stock. The Plan provides both for the direct award or sale of Shares and for the grant of Options to purchase Shares. Options granted under the Plan may include Nonstatutory Options as well as ISOs intended to qualify under Section 422 of the Code.

Capitalized terms are defined in Section 12.

SECTION 2. ADMINISTRATION.

(a) COMMITTEES OF THE BOARD OF DIRECTORS. The Plan may be administered by one or more Committees. Each Committee shall consist of one or more members of the Board of Directors who have been appointed by the Board of Directors. Each Committee shall have such authority and be responsible for such functions as the Board of Directors has assigned to it. If no Committee has been appointed, the entire Board of Directors shall administer the Plan. Any reference to the Board of Directors in the Plan shall be construed as a reference to the Committee (if any) to whom the Board of Directors has assigned a particular function.

(b) AUTHORITY OF THE BOARD OF DIRECTORS. Subject to the provisions of the Plan, the Board of Directors shall have full authority and discretion to take any actions it deems necessary or advisable for the administration of the Plan. All decisions, interpretations and other actions of the Board of Directors shall be final and binding on all Purchasers, all Optionees and all persons deriving their rights from a Purchaser or Optionee.

SECTION 3. ELIGIBILITY.

(a) GENERAL RULE. Only Employees, Outside Directors and Consultants shall be eligible for the grant of Nonstatutory Options or the direct award or sale of Shares. Only Employees shall be eligible for the grant of ISOs.

(b) TEN-PERCENT STOCKHOLDERS. A person who owns more than 10% of the total combined voting power of all classes of outstanding stock of the Company, its Parent or any of its Subsidiaries shall not be eligible for the grant of an ISO unless (i) the Exercise Price is at least 110% of the Fair Market Value of a Share on the date of grant and (ii) such ISO by its terms is not exercisable after the expiration of five years from the date of grant. For purposes of this Subsection (b), in determining stock ownership, the attribution rules of Section 424(d) of the Code shall be applied.

SECTION 4. STOCK SUBJECT TO PLAN.

(a) BASIC LIMITATION. Not more than 5,489,714 Shares may be issued under the Plan (subject to Subsection (b) below and Section 8). All of these Shares may be issued upon the exercise of ISOs. The number of Shares that are subject to Options or other rights outstanding at any time under the Plan shall not exceed the number of Shares that then remain available for issuance under the Plan. The Company, during the term of the Plan, shall at all times reserve and keep available sufficient Shares to satisfy the requirements of the Plan. Shares offered under the Plan may be authorized but unissued Shares or treasury Shares.

(b) ADDITIONAL SHARES. In the event that Shares previously issued under the Plan are reacquired by the Company, such Shares shall be added to the number of Shares then available for issuance under the Plan. In the event that an outstanding Option or other right for any reason expires or is canceled, the Shares allocable to the unexercised portion of such Option or other right shall be added to the number of Shares then available for issuance under the Plan.

SECTION 5. TERMS AND CONDITIONS OF AWARDS OR SALES.

(a) STOCK PURCHASE AGREEMENT. Each award or sale of Shares under the Plan (other than upon exercise of an Option) shall be evidenced by a Stock Purchase Agreement between the Purchaser and the Company. Such award or sale shall be subject to all applicable terms and conditions of the Plan and may be subject to any other terms and conditions which are not inconsistent with the Plan and which the Board of Directors deems appropriate for inclusion in a Stock Purchase Agreement. The provisions of the various Stock Purchase Agreements entered into under the Plan need not be identical.

(b) DURATION OF OFFERS AND NONTRANSFERABILITY OF RIGHTS. Any right to acquire Shares under the Plan (other than an Option) shall automatically expire if not exercised by the Purchaser within 30 days after the grant of such right was communicated to the Purchaser by the Company. Such right shall not be transferable and shall be exercisable only by the Purchaser to whom such right was granted.

(c) PURCHASE PRICE. The Purchase Price of Shares to be offered under the Plan, if newly issued, shall not be less than the par value of such Shares. Subject to the preceding sentence, the Board of Directors shall determine the Purchase Price at its sole discretion. The Purchase Price shall be payable in a form described in Section 7.

(d) WITHHOLDING TAXES. As a condition to the purchase of Shares, the Purchaser shall make such arrangements as the Board of Directors may require for the satisfaction of any federal, state, local or foreign withholding tax obligations that may arise in connection with such purchase.

(e) RESTRICTIONS ON TRANSFER OF SHARES. Any Shares awarded or sold under the Plan shall be subject to such special forfeiture conditions, rights of repurchase, rights of first refusal and other transfer restrictions as the Board of Directors may determine. Such restrictions shall be set forth in the applicable Stock Purchase Agreement and shall apply in addition to any restrictions that may apply to holders of Shares generally. A Stock Purchase Agreement may

provide for accelerated vesting in the event of the Purchaser's death, disability or retirement or other events.

SECTION 6. TERMS AND CONDITIONS OF OPTIONS.

(a) STOCK OPTION AGREEMENT. Each grant of an Option under the Plan shall be evidenced by a Stock Option Agreement between the Optionee and the Company. Such Option shall be subject to all applicable terms and conditions of the Plan and may be subject to any other terms and conditions which are not inconsistent with the Plan and which the Board of Directors deems appropriate for inclusion in a Stock Option Agreement. The provisions of the various Stock Option Agreements entered into under the Plan need not be identical.

(b) NUMBER OF SHARES. Each Stock Option Agreement shall specify the number of Shares that are subject to the Option and shall provide for the adjustment of such number in accordance with Section 8. The Stock Option Agreement shall also specify whether the Option is an ISO or a Nonstatutory Option.

(c) EXERCISE PRICE. Each Stock Option Agreement shall specify the Exercise Price. The Exercise Price of an ISO shall not be less than 100% of the Fair Market Value of a Share on the date of grant, and a higher percentage may be required by Section 3(b). The Exercise Price of a Nonstatutory Option to purchase newly issued Shares shall not be less than 30% of the Fair Market Value of a Share on the date of grant. Subject to the preceding two sentences, the Exercise Price under an Option shall be determined by the Board of Directors at its sole discretion. The Exercise Price shall be payable in a form described in Section 7.

(d) EXERCISABILITY. Each Stock Option Agreement shall specify the date when all or any installment of the Option is to become exercisable. No Option shall be exercisable unless the Optionee has delivered an executed copy of the Stock Option Agreement to the Company. The Board of Directors shall determine the exercisability provisions of any Stock Option Agreement at its sole discretion. All of an Optionee's Options shall become exercisable in full if Section 8(b)(iv) applies.

(e) TERM. The Stock Option Agreement shall specify the term of the Option. The term shall not exceed 10 years from the date of grant, and in the case of an ISO a shorter term may be required by Section 3(b). Subject to the preceding sentence, the Board of Directors at its sole discretion shall determine when an Option is to expire. A Stock Option Agreement may provide for expiration prior to the end of its term in the event of the termination of the Optionee's Service or death.

(f) RESTRICTIONS ON TRANSFER OF SHARES. Any Shares issued upon exercise of an Option shall be subject to such special forfeiture conditions, rights of repurchase, rights of first refusal and other transfer restrictions as the Board of Directors may determine. Such restrictions shall be set forth in the applicable Stock Option Agreement and shall apply in addition to any restrictions that may apply to holders of Shares generally.

(g) TRANSFERABILITY OF OPTIONS. An Option shall be transferable by the Optionee only by (i) a beneficiary designation, (ii) a will or (iii) the laws of descent and

distribution, except as provided in the next sentence. If the applicable Stock Option Agreement so provides, a Nonstatutory Option shall also be transferable by gift or domestic relations order to a Family Member of the Optionee. An ISO may be exercised during the lifetime of the Optionee only by the Optionee or by the Optionee's guardian or legal representative.

(h) WITHHOLDING TAXES. As a condition to the exercise of an Option, the Optionee shall make such arrangements as the Board of Directors may require for the satisfaction of any federal, state, local or foreign withholding tax obligations that may arise in connection with such exercise. The Optionee shall also make such arrangements as the Board of Directors may require for the satisfaction of any federal, state, local or foreign withholding tax obligations that may arise in connection with the disposition of Shares acquired by exercising an Option.

(i) NO RIGHTS AS A STOCKHOLDER. An Optionee, or a transferee of an Optionee, shall have no rights as a stockholder with respect to any Shares covered by the Optionee's Option until such person becomes entitled to receive such Shares by filing a notice of exercise and paying the Exercise Price pursuant to the terms of such Option.

(j) MODIFICATION, EXTENSION AND ASSUMPTION OF OPTIONS. Within the limitations of the Plan, the Board of Directors may modify, extend or assume outstanding Options or may accept the cancellation of outstanding Options (whether granted by the Company or another issuer) in return for the grant of new Options for the same or a different number of Shares and at the same or a different Exercise Price. The foregoing notwithstanding, no modification of an Option shall, without the consent of the Optionee, impair the Optionee's rights or increase the Optionee's obligations under such Option.

SECTION 7. PAYMENT FOR SHARES.

(a) GENERAL RULE. The entire Purchase Price or Exercise Price of Shares issued under the Plan shall be payable in cash or cash equivalents at the time when such Shares are purchased, except as otherwise provided in this Section 7.

(b) SURRENDER OF STOCK. At the discretion of the Board of Directors, all or any part of the Exercise Price may be paid by surrendering, or attesting to the ownership of, Shares that are already owned by the Optionee. Such Shares shall be surrendered to the Company in good form for transfer and shall be valued at their Fair Market Value on the date when the Option is exercised. The Optionee shall not surrender, or attest to the ownership of, Shares in payment of the Exercise Price if such action would cause the Company to recognize compensation expense (or additional compensation expense) with respect to the Option for financial reporting purposes.

(c) SERVICES RENDERED. At the discretion of the Board of Directors, Shares may be awarded under the Plan in consideration of services rendered to the Company, a Parent or a Subsidiary prior to the award.

(d) PROMISSORY NOTE. At the discretion of the Board of Directors, all or a portion of the Exercise Price or Purchase Price (as the case may be) of Shares issued under the Plan may be paid with a full-recourse promissory note. The Shares shall be pledged as security

for payment of the principal amount of the promissory note and interest thereon. The interest rate payable under the terms of the promissory note shall not be less than the minimum rate (if any) required to avoid (i) the imputation of additional interest under the Code and (ii) the recognition of compensation expense (or additional compensation expense) with respect to the Option for financial reporting purposes. Subject to the foregoing, the Board of Directors (at its sole discretion) shall specify the term, interest rate, amortization requirements (if any) and other provisions of such note.

(e) EXERCISE/SALE. To the extent that a Stock Option Agreement so provides, and if Stock is publicly traded, payment may be made all or in part by the delivery (on a form prescribed by the Company) of an irrevocable direction to a securities broker approved by the Company to sell Shares and to deliver all or part of the sales proceeds to the Company in payment of all or part of the Exercise Price and any withholding taxes.

(f) EXERCISE/PLEDGE. To the extent that a Stock Option Agreement so provides, and if Stock is publicly traded, payment may be made all or in part by the delivery (on a form prescribed by the Company) of an irrevocable direction to pledge Shares to a securities broker or lender approved by the Company, as security for a loan, and to deliver all or part of the loan proceeds to the Company in payment of all or part of the Exercise Price and any withholding taxes.

(g) OTHER FORMS OF PAYMENT. At the discretion of the Board of Directors, the Purchase Price or Exercise Price of Shares issued under the Plan may be paid in any other form permitted by the Delaware General Corporation Law, as amended.

SECTION 8. ADJUSTMENT OF SHARES.

(a) GENERAL. In the event of a subdivision of the outstanding Stock, a declaration of a dividend payable in Shares or a combination or consolidation of the outstanding Stock into a lesser number of Shares, corresponding adjustments shall automatically be made in each of (i) the number of Shares available for future grants under Section 4, (ii) the number of Shares covered by each outstanding Option and (iii) the Exercise Price under each outstanding Option. In the event of a declaration of an extraordinary dividend payable in a form other than Shares in an amount that has a material effect on the Fair Market Value of the Stock, a recapitalization, a spin-off, a reclassification or a similar occurrence, the Board of Directors at its sole discretion may make appropriate adjustments in one or more of (i) the number of Shares available for future grants under Section 4, (ii) the number of Shares covered by each outstanding Option or (iii) the Exercise Price under each outstanding Option.

(b) MERGERS AND CONSOLIDATIONS. In the event that the Company is a party to a merger or consolidation, all outstanding Options shall be subject to the agreement of merger or consolidation. Such agreement shall provide for one or more of the following:

(i) The continuation of such outstanding Options by the Company (if the Company is the surviving corporation).

(ii) The assumption of such outstanding Options by the surviving corporation or its parent in a manner that complies with Section 424(a) of the Code (whether or not such Options are ISOs).

(iii) The substitution by the surviving corporation or its parent of new options for such outstanding Options in a manner that complies with Section 424(a) of the Code (whether or not such Options are ISOs).

(iv) Full exercisability of such outstanding Options and full vesting of the Shares subject to such Options, followed by the cancellation of such Options. The full exercisability of such Options and full vesting of the Shares subject to such Options may be contingent on the closing of such merger or consolidation. The Optionees shall be able to exercise such Options during a period of not less than five full business days preceding the closing date of such merger or consolidation, unless (A) a shorter period is required to permit a timely closing of such merger or consolidation and (B) such shorter period still offers the Optionees a reasonable opportunity to exercise such Options. Any exercise of such Options during such period may be contingent on the closing of such merger or consolidation.

(v) The cancellation of such outstanding Options and a payment to the Optionees equal to the excess of (A) the Fair Market Value of the Shares subject to such Options (whether or not such Options are then exercisable or such Shares are then vested) as of the closing date of such merger or consolidation over (B) their Exercise Price. Such payment shall be made in the form of cash, cash equivalents, or securities of the surviving corporation or its parent with a Fair Market Value equal to the required amount. Such payment may be made in installments and may be deferred until the date or dates when such Options would have become exercisable or such Shares would have vested. Such payment may be subject to vesting based on the Optionee's continuing Service, provided that the vesting schedule shall not be less favorable to the Optionees than the schedule under which such Options would have become exercisable or such Shares would have vested. If the Exercise Price of the Shares subject to such Options exceeds the Fair Market Value of such Shares, then such Options may be cancelled without making a payment to the Optionees. For purposes of this Paragraph (v), the Fair Market Value of any security shall be determined without regard to any vesting conditions that may apply to such security.

SECTION 9. SECURITIES LAW REQUIREMENTS.

Shares shall not be issued under the Plan unless the issuance and delivery of such Shares comply with (or are exempt from) all applicable requirements of law, including (without limitation) the Securities Act of 1933, as amended, the rules and regulations promulgated thereunder, state securities laws and regulations, and the regulations of any stock exchange or other securities market on which the Company's securities may then be traded.

SECTION 10. NO RETENTION RIGHTS.

Nothing in the Plan or in any right or Option granted under the Plan shall confer upon the Purchaser or Optionee any right to continue in Service for any period of specific duration or interfere with or otherwise restrict in any way the rights of the Company (or any Parent or Subsidiary employing or retaining the Purchaser or Optionee) or of the Purchaser or Optionee, which rights are hereby expressly reserved by each, to terminate his or her Service at any time and for any reason, with or without cause.

SECTION 11. DURATION AND AMENDMENTS.

(a) TERM OF THE PLAN. The Plan, as set forth herein, shall become effective on the date of its adoption by the Board of Directors, subject to the approval of the Company's stockholders. If the stockholders fail to approve the Plan within 12 months after its adoption by the Board of Directors, then any grants, exercises or sales that have already occurred under the Plan shall be rescinded and no additional grants, exercises or sales shall thereafter be made under the Plan. The Plan shall terminate automatically 10 years after the later of (i) its adoption by the Board of Directors or (ii) the most recent increase in the number of Shares reserved under Section 4 that was approved by the Company's stockholders. The Plan may be terminated on any earlier date pursuant to Subsection (b) below.

(b) RIGHT TO AMEND OR TERMINATE THE PLAN. The Board of Directors may amend, suspend or terminate the Plan at any time and for any reason; provided, however, that any amendment of the Plan shall be subject to the approval of the Company's stockholders if it (i) increases the number of Shares available for issuance under the Plan (except as provided in Section 8) or (ii) materially changes the class of persons who are eligible for the grant of ISOs. Stockholder approval shall not be required for any other amendment of the Plan. If the stockholders fail to approve an increase in the number of Shares reserved under Section 4 within 12 months after its adoption by the Board of Directors, then any grants, exercises or sales that have already occurred in reliance on such increase shall be rescinded and no additional grants, exercises or sales shall thereafter be made in reliance on such increase.

(c) EFFECT OF AMENDMENT OR TERMINATION. No Shares shall be issued or sold under the Plan after the termination thereof, except upon exercise of an Option granted prior to such termination. The termination of the Plan, or any amendment thereof, shall not affect any Share previously issued or any Option previously granted under the Plan.

SECTION 12. DEFINITIONS.

(a) "BOARD OF DIRECTORS" shall mean the Board of Directors of the Company, as constituted from time to time.

(b) "CODE" shall mean the Internal Revenue Code of 1986, as amended.

(c) "COMMITTEE" shall mean a committee of the Board of Directors, as described in Section 2(a).

(d) "COMPANY" shall mean Vanda Pharmaceuticals Inc., a Delaware corporation.

(e) "CONSULTANT" shall mean a person who performs bona fide services for the Company, a Parent or a Subsidiary as a consultant or advisor, excluding Employees and Outside Directors.

(f) "EMPLOYEE" shall mean any individual who is a common-law employee of the Company, a Parent or a Subsidiary.

(g) "EXERCISE PRICE" shall mean the amount for which one Share may be purchased upon exercise of an Option, as specified by the Board of Directors in the applicable Stock Option Agreement.

(h) "FAIR MARKET VALUE" shall mean the fair market value of a Share, as determined by the Board of Directors in good faith. Such determination shall be conclusive and binding on all persons.

(i) "FAMILY MEMBER" shall mean (i) any child, stepchild, grandchild, parent, stepparent, grandparent, spouse, former spouse, sibling, niece, nephew, mother-in-law, father-in-law, son-in-law, daughter-in-law, brother-in-law or sister-in-law, including adoptive relationships, (ii) any person sharing the Optionee's household (other than a tenant or employee), (iii) a trust in which persons described in Clause (i) or (ii) have more than 50% of the beneficial interest, (iv) a foundation in which persons described in Clause (i) or (ii) or the Optionee control the management of assets and (v) any other entity in which persons described in Clause (i) or (ii) or the Optionee own more than 50% of the voting interests.

(j) "ISO" shall mean an employee incentive stock option described in Section 422(b) of the Code.

(k) "NONSTATUTORY OPTION" shall mean a stock option not described in Sections 422(b) or 423(b) of the Code.

(l) "OPTION" shall mean an ISO or Nonstatutory Option granted under the Plan and entitling the holder to purchase Shares.

(m) "OPTIONEE" shall mean a person who holds an Option.

(n) "OUTSIDE DIRECTOR" shall mean a member of the Board of Directors who is not an Employee.

(o) "PARENT" shall mean any corporation (other than the Company) in an unbroken chain of corporations ending with the Company, if each of the corporations other than the Company owns stock possessing 50% or more of the total combined voting power of all classes of stock in one of the other corporations in such chain. A corporation that attains the status of a Parent on a date after the adoption of the Plan shall be considered a Parent commencing as of such date.

(p) "PLAN" shall mean this Vanda Pharmaceuticals Inc. Second Amended and Restated Management Equity Plan.

(q) "PURCHASE PRICE" shall mean the consideration for which one Share may be acquired under the Plan (other than upon exercise of an Option), as specified by the Board of Directors.

(r) "PURCHASER" shall mean a person to whom the Board of Directors has offered the right to acquire Shares under the Plan (other than upon exercise of an Option).

(s) "SERVICE" shall mean service as an Employee, Outside Director or Consultant.

(t) "SHARE" shall mean one share of Stock, as adjusted in accordance with Section 8 (if applicable).

(u) "STOCK" shall mean the Common Stock of the Company, with a par value of $0.001 per Share.

(v) "STOCK OPTION AGREEMENT" shall mean the agreement between the Company and an Optionee that contains the terms, conditions and restrictions pertaining to the Optionee's Option.

(w) "STOCK PURCHASE AGREEMENT" shall mean the agreement between the Company and a Purchaser who acquires Shares under the Plan that contains the terms, conditions and restrictions pertaining to the acquisition of such Shares.

(x) "SUBSIDIARY" shall mean any corporation (other than the Company) in an unbroken chain of corporations beginning with the Company, if each of the corporations other than the last corporation in the unbroken chain owns stock possessing 50% or more of the total combined voting power of all classes of stock in one of the other corporations in such chain. A corporation that attains the status of a Subsidiary on a date after the adoption of the Plan shall be considered a Subsidiary commencing as of such date.

LEASE AGREEMENT

THIS LEASE AGREEMENT, made this 25th day of June 2003, by and between RED GATE III LLC ("LANDLORD") and VANDA PHARMACEUTICALS, INC. ("TENANT").

WITNESSETH:

1. DEMISE OF PREMISES

Landlord hereby demises unto Tenant, and Tenant hereby leases from Landlord for the terms and upon the conditions set forth in this Lease 7,200 square feet of space in the building located at 9620 Medical Center Drive, Suite 201, Rockville, Maryland (the "Building"), as set forth on Exhibit A, hereto attached, said space being referred to as the "Premises."

2. TERM

The term of this Lease shall be for a period of 5 years, commencing on the 1st day of July 2003, and terminating on the 30th day of June 2008, with an option for an additional 5 years on the same terms and conditions in this Lease, provided that Tenant shall have given the Landlord written notice of Tenant's intention to do so at least six (6) months prior to the expiration of this Lease and that Tenant is not in default under this Lease.

3. RENT

The Tenant shall pay to the Landlord an annual rental (herein called "Minimum Rent") in the amount of ONE HUNDRED SEVENTY TWO THOUSAND EIGHT HUNDRED and NO/100 DOLLARS ($172,800.00), subject to adjustment as hereinafter set forth, payable without deduction or set off in equal monthly installments of FOURTEEN THOUSAND FOUR HUNDRED and NO/100 DOLLARS ($14,400.00) in advance, the first installment of which is due and payable upon signing of the Lease and upon commencement all subsequent installments due and payable on the first day of each calendar month thereafter during the term of the Lease until the total rent provided for herein is paid. No payment by Tenant or receipt of Landlord of a lesser amount than a monthly installment of rent herein stipulated, or endorsement or statement on any check or any letter accompanying any check for payment as rent be deemed an accord and satisfaction, and Landlord may accept such check for payment without prejudice to Landlord's right to recover the balance of such rent or pursue any other remedy provided for in this Lease.

4. ADJUSTMENT OF MINIMUM RENT

The Minimum Rent shall be increased at the end of each lease year during the term hereby by three percent (3%) of the rent then being paid. There shall be no additional pass-throughs of increases in operating expenses except for real estate taxes or as otherwise provided for herein.

5. REAL ESTATE TAXES

In the event the real estate taxes levied or assessed against the land and Building on which the Premises are a part in future tax years are greater than the real estate taxes for the Base Year, the Tenant shall pay within thirty (30) days after

submission of the bill to Tenant for the increase in real estate taxes, as additional rent, a proportionate share of such increase, which proportionate share shall be computed at 11.0% of the increase in taxes, but shall exclude any fine, penalty, or interest charge for late or non-payment of taxes by Landlord. The Base Year shall be July 1, 2003, to June 30, 2004.

Any reasonable expense incurred by Landlord (including counsel fees) in contesting any tax increase shall be included as an item of taxes for the purpose of computing additional rent due Landlord. Landlord, however, shall be under no obligation to contest any tax increase.

6. UTILITIES

Tenant shall be responsible for the payment of all utilities used or consumed by the Tenant in and upon the Premises. Electric and Gas shall be separately metered. Water shall be either separately metered or an equitable allocation made between the Tenants in the Building based on the quantity of water consumed. In the event any utility service to the Premises shall be interrupted for a period of more than two (2) days due to the negligence or willful misconduct of Landlord, its agents or servants, the Minimum Rent shall abate until such services are fully rendered.

Landlord shall not be liable to Tenant for any damage or inconvenience caused by the cessation or interruption of any utility service, or the elevators in the Building, occasioned by fire, accident, strike or other cause beyond Landlord's control.

7. USE OF PREMISES

Tenant shall use the Premises only for laboratory and office purposes consistent with Tenant's business, and for no other purpose, except as approved by Landlord in advance, in writing, which approval shall not be unreasonably withheld. Tenant shall not make any use of the Premises which would disturb the quiet enjoyment of the Landlord or other tenants in the Building or prejudice or increase the fire insurance premium for the Building, and shall comply with all laws and regulations of all governmental authorities pertaining to Tenant's use of Premises.

8. WASTE REMOVAL

Tenant shall be responsible for removal of waste generated by Tenant's operation. This includes waste service fees levied by local jurisdictions.

9. HAZARDOUS MATERIALS

Tenant shall be permitted to store Hazardous Materials on the Premises and shall comply with all laws and regulations of all governmental authorities pertaining to Tenant's use of the Premises, including, without limitation, all Environmental Laws (as hereinafter defined) and laws pertaining to Hazardous Materials and Air and Water Quality. The term "Hazardous Materials" means and includes any petroleum products and/or any hazardous toxic or other dangerous waste, substance or material defined as such in the Environmental Laws. The term "Environmental Laws" means the Comprehensive Environmental Response, Compensation and Liability Act, any "Superfund" or "Superlien" law, or any other federal, state or local statute, law, ordinance, code, regulation, order or decree regulating, relating to, or imposing liability or standards of conduct concerning the use or storage of Hazardous Materials. All such materials must be completely removed upon expiration of this Lease, and any de-contamination

certificates required by the Landlord or any government authority must be obtained and delivered to the Landlord.

Tenant shall obtain and maintain, in full force and effect, all necessary government licenses, permits and approvals legally required for materials used in the conduct of its business. If the presence of any Hazardous Materials on the Premises caused or permitted by Tenant results in any contamination of the Premises or any portion of the Building or Common Areas, Tenant shall promptly take all actions, at its sole expense, necessary to return the Premises to the condition existing prior to the introduction of such Hazardous Materials, provided that all such actions shall be subject to the approval of Landlord, which approval shall not be unreasonably withheld.

At the Commencement Date of the Lease and on January 1 of each year thereafter, Tenant shall disclose to Landlord the names and amounts of all Hazardous Materials which are to be stored, used or disposed of on the Premises.

Any Hazardous Materials stored or used on the Premises must not in any way prejudice the Landlord's insurance or increase the fire hazards to a greater extent than necessarily incident to the business for which the Premises are leased.

10. LATE CHARGE

If any installment of rent accruing herein shall not be paid within five (5) days of due date, and other sums not paid within fifteen (15) days after written notice to Tenant, such installment and other sums shall be increased without affecting the Landlord's other rights under this Lease, by a late charge of ten percent (10%) of the delinquent installment. Anything contained herein to the contrary notwithstanding.

11. REPAIRS AND MAINTENANCE

Landlord shall be responsible for all structural repairs, including repairs to the roof and load-bearing walls of the Building, for maintaining the parking area and sidewalks, and the Common Areas (as hereinafter defined) in the Building.

The Tenant shall be responsible for the maintenance and repair of the Premises and all fixtures, appliances and equipment therein, including, but not limited to, the Heating and Air Conditioning system(s) serving Tenant's suite. Landlord will pay for major Heating and Air Conditioning component replacement and all repairs to the Landlord installed heating and air conditioning system(s) in excess of Three Hundred Dollars ($300.00) per occurrence per Heating and Air Conditioning unit.

Tenant shall provide its own char service. Tenant, at its sole expense, shall keep all Tenant fixtures and equipment in the Premises in safe and sanitary condition and good order and repair, together with related plumbing, electrical or other utility service, whether installed by Tenant or by Landlord on Tenant's behalf. Tenant shall pay for all damage to the Building and any fixtures and appurtenances related thereto due to the malfunction, lack of repair, or improper installation of the Tenant's fixtures and equipment.

12. COMMON AREAS

In addition to the use of the Premises, Tenant, its employees and business invitees shall have the right to use the Common Areas in common with Landlord

and other tenants of the Building, their employees and visitors. The term "Common Areas" shall mean those portions of the Building and the land upon which the Building is erected which Landlord may from time to time designate for Tenant's non-exclusive use, which may include the entrance, foyer and lobby corridors, lavatories, stairwells, elevators, and parking areas. All Common Areas shall be subject to the exclusive control of the Landlord. The Landlord shall operate, manage, light and maintain the Common Areas. Landlord reserves the right to change the size, area, level, location and arrangement of the Common Areas and any such change or rearrangement shall not affect the obligations of the Landlord and Tenant hereunder.

13. LANDLORD'S WORK PRIOR TO COMMENCEMENT OF TERM

None. Landlord delivers the Premises "As Is." Landlord will reimburse Tenant up to $14,400.00 for carpet and up to $14,400.00 for paint when Tenant has presented paid invoices to Landlord showing the work has been completed and Landlord has inspected the work. All coordination for this work is the responsibility of the Tenant. This offer is null and void after June 30, 2004.

14. TENANT ALTERATIONS

All alterations, improvements, or additions to the demised Premises to be made by Tenant shall be subject to the written consent of the Landlord, which consent shall not be unreasonably withheld, provided such alterations and improvements do not weaken the structural integrity of the Building or detract from its dignity and/or uniformity. All alterations and improvements and/or additions made by Tenant shall remain upon the Premises at the expiration or earlier termination of this Lease and shall become the property of the Landlord, unless Landlord shall, at the time of approval of the alteration, provide written notice to Tenant to remove the same, in which event Tenant shall remove such alterations, improvements and/or additions, and restore the Premises to the same good order and condition in which it was at the commencement of this Lease, reasonable wear and tear and unavoidable casualty excepted. Should Tenant fail to do so, Landlord may do so, collecting the reasonable cost and expense thereof from Tenant as additional rent.

15. TRADE FIXTURES

All trade fixtures, telephone equipment, and apparatus installed by Tenant in the Premises shall remain the property of Tenant and shall be removed at the expiration or earlier termination of this Lease and, upon such removal, Tenant shall repair any damage caused by the removal and shall promptly restore the Premises to their good order and condition. Any such trade fixture not removed prior to such termination shall be considered abandoned property, but such abandonment shall not release Tenant of its obligation to pay for the cost of removing such trade fixtures and repairing any damage caused by the removal.

16. EQUIPMENT/BENCHWORK

Landlord provides the Laboratory Equipment and Benchwork listed below. It is the Tenant's responsibility to maintain, and service these items by obtaining service contracts with qualified vendors. All costs associated with the repair and maintenance of these items is Tenant's responsibility. These conditions remain in effect throughout the term of the Lease.

a) Crystal Tips Ice Machine Model BRS-725

b) Bulk Gas Manifold with Distribution Lines

c) 4' Bench Top Fume Hood

d) Sensaphone 1108 Monitor System

e) Laboratory Benchwork and Shelving with related fixtures

NOTE: The above items remain the properly of the Landlord.

17. QUIET ENJOYMENT

Landlord covenants that, upon payment of the rent herein provided and performance by the Tenant of all other covenants herein contained, Tenant shall and may peaceably and quietly have, hold and enjoy the Premises for the term hereof and options.

18. SURRENDER OF PREMISES

Upon the expiration or termination of this Lease, Tenant shall quit and surrender the Premises to the Landlord broom clean and shall remove all of its property therefrom. If the removal of any such property shall result in damaging the Premises, or leaving any holes in the floors, walls or ceiling therein, the Tenant shall make the appropriate repairs with Landlord approved building materials prior to the expiration of this Lease. The obligation of this paragraph shall survive the termination of the Lease.

19. INSURANCE

Tenant covenants and agrees to maintain and carry, at all times during the term of this Lease, in companies qualified and authorized to transact business in the State of Maryland, general liability insurance in amounts of $500,000.00 per person, $1,000,000.00 per occurrence and $100,000.00 for damage to property on the Premises or arising out of the use thereof by Tenant or its agents. All policies of insurance shall provide that they may not be canceled, except on thirty (30) days written notice to Landlord, and all such policies shall name Landlord as an additional insured.

Prior to commencement, Tenant shall furnish Landlord with satisfactory proof that the insurance herein provided for is at all times in full force and effect. If either party hereto is paid any proceeds under any policy of insurance naming such party as an insured on account of any loss, damage or liability, then such party hereby releases the other party to (and only to) the extent of the amount of such proceeds, from any and all liability for such loss or damage, notwithstanding negligent or intentionally tortuous act or omission of the other party, its agents or employees; provided, such release shall be effective only as to a loss of damage occurring while the appropriate policy of insurance of the releasing party provides that such release shall not impair the effectiveness of such policy or the insured's ability to recover thereunder. Each party hereto shall use reasonable efforts to have a clause to such effect included in its said policies, and shall promptly notify the other in writing if such clause cannot be included in any such policy.

20. INDEMNIFICATION

Tenant shall indemnify and hold harmless the Landlord from, and name LANDLORD as additional insured on policy regarding, any and all liability, damage, expense, cause of action, or claims arising out of injury to persons or to property on the Premises, except for the negligence or willful misconduct of Landlord, its agents, employees, or servants.

21. DAMAGE BY FIRE OR CASUALTY

(a) If the Premises are damaged by fire or other casualty, but are not thereby rendered untenantable in whole or in part, Landlord, at its own expense, and subject to the limitations set forth in this Lease, shall cause such damage to be repaired and the Minimum Rent and Additional Rent shall not be abated.

If, by reason of any damage or destruction, the Premises shall be rendered untenantable in whole or in part and cannot be repaired and made tenantable within one hundred twenty (120) days after such damage: (i) Landlord, at its option and its own expense, may cause the damage to be repaired and the Minimum Rent and Additional Rent shall be abated proportionately as to the portion of the Premises rendered untenantable while it is untenantable; or (ii) Landlord shall have the right, to be exercised by notice in writing delivered to Tenant within thirty (30) days of the occurrence of such damage or destruction, to terminate this Lease, whereupon the Minimum Rent and Additional Rent shall be adjusted as of the date of such termination.

(b) In the event that twenty-five percent (25%) or more of the rentable floor area of the Building shall be damaged or destroyed by fire or other cause, notwithstanding that the Premises may be unaffected by such fire or other damage, Landlord shall have the right, to be exercised by notice in writing delivered to Tenant within thirty (30) days after such occurrence, to terminate this Lease. Upon the giving of such notice, the Minimum Rent and Additional Rent shall be adjusted as of the date of termination and This Lease shall thereupon terminate.

22. ASSIGNMENT OR SUBLETTING

Tenant acknowledges that Landlord has entered into this Lease because of Tenant's financial strength, goodwill, ability and expertise and that accordingly, this lease is personal to Tenant. Taking this into consideration, tenant shall not assign, mortgage, sublet, pledge or encumber this Lease, in whole or in part, except with the written consent of the Landlord, which shall not be unreasonably withheld or delayed. Tenant agrees that, in the event of any such assignment or subletting, Tenant shall nevertheless remain liable for the performance of all terms, covenants, and conditions of this Lease.

In the event the Landlord consents to an assignment of the Lease, any money or consideration to be paid to Tenant for the assignment shall be paid to the Landlord as partial consideration for the Landlord's consent to the assignment.

In the event the Landlord consents to a sublease of the Premises, or any portion thereof, Tenant shall pay to the Landlord a sum equal to (1) any money, rent or other consideration paid to the Tenant by any subtenant in excess of the pro-rata portion of the rent for such space then being paid by Tenant to Landlord under this Lease and (2) any other profit or gain realized by the Tenant from such subletting. All sums payable hereunder by Tenant shall be paid to Landlord as additional rent immediately upon the receipt thereof by Tenant.

23. SUBORDINATION AND ATTORNMENT

This Lease shall be subject to and subordinate at all times to the lien of any mortgage and/ or deeds of trust and all land leases now or hereafter made on any portion of the Premises, and to all advances thereunder, provided the mortgagee or trustee named in said mortgage or deed of trust shall agree to recognize this

Lease and agrees, in the event of foreclosure, not to disturb the Tenant's possession hereunder, provided Tenant is not in default under this Lease. This subordination shall be self-operative and no further instrument of subordination shall be required.

If any proceedings are commenced to foreclose any mortgage or deed of trust encumbering the Premises, Tenant agrees to attorn to the purchaser at the foreclosure sale, if requested to do so by any such purchaser, and to recognize such purchaser as the Landlord under this Lease, provided purchaser shall agree that Tenant's rights hereunder shall not be disturbed so long as Tenant has not committed any event of default as to which the applicable cure period has expired.

24. CONDEMNATION

(a) If the whole of the Premises shall be taken by any public or quasi-public authority under the power of eminent domain, condemnation or conveyance in lieu thereof, then this Lease shall terminate as of the date on which possession of the Premises is required to be surrendered to the condemning authority and the Tenant shall have no claim against Landlord or the condemning authority for the value of the unexpired term of this Lease. Tenant shall have the right to claim, however, the unamortized cost of any improvements or additions made to the Premises by Tenant at its cost, the value of any Tenant fixtures and furnishings and any moving expenses.

(b) If a portion of the Premises shall be so taken or conveyed, and if such partial taking or conveyance shall render the Premises unsuitable for the business of the Tenant, then the term of this Lease shall cease and terminate as of the date on which possession of the portion of the Premises is surrendered to the condemning authority, and Tenant shall have no claim against Landlord or the condemning authority for the value of any unexpired term of this Lease.

In the event such partial taking or conveyance is not extensive enough to render the Premises untenantable for the business of Tenant, this Lease shall continue in full force and effect, except that the Minimum Rent shall be reduced in the same proportion that the floor area of the Premises so taken or conveyed bears to such floor area immediately prior to such taking or conveyance.

In the event of such partial taking and continuation of Lease, Landlord shall promptly restore the Premises as nearly as practical to the condition comparable to that which existed prior to the condemnation.

25. EVENTS OF DEFAULT

The occurrence of any of the following shall constitute an event of default hereunder:

(a) Failure of Tenant to pay installment of rent within five (5) days of the due date, or failure of Tenant to pay within fifteen (15) days after receipt of written notice any other sum herein required to be paid by Tenant.

(b) Tenant's failure to perform any other covenant or condition of this Lease within thirty (30) days after receipt of written notice and demand, unless the failure is of such a character as to require more than thirty (30) days to cure in which event Tenant's failure to proceed diligently to cure such

failure shall constitute an event of default.

26. LANDLORD'S REMEDIES

Upon the occurrence of any event of default, Landlord may, at Landlord's sole option, exercise any or all of the following remedies, together with any such other remedies as may be available to Landlord at law or in equity.

(a) Landlord may terminate this Lease by giving Tenant written notice of its election to do so, as of a specified date not less than thirty (30) days after the date of the giving of such notice and this Lease shall then expire on the date so specified, and Landlord shall then be entitled to immediately regain possession of the Premises as if the date had been originally fixed as the expiration date of the term of this Lease. Landlord may then re-enter upon the Premises, either with or without due process of law, and remove all persons therefrom, the statutory notice to quit or any other notice to quit being hereby expressly waived by Tenant. Tenant expressly agrees that the exercise by Landlord of the right of re-entry shall not be a bar to or prejudice in any way other legal remedies available to Landlord. In that event, Landlord shall be entitled to recover from Tenant as and for liquidated damages an amount equal to the rent and additional rent reserved in this Lease less any and all amounts received by Landlord from the rental of the Premises to another tenant. Nothing herein contained, however, shall limit or prejudice the right of Landlord to prove for and obtain as liquidated damages, by reason of such termination, an amount equal to the maximum allowed by any statute or rule of law in effect at the time when, and governing the proceedings in which such damages are to be proved, whether or not such amount may be greater, equal to, or less than the amount of the difference referred to above, and the Landlord may, in his own name, but as agent for Tenant, re-let the Premises. Any recovery by the Landlord shall be limited to the rent hereunder (plus any costs incurred in re-letting) less any rent actually paid by the new tenant.

(b) No termination of this Lease or any taking of possession of the Premises shall deprive Landlord of any of its remedies or actions against Tenant for past or future rent, nor shall the bringing of any action for rent or breach of covenant, or the resort to any other remedy herein provided for the recovery of rent, be construed as a waiver of the right to obtain possession of the Premises.

(c) In addition to any damages becoming due under this paragraph, Landlord shall be entitled to recover from Tenant and Tenant shall pay to Landlord an amount equal to all expenses, including attorneys' fees, if any, incurred by the Landlord in recovering possession of the Premises, and all reasonable costs and charges for the care of said Premises while vacant, which damages shall be due and payable by Tenant to Landlord at such time or times as such expenses are incurred by the Landlord.

(d) In the event of a default or threatened default by Tenant of any of the terms or conditions of this Lease, Landlord shall have the right of injunction and the right to invoke any remedy allowed by law or in equity as if no specific remedies of Landlord were set forth in this Lease.

(e) If default be made and a compromise and settlement shall be had thereupon, it shall not constitute a waiver of any covenant herein contained, nor of the Lease itself.

27. RIGHTS OF LANDLORD

Landlord reserves the following rights with respect to the Premises:

(a) During normal business hours, upon 24 hours notice, to go upon and inspect the Premises, and at Landlord's option, to make repairs, alterations and additions to the Premises or the Building of which the Premises are a part, provided there is no interference with Tenant's occupancy. An Agent of the Tenant may be present for inspection, if requested by Tenant.

(b) To display, within sixty (60) days prior to the expiration of this Lease or after notice from either party of intention to terminate this Lease, a "For Rent" sign, and all of said signs which shall be placed upon such part of the Premises as Landlord shall determine, except on doors leading into the Premises. Prospective purchasers or tenants authorized by Landlord may inspect the Premises during normal business hours following adequate notice to Tenant.

(c) To install, place upon, or fix to the roof and exterior walls of the Premises, equipment, signs, displays, antennae, and any other object or structure of any kind, providing the same shall not materially impair the structural integrity of the Building or interfere with Tenant's occupancy.

28. HOLDING OVER

If Tenant holds possession of the Premises after the termination of this Lease or any renewal or extension thereof, Tenant shall become a Tenant from month to month at 150% of the then current escalated rental rate.

29. WAIVER OF CLAIMS

Except as may result from their negligence, Landlord and Landlord's agents, employees, and contractors shall not be liable for, and Tenant hereby releases all claims for, damages to persons or property sustained by Tenant (or any person claiming through Tenant) resulting from any fire, accident, occurrence or condition in or upon the Premises or Building, including but not limited to such claims for damage resulting from (1) any defect in or failure of plumbing, heating or air-conditioning equipment, electric wiring or installation thereof, water pipes, stairs, railings or walks; (2) any equipment or apparatus becoming out of repair; (3) the bursting, leaking or running of any tank, washstand, water closet, waste pipe, drain or any other pipe or tank, upon or about such building or premises; (4) the backing up of any sewer pipe or downspout; (5) the escape of steam or hot water; (6) water, snow or ice being upon or coming through the roof or any other place upon or near the Building or Premises or otherwise; (7) the falling of any fixtures, plaster or stucco; (8) broken glass; and (9) any act or omission of occupants of adjoining or contiguous property or buildings.

30. NOTICE

All notices required under this Lease shall be given in writing and shall be deemed to be properly serviced if sent by certified or registered United States Mail, postage prepaid, as follows:

If to the Landlord: RED GATE III LLC
15215 Shady Grove Road
Suite 201
Rockville, Maryland 20850

If to the Tenant: VANDA PHARMACEUTICALS, INC.
9620 Medical Center Drive Suite
201 Rockville, Maryland 20850

or to such other address as either may have designated from time to time by written notice to the other. The date of service of such notices shall be the date such notices are deposited in any United Slates Post Office.

31. COVENANTS OF TENANT

Tenant covenants and agrees:

(a) To give to Landlord prompt written notice of any accident, fire, or damage occurring on or to the Premises.

(b) To keep the thermostats in the Premises set at a temperature sufficient to prevent freezing of water pipes, fixtures and HVAC units.

(c) To keep the Premises clean, orderly, sanitary, and free from all objectionable odors and from insects, vermin and other pests.

(d) To comply with the requirements of the State, Federal and County statutes, ordinances, and regulations applicable to Tenant and its use of the Premises, and to save Landlord harmless from penalties, fines, costs, and expenses resulting from failure to do so, provided Tenant shall not be obligated to make structural repairs or alterations to so comply.

(e) Tenant shall promptly pay all contractors, suppliers of material and persons it engages to perform work and provide materials for construction work on the Premises so as to minimize the possibility of a lien attaching to the Premises. Should any such lien be made or filed, Tenant shall cause the same to be discharged and released of record by bond or otherwise within ten (10) days of receipt of written request from Landlord.

(f) Tenant is responsible for the security of the Premises.

32. LANDLORD'S RIGHT TO ALTER SITE PLAN

LANDLORD shall, from time to time, have the right to alter or modify the site plan of the Building and to rearrange the driveways and parking areas, as well as the entrance and exits to the Premises.

33. PARKING SPACES

LANDLORD agrees to furnish 3 1/3 unreserved parking spaces per thousand square feet of space occupied by the TENANT.

34. ENTIRE AGREEMENT

This Lease contains the entire agreement of the parties. There are no oral agreements existing between them.

35. SUCCESSORS AND ASSIGNS

This Lease, and the covenants and conditions herein contained shall inure to the benefit of and be binding upon the Landlord, its successors and assigns, and shall inure to the benefit of and be binding upon the Tenant, its successors and assigns,

if permitted.

36. BANKRUPTCY

If Tenant shall make an assignment of its assets for the benefit of creditors, or if Tenant shall file a voluntary petition in bankruptcy, or if any involuntary petition in bankruptcy or for receivership be instituted against the Tenant and the same be not dismissed within thirty (30) days of the filing thereof, or if Tenant shall be adjudged bankrupt, then and in any of said events, this Lease shall immediately cease and terminate at the option of the Landlord with the same force and effect as though the date of said event was the date herein fixed for expiration of the term of this Lease.

37. NON-DELIVERY

In the event the Landlord shall be unable to give possession of the Premises because Human Genome Sciences, Inc., has not released the Premises under the terms of their Lease or for any other cause reasonably beyond the control of the Landlord, the Landlord shall not be liable to Tenant for any damage resulting from failure to give possession.

38. PARTIAL INVALIDITY

If any term, covenant, or condition of this Lease or the application thereof to any person or circumstance shall be held to be invalid and unenforceable, the remainder of this Lease, and the application of such terms, covenants, or conditions shall be valid and enforceable to the fullest extent permitted by law.

39. FORCE MAJEUR

With the exception of those provisions contained herein regarding the payment of rent, the inability of either party to perform any of the terms, covenants or conditions of this Lease shall not be deemed a default if the same shall be due to any cause beyond the control of that party.

40. ESTOPPEL CERTIFICATE

The Tenant shall from time to time, within five (5) days after being requested to do so by the Landlord or any Mortgagee, execute, acknowledge and deliver to the Landlord (or, at the Landlord's request, to any existing or prospective purchaser, transferee, assignee or Mortgagee of any or all of the Premises) an instrument in recordable form, certifying (a) that this Lease is unmodified and in full force and effect (or, if there has been any modification thereof, that it is in full force and effect as so modified, stating therein the nature of such modification); (b) as to the dates to which the Minimum Rent and other charges arising hereunder have been paid; (c) as to the amount of any prepaid Rent or any credit due to the Tenant hereunder; (d) that the Tenant has accepted possession of the Premises, and the date on which the Term commenced; (e) as to whether, to the best knowledge, information and belief of the signer of such certificate, the Landlord or the Tenant is then in default in performing any of its obligations hereunder (and, if so, specifying the nature of each such default); and (f) as to any other fact or condition reasonably requested by the Landlord or such other addressee. In the event the Tenant fails or refuses to provide such a certificate, Tenant shall be liable to Landlord for any loss or damage (including reasonable counsel fees) arising out of or in connection with such failure or refusal.

IN WITNESS WHEREOF, the parties have caused this Lease Agreement to be executed on the year and date first written.

	LANDLORD:
WITNESS:	RED GATE III LLC
/s/ Ross L. Englehart	/s/ William M. Rickman
- -------------------------	----------
Ross L. Englehart	By: William M. Rickman
	TENANT:
WITNESS:	VANDA PHARMACEUTICALS, INC.
/s/ Jennifer Masella	/s/ M. H. Polymeropoulos
- -------------------------	----------
Jennifer Masella	By: M. H. Polymeropoulos

[FLOOR PLAN]

EXHIBIT 10.8

AMENDMENT TO LEASE AGREEMENT

This amendment to lease agreement ("AGREEMENT") made and entered into this 29th day of September 2003, by and between Red Gate III LLC ("LANDLORD") and Vanda Pharmaceuticals, Inc. ("TENANT").

WITNESSETH:

Whereas, the LANDLORD and TENANT entered into a certain lease ("LEASE") dated June 25, 2003, covering 7,200 square feet of space ("PREMISES") located in 9620 Medical Center Drive, Suite 201, Rockville, Maryland ("BUILDING"); and

Whereas, the TENANT desires and the LANDLORD agrees to add 1,800 square feet of space to the LEASE. LANDLORD will deliver the space as shown on the attached floor plan, including paint and carpet. TENANT is responsible for paying for three fixed wall windows and one glass wall at a total cost of Two Thousand Four Hundred and No/100 Dollars ($2,400.00). The new total of space is 9,000 square feet; and

Whereas, the new rent will be Eighteen Thousand and No/100 Dollars ($18,000.00) per month commencing November 1, 2003, or at an earlier date if LANDLORD has completed its work, and increase annually in accordance with the LEASE; and

Whereas, the TENANT'S new proportionate share of Real Estate Taxes is 13.7% effective November 1, 2003, or earlier as stated in the preceding paragraph.

Ratification of LEASE: Except as expressly modified or amended by this AGREEMENT, all terms, covenants and conditions of the LEASE shall remain the same.

In witness whereof, LANDLORD and TENANT have caused this AGREEMENT to be executed as of this 29th day of September 2003, and do hereby declare this AGREEMENT to be binding on them, their respective successors and assigns.

WITNESS:	LANDLORD: Red Gate III LLC
/s/ Ross L. Englehart - -------------------------- Ross L. Englehart	/s/ William M. Rickman ---------- By: William M. Rickman
WITNESS:	TENANT: Vanda Pharmaceuticals, Inc.
_____	/s/ M. Polymeropoulos ---------- By: M. Polymeropoulos

EXHIBIT 10.9

DATE OF LEASE EXECUTION: August 4th, 2005
(To be completed by Landlord)

ARTICLE I
REFERENCE DATA

1.1 SUBJECTS REFERRED TO:

Each reference in this Lease to any of the following subjects shall be construed to incorporate the data stated for that subject in this Section 1.1:

LANDLORD: MCC3, LLC, a Delaware limited liability company

MANAGING AGENT: Spaulding and Slye LLC

LANDLORD'S ADDRESS: c/o Spaulding and Slye LLC
255 State Street
Boston, MA 02109
Attn: Chief Financial Officer

with a copy of all notices to:

Spaulding and Slye LLC
1717 Pennsylvania Avenue, N.W.
Washington, DC 20006
Attn: Director of Property Management

and

New Boston Fund, Inc.
60 State Street
Suite 1500 Boston, MA 02109
Attn: Jerome L. Rappaport, Jr.

LANDLORD'S REPRESENTATIVE: Sue Kravitz

TENANT: Vanda Pharmaceuticals, Inc., a Delaware Corporation

TENANT'S ADDRESS (FOR NOTICE AND BILLING):

Before Commencement Date:

Vanda Pharmaceuticals, Inc.
9620 Medical Center Drive, Suite 201
Rockville, MD 20850
Attn: Chip Clark

After Commencement Date:

Vanda Pharmaceuticals, Inc.
9605 Medical Center Drive
Rockville, MD 20850
Attn: Chip Clark

with a copy of all notices to:

Looney, Cohen, Reagan & Aisenberg LLP
109 State Street, 2nd Floor
Boston, MA 02109
Attn: James H. Cohen, Esq.

TENANT'S REPRESENTATIVE: Chip Clark

BUILDING: The building located on the parcel of land described in Exhibit A hereto. References in the Lease to "Base Building" mean the Building shell including base Building mechanical, electrical and plumbing systems (other than the horizontal distribution lines, ducts or equipment); main lobby and elevator lobbies on the first floor, but excluding all leased or leasable areas within the Building. A more detailed description of the Building Standard Completed Shell is set forth in Part 1 of Exhibit C hereto.

BUILDING ADDRESS: 9605 Medical Center Drive, Rockville, MD 20850

RENTABLE FLOOR AREA OF TENANT'S SPACE: Approximately 17,002 square feet, measured in accordance with Section 10.24 hereof.

TOTAL RENTABLE FLOOR AREA OF THE BUILDING: Approximately 115,691 square feet, measured in accordance with Section 10.24 hereof.

TENANT'S DESIGN COMPLETION DATE: See Exhibit C - Part I

SCHEDULED TERM COMMENCEMENT DATE: January 1, 2006

TERM EXPIRATION DATE: June 30, 2016 or if the Commencement Date occurs other than January 1, 2006, then the Term Expiration Date shall be the last day of the 126th full calendar month of the Term.

APPROXIMATE TERM: Ten (10) years, six (6) months

ANNUAL RENT: $421,770.00 (triple net) for the first Lease Year (subject to an annual adjustment as provided in Section 4.1), computed as follows:

$23.00 p.r.s.f. X 17,002 rentable square feet	=	$391,046.00 (the "Base Annual Rent")
+ $ 1.81 p.r.s.f. X 17,002 rentable square feet	=	$ 30,773.62 (the "Additional Allowance Charge")
	=	$421,819.62 Annual Rent

ANNUAL ELECTRICAL COST: As provided in Section 4.4.

SECURITY DEPOSIT: $430,230.00

GUARANTOR: N/A

TENANT ALLOWANCE: In accordance with Section 3.5, Tenant shall receive an allowance for design and construction of improvements in accordance with Section 3.1 (a) in up to 2,578 square feet of the Premises to be used as a wet laboratory (the "Lab Space") not to exceed the sum of (i) $40.00 p.r.s.f. of the Lab Space (the "Tenant Allowance"), plus (ii) at Tenant's option, up to an additional $70.00 p.r.s.f. of Lab Space (the "Additional Allowance"). Landlord shall complete improvements in the remainder of the Premises (the "Office Space") on a turnkey basis as provided in Section 3.1(b). The costs incurred by Landlord in connection with the design and construction of improvements in the Office Space are herein sometimes referred to as the "Turnkey Costs." The Additional Allowance shall be amortized with interest thereon

at twelve percent (12%) per annum over the first ten (10) Lease Years, and the amount amortized each Lease Year (herein referred to as the "Additional Allowance Charge") shall be added to Annual Rent payable by Tenant as herein provided. If Landlord does not provide the entire Additional Allowance to pay costs of completing laboratory space as herein provided, the amount of the Additional Allowance actually provided by Landlord shall be confirmed by Landlord and Tenant on the Lease Commencement Date Agreement and the Additional Allowance Charge p.r.s.f. shall be reduced to reflect the actual amount of Additional Allowance actually provided by Landlord, using the applicable interest rate and amortization period, and the Annual Rent shall be adjusted accordingly. Tenant shall have the option to prepay any or all of the Additional Allowance prior to the expiration or earlier termination of this Lease without penalty or additional finance charge on the amount so prepaid.

TENANT'S SHARE: Tenant's Share shall be equal to a fraction, the numerator of which shall be the Rentable Floor Area of Tenant's Space (as the same may be increased or decreased in accordance with this Lease) and the denominator of which shall be the Total Rentable Floor Area of the Building.

PERMITTED USES: Office and laboratory use (including development and testing, including genetic testing, of pharmaceutical drugs, but excluding human or animal testing) allowable per applicable law only and no other use.

PUBLIC LIABILITY INSURANCE: SINGLE OCCURRENCE: $5,000,000
AGGREGATE: $10,000,000

LEASE YEAR: For all purposes of this Lease, the term "Lease Year" shall mean any period of twelve consecutive calendar months during the Term of this Lease which begins on the Commencement Date or an anniversary thereof, provided, however, that if the Commencement Date does not occur on the first day of a month, then the term "Lease Year" shall mean any period of twelve consecutive calendar months during the Term of this Lease beginning on the first day of the next calendar month following the Commencement Date, and the first Lease Year shall also include the period between the Commencement Date and the first day of such succeeding calendar month and provided further that the last Lease Year shall terminate on the Term Expiration Date or such earlier date on which the Lease may be terminated.

SPECIAL PROVISIONS: Provided Tenant is not in default hereunder, one half of each monthly installment of Base Annual Rent due for the first twelve (12) months of the initial Term shall be abated. The Security Deposit, whether in cash or in substantially the form of the letter of credit attached hereto as Exhibit I (the "Letter of Credit"), shall be due upon the execution of this Lease by Tenant.

1.2 EXHIBITS.

The exhibits and appendix listed below in this section are incorporated in this Lease by reference and are to be construed as part of this Lease:

EXHIBIT A	Legal Description of Lot
EXHIBIT B	Part I - Plan Showing Tenant's Space
	Part II - First Offer Space
EXHIBIT C	Part I - Building Standard Completed Shell
	Part II - Office Space Plan
	Part III- Milestone Schedule
EXHIBIT D	Landlord's Services
EXHIBIT E	Rules and Regulations
EXHIBIT F	Intentionally Omitted
EXHIBIT G	Form of Estoppel Certificate

1.3 TABLE OF CONTENTS

ARTICLE II
PREMISES AND TERM

2.1 PREMISES.

Subject to and with the benefit of the provisions of this Lease and the Ground Lease (as hereinafter defined) relating to the parcel of land described in Exhibit A attached hereto and made a part hereof (the "Lot"), Landlord hereby leases to Tenant, and Tenant leases from Landlord, Tenant's Space shown in Exhibit B attached hereto and made a part hereof, on the third (3rd) floor of the Building on the Lot, excluding exterior faces of exterior walls, the common facilities areas and building service fixtures and equipment serving exclusively or in common other parts of the Building. Tenant's Space, with such exclusions, is hereinafter referred to as the "Premises."

Tenant shall have, as appurtenant to the Premises, the right to use in common with others entitled thereto: (a) the common facilities included in the Building or on the Lot to the extent and in the location from time to time designated by Landlord and the common facilities, if any, on the Johns Hopkins University Montgomery County Campus (the "Campus") of which the Building and Lot are a part to the extent such facilities are available for use by tenants of the Building, and (b) the building service fixtures and equipment serving the Premises.

Landlord reserves the right from time to time, without notice or liability to Tenant, (a) to install, repair, replace, use, maintain and relocate for service to the Premises and to other parts of the Building or either, building service fixtures and .equipment wherever located in the Building and (b) to alter or relocate any common facilities, provided, however, that the same do not materially adversely affect Tenant's use of or access to the Premises except in the case of temporary disruptions caused by such activities. Landlord shall use reasonable efforts to minimize any disruption to Tenant's enjoyment of the Premises from construction and repair activity within the Building. Tenant acknowledges that Johns Hopkins University ("JHU") will conduct evening and weekend classes in the Building and that to accommodate such users, the Building common areas will be open from 7:00 a.m. to 11:00 p.m., Monday through Friday, and from 8:00 a.m. to 6:00 p.m., Saturday, Sunday and Holidays (subject to adjustment from time to time).

2.2 TERM.

To have and to hold for a period (the "Term") commencing on the earliest of (a) the later of (i) the Scheduled Term Commencement Date, or (ii) the date on which the Premises are deemed ready for occupancy as provided in Section 3.2, or (b) in any event, the date on which Tenant occupies ail or any part of the Premises for the purpose of conducting its business operations (whichever of said dates is appropriate being hereafter referred to as the "Commencement Date"), and continuing until the Term Expiration Date, unless sooner terminated as provided in this Lease. Promptly following Landlord's request, Landlord and Tenant agree to execute a Lease Commencement Date Agreement in the form of Exhibit H which shall establish the Commencement Date and become part of the Lease.

2.3 OPTION TO EXTEND.

Tenant shall have the right to renew the Lease in its entirety for one consecutive additional term of five (5) years (the "Extension Term"), upon written notice delivered to Landlord (the "Extension Notice") not less than 12 months nor more than 15 months prior to the Term Expiration Date; provided that at the time Tenant gives the Extension Notice to Landlord and at the time of expiration of the initial Term, (i) Tenant is not in default hereunder beyond expiration of any applicable grace or cure periods, and (ii) except for a Permitted Assignment (as defined in Section 6.1.6), Tenant has not assigned this Lease and is not subleasing in the aggregate more than fifty percent (50%) of the Premises. In no event shall any assignee (other than a Permitted Assignee, as defined in Section 6.1.6) or subtenant be entitled to exercise the right to renew set forth in this paragraph.

If this right to renew is exercised by Tenant, all terms, covenants, conditions and provisions of the Lease (including, without limitation, those related to additional rent, Operating Cost Escalations, Real Estate Tax Escalations, Tenant's Annual Electrical Cost and, if applicable, Tenant's Annual Water or Gas Cost) shall apply during the Extension Term, and the Lease shall continue in full force and effect except that: (a) Tenant shall occupy the Premises in its then "as is" and "where is" condition; (b) the provisions of this Lease as to Tenant Allowance, Turnkey Costs, Additional Allowance, and rental abatement for the first Lease Year shall not apply to the Extension Term; (c) the Annual Rent for the Premises shall be adjusted as hereinafter provided; and (d) Tenant shall have no further right to renew or extend this Lease unless otherwise agreed to in writing by the parties. Annual Rent for the first year of the Extension Term will be equal to the then-projected market rate of rent with market concessions for space of a similar quality and otherwise comparable to the Premises in the Building and in the market area as of the expiration of the initial Term and shall thereafter escalate, in accordance with market terms as determined in accordance herewith provided, however, in no event shall Annual Rent be less than the Base Annual Rent payable by Tenant hereunder during the 12-month period prior to commencement of the Extension Term, plus any remaining unpaid portion of the Additional Allowance Charge.

If, by the date thirty (30) calendar days following timely and valid delivery of Tenant's Extension Notice exercising its option to extend the Term, Landlord and Tenant have not agreed in writing as to the Annual Rent to be paid by Tenant, including annual escalations thereof, or the tenant allowance, if any, to be paid by Landlord during the applicable Extension Term, either Landlord or Tenant may elect that the fair market rent, escalations and tenant allowance, if any, be determined in accordance with the following procedure (which procedure is herein referred to as the "Three-Broker Method"). If neither Landlord nor Tenant delivers notice to the other electing to use the Three-Broker Method (the "Appraisal Notice") within seven (7) business days following the aforesaid thirty (30) day period, then Tenant's exercise of its right to extend the Term shall be void and Tenant's options to renew in accordance herewith shall terminate and be null and void. If either Landlord or Tenant timely delivers the Appraisal Notice, Landlord and Tenant shall each appoint one commercial real estate broker, and the two so selected shall mutually select a third. Said real estate brokers shall each be licensed in Maryland, specializing in the field of commercial real estate leases (including those with wet labs) in the Montgomery County, Maryland area, having no less than ten (10) years' experience in such field, and recognized as ethical and reputable within their field. Landlord and Tenant agree to make their appointments promptly within seven (7) business days after delivery of the Appraisal Notice. The two brokers selected by Landlord and Tenant shall promptly select a third broker within seven (7) business days after they have both been appointed. Within ten (10) business days after the third broker is selected, each broker shall submit his or her determination of the then-projected prevailing market rent, including annual escalations thereof and tenant allowance and other market concessions, if any, for comparable space in comparable buildings within the market area. For purposes hereof, the prevailing market rent, escalations thereof and tenant allowance and other concessions, if applicable, shall be deemed to equal the mean of the two closest rental rate, escalation and allowance determinations. However, if either party fails to appoint a broker within seven (7) business days as provided above, the one broker who was timely appointed by the other party shall by himself make the determination of the prevailing market rent, escalations and allowance, if any. Landlord and Tenant shall each be bound by such determinations. Landlord and Tenant shall each pay the fees of the broker that it appointed and shall each pay one-half of the fees of the third broker, or the single broker as the case may be.

2.4 RIGHT TO CANCEL.

Notwithstanding anything to the contrary contained in this Lease, if Tenant is not in default beyond applicable notice and cure periods as of the date it delivers a Cancellation Notice (as defined below) and as of the Early Expiration Date (as defined below), Tenant may terminate this Lease effective upon the last day of the sixty-sixth (66th) calendar month of the Term (the "Early Expiration Date"), by delivery of a written notice (the "Cancellation Notice") and the applicable Termination Payment (as described below) to Landlord no later than the last day of the fifty-fourth (54th) calendar month of the Term. The Termination Payment due to Landlord should Tenant elect to terminate this Lease shall be the unamortized value, determined as herein provided, of the "Lease Transaction Costs" (as defined below). For purposes hereof, the Lease Transaction Costs shall mean all the Tenant Allowance, Turnkey Costs,

Additional Allowance, and all other costs incurred by Landlord with respect to all Leasehold Improvements to or for the Premises paid for by Landlord (including interest thereon, if any, at the cost to Landlord to obtain funds to pay for such obligations), the full amount of the Base Annual Rent abated in accordance with Section 1.1, and all reasonable legal fees incurred by Landlord in connection with the negotiation of this Lease as amended and all brokerage commissions incurred by Landlord in connection with this Lease as it may be amended, but excluding the Test Fit Allowance (as defined in Section 3.4) paid by Landlord for the initial space plan for the Premises. For the purpose of determining the Termination Payment, the Lease Transaction Costs shall be amortized on a straight-line basis over the initial ten (10) Lease Years of the Term, and the unamortized value shall be measured by Landlord as of the Early Expiration Date. Upon the Commencement Date, Landlord and Tenant shall execute a Lease Commencement Date Agreement (Exhibit H) that stipulates the amount of unamortized costs as stated above that will be due upon delivery of a Cancellation Notice.

If Tenant validly terminates this Lease as herein provided, this Lease shall terminate as of the Early Expiration Date as if such date were the original Term Expiration Date set forth in this Lease and Tenant will vacate and surrender the Premises on the Early Expiration Date in the condition required by Subsection 6.1.2.

2.5 RIGHT OF FIRST OFFER.

Subject to the conditions subsequently set forth in this Section 2.5, Tenant shall, following the initial leasing of all of the space in the Building (the "Initial Lease-Up") and during the remainder of the initial Term of this Lease, have a right of first offer with respect to the lease of the space identified as the "First Offer Space" shown on Exhibit B-2 hereto and contiguous to the Premises (herein referred to as the "First Offer Space"), excepting any portion thereof leased by Tenant pursuant to Section 2.6, when such rentable space becomes Available for Leasing (as hereinafter defined). This right of first offer shall be subject and subordinate to the rights granted to any tenant or tenants under leases in the Building entered into prior to the Date of Lease Execution set forth at the beginning of this Lease. As a result, Tenant's rights hereunder in the First Offer Space shall arise only (i) upon the expiration of early termination of the term of any lease of such space entered into prior to the Date of Lease Execution or pursuant to an option, right of refusal, offer or negotiation granted to a tenant under a lease executed prior to the Date of Lease Execution, including all permitted extensions or expansions thereof, and (ii) after Landlord first offers such space to other tenant(s) of the Building holding options to expand or rights of first refusal, offer or negotiation as to the First Offer Space pursuant to the terms of their respective leases (provided such leases were executed prior to the Date of Lease Execution) and such tenant(s) fail or refuse to lease the same in accordance with their respective leases. For purposes hereof, First Offer Space shall be "Available for Leasing" if such space is then or will within 12 months thereafter be vacant and unencumbered by any lease, option or right in favor of another tenant or tenants in the Building under leases executed prior the Date of Lease Execution.

If and when the First Offer Space or any portion thereof (herein referred to as the "Offered Space") becomes Available for Leasing in accordance with the preceding paragraph, prior to entering into a lease of such area with another person or entity, Landlord, by written notice to Tenant ("Landlord's Offer Notice), shall first offer to lease to Tenant the Offered Space provided that no other tenant has a prior claim to such space as described in the preceding paragraph and provided further that the conditions set forth herein are satisfied. Upon the receipt of Landlord's Offer Notice, Tenant shall have 10 days after receipt of Landlord's Offer Notice to advise Landlord in writing of Tenant's election to lease the entire Offered Space (the 'Tenant's Election Notice"), failing which Tenant's rights as to the Offered Space under this Section 2.5 shall terminate and shall be null and void and Landlord shall be free to lease the Offered Space in its sole discretion to another party or parties or to otherwise encumber the same in favor of other new or existing tenant(s) in the Building on such terms as Landlord may elect.

Any space taken by Tenant pursuant to this Section 2.5 shall, except as expressly provided in this Section 2.5, be taken by Tenant in its "as is" and "where is" condition and added to the Premises under the terms of this Lease, provided that Landlord shall have no obligation to incur Turnkey Costs or provide Tenant with the Tenant Allowance, Additional Allowance, or rent abatement for the first Lease Year

provided under this Lease and Annual Rent for the Offered Space shall be determined as hereinafter provided. The Annual Rent payable by Tenant for Offered Space leased by Tenant in accordance with this Section 2.5 shall be equal to the then-prevailing market rate of rent with market concessions for comparable space in the market area and shall escalate annually in accordance with market terms, provided however, that in no event shall Annual Rent for the Offered Space be less than the Base Annual Rent payable by Tenant hereunder. In the event Landlord and Tenant are unable to reach agreement upon an amendment to this Lease adding the Offered Space to the Premises, including the rate of rent for such space, within thirty (30) days following the date Landlord received Tenant's Election Notice, Tenant's rights under this Section 2.5 shall terminate and shall be null and void with respect to the Offered Space designated in that particular Offer Notice, and Landlord shall be free to lease such Offered Space in its sole discretion to another party or parties or to otherwise encumber the same in favor of other or new tenant(s) in the Building on such terms as Landlord may elect.

Tenant acknowledges and agrees that Landlord shall have no obligation to lease First Offer Space to Tenant under this Section 2.5 unless at the time the Offered Space is added to the Premises no less than three years remains of the initial Term of the Lease.

At the time Tenant seeks to exercise any right provided to Tenant under this Section 2.5, (i) Tenant shall not be in default under the terms of this Lease beyond applicable grace or cure period, and (ii) except for a Permitted Assignment, Tenant may not have assigned this Lease or be subletting in the aggregate more than twenty five percent (25%) of the Premises. In no event shall any assignee (other than a Permitted Assignee) or subtenant have the right to exercise Tenant's right under this Section 2.5.

2.6 OPTION TO EXPAND.

Subject to the conditions subsequently set forth in this Section 2.6, Tenant shall have an option to the lease of up to 10,000 rentable square feet of the First Offer Space identified as the "Option Space" on Exhibit B-2 hereto, and contiguous to the Premises (such portion of the First Offer Space, if any leased by Tenant under this Section 2.6, is herein referred to as the "Option Space").

If Tenant elects to lease all or any portion of the Option Space, then not later than sixty (60) days following the Date of Lease Execution Tenant shall give Landlord written notice of such election (identifying the area of Option Space, if less than all, that Tenant has elected to lease) (the 'Tenant's Option Election Notice"), failing which (or if Tenant does not elect to lease all of the Option Space in the Tenant's Option Election Notice) Tenant's rights under this Section 2.6 as to the entire Option Space or as to portion thereof Tenant has not timely elected to lease hereunder, as the case may be, shall terminate and shall be null and void.

Any space taken by Tenant pursuant to this Section 2.6 (the "Taken Option Space") shall be taken by Tenant in its "as is" and "where is" condition and added to the Premises under the terms of this Lease, including without limitation the terms of this Lease as to the rate of Annual Rent and Tenant Allowance per rentable square foot, provided however that Landlord shall have no obligation to incur any Turnkey Costs for such Space and the Additional Allowance, if any, shall apply only as to the Taken Option Space improved for use as wet laboratory, but in no event more than 30% of the Taken Option Space. If the Taken Option Space is less than all of the Option Space, the portion leased by Tenant hereunder shall be contiguous with the Premises and satisfactory to Landlord (in it sole but reasonable discretion) so that the remaining unleased portion of the Option Space is of a size, configuration and location on the floor that in Landlord's judgment is marketable for the full rental value of the Taken Option Space. In the event Tenant timely elects to lease any or all of the Option Space as herein provided, Landlord and Tenant shall execute and deliver an appropriate amendment to this Lease prepared by Landlord and adding the Taken Option Space to the Premises within thirty (30) days following the date Landlord received Tenant's Option Election Notice. If Tenant fails to execute any such amendment as and when herein provided, Tenant's rights under this Section 2.6 shall terminate and shall be null and void.

At the time Tenant seeks to exercise any right provided to Tenant under this Section 2.6, (i) Tenant shall not be in default under the terms of this Lease beyond applicable grace or cure period, and (ii) except for a Permitted Assignee, Tenant may not have assigned this Lease or be subletting in the aggregate more than twenty five percent (25%) of the Premises. In no event shall any assignee (other than a Permitted Assignee) or subtenant have the right to exercise Tenant's right under this Section 2.6.

ARTICLE III
CONSTRUCTION

3.1 INITIAL CONSTRUCTION.

Tenant acknowledges that Tenant has had an opportunity to inspect the Premises. Except as expressly herein provided as to the completion of Leasehold Improvements, the Premises shall be delivered to Tenant "as is" and "where is" with all faults and without representation, warranty or guaranty of any kind by Landlord to Tenant.

(a) Lab Space. Tenant shall provide to Landlord for approval on or before Tenant's Design Completion Date, complete sets of drawings and specifications for construction of leasehold improvements in the Lab Space (such complete sets, once approved by Landlord, are referred to herein as the "Lab Space Complete Plans") all of which shall be prepared at Tenant's expense by an architect selected by Tenant and approved by Landlord (herein referred to as Tenant's Architect") and Landlord's engineer, including but not limited to:

a. Furniture and Equipment Layout Plans

b. Dimensioned Partition Plans

c. Dimensioned Electrical and Telephone Outlet Plans

d. Reflected Ceiling Plans

e. Door and Hardware Schedules

f. Room Finish Schedules including wall, carpet and floor tile colors

g. Electrical, mechanical and structural engineering plans

h. All necessary construction details and specifications.

Tenant shall deliver such complete construction drawings and specifications to Landlord at Landlord's Address and Landlord shall have 5 business days (or 10 business days if the contemplated improvements will affect the structure of the Building or mechanical, electrical or plumbing systems) from the date it receives the same to review such drawings and specifications and notify Tenant as to whether they are approved by Landlord, it being understood that any such approvals are for the limited purposes set forth in Section 10.25 of the Lease. If Tenant's drawings and specifications are not approved by Landlord, Landlord shall inform Tenant of the reason and Tenant shall have the opportunity to submit revised plans (the "Revised Plans") and the Landlord shall have 5 business days from the date it receives the Revised Plans to review the same and notify the Tenant as to whether the Revised Plans are approved by Landlord.

Landlord and Tenant shall initial the Lab Space Complete Plans after the same have been submitted by Tenant and approved by Landlord. Tenant shall not amend or supplement the Lab Space Complete Plans, including by change order, without Landlord's approval.

All of Tenant's construction, installation of furnishings, and later changes or additions for the Lab Space shall be coordinated with any other work being performed by Landlord in such manner as to maintain harmonious labor relations and not to damage the Building or Lot or interfere with construction of the Building or related improvements or Building operations. All work described in the Lab Space Complete Plans (the "Lab Space Leasehold Improvements") shall be performed by Spaulding and Slye Construction Company, Limited Partnership (the "Landlord's Contractor").

The subcontractors for building the Lab Space Leasehold Improvements shall be selected according to the following process. Landlord's Contractor shall (i) solicit bids from at least three subcontractors for each trade, if applicable, and at the time of submission of final bid and pricing drawings pursuant to Milestone #5 set forth in Part III of Exhibit C hereto, Tenant may designate the name of at least one qualified subcontractor to be included in Landlord's Contractor's list; (ii) allow Tenant to review the results of bids received for the Lab Space Leasehold Improvements prior to awarding subcontracts for the work, provided, that any delay occasioned by Tenant's review shall be deemed a Tenant Delay (as hereinafter defined); and (iii) select the lowest qualified bid timely received in accordance with the foregoing process, provided that in no event shall Landlord's Contractor be required to accept any bid which Landlord's Contractor believes to be in error, or any bid from a subcontractor to which Landlord's Contractor may have reasonable objection. If Tenant elects that a trade not go through the three-bid process described above, Landlord's Contractor will obtain prices from a subcontractor in such trade and present the same to Tenant. The Tenant shall then have the right to approve such subcontractor and its prices or reject such subcontractor in which case the Landlord's Contractor will choose a subcontractor pursuant to the three bid process described above, and any delay occasioned by Tenant's rejection of any subcontractor shall be deemed a Tenant Delay (as hereinafter defined).

The Landlord's Contractor shall perform the Lab Space Leasehold Improvements for a guaranteed cost (including a 5% contractor's fee and the Landlord's Contractor's general conditions costs) established in accordance with procedure set forth above. Landlord shall not charge Tenant any fee for construction management. Landlord's Contractor shall obtain all necessary building permits for constructing the Lab Space Leasehold Improvements and the initial certificate of occupancy for the Lab Space.

Landlord, in its sole discretion, may elect by written notice to Tenant at the time it approves the Lab Space Complete Plans, not to approve any proposed construction, alterations or additions requiring unusual expense to readapt the Lab Space to normal laboratory use on lease termination or increasing the cost of construction, insurance or taxes on the Building or of Landlord's services called for by Section 5.1 unless Tenant first gives assurances acceptable to Landlord that such readaptation will be made prior to such termination without expense to Landlord and makes provisions acceptable to Landlord for payment of such increased cost. Landlord will also disapprove any alterations or additions requested by Tenant which will delay completion of the Premises or the Building. All changes and additions shall be part of the Building except such items as by writing at the time of approval the parties agree either shall be removed by Tenant on termination of this Lease or shall be removed at Tenant's cost or left at Tenant's election.

Tenant shall also pay to Landlord as additional rent the Tenant Improvement Reimbursement to Landlord (also herein referred to as "TIR") for the Lab Space. Tenant Improvement Reimbursement to Landlord for the Lab Space shall be the amount equal to the excess of (a) all costs incurred by Landlord on account of the Lab Space Leasehold Improvements including in the costs so incurred any fees and charges of Tenant's Architect or Landlord's engineer paid by Landlord and the cost and fees charged to Landlord by Landlord's Contractor over (b) the Tenant Allowance for the Lab Space set forth in Section 1.1 hereof and, if applicable, the Additional Allowance. Tenant shall pay to Landlord the TIR for the Lab Space parri passu with the disbursement by Landlord of the Tenant Allowance and, if applicable, Additional Allowance for the Lab Space, and the remainder upon substantial completion of Lab Space Leasehold Improvements, in each case, on submission by Landlord to Tenant of a statement therefor. In addition to paying TIR as provided above, Tenant shall pay an amount equal to all costs incurred by Landlord as a result of any change orders signed by Tenant and Landlord affecting the Lab Space Complete Plans, including the costs and fees charged to Landlord by Landlord's Contractor with respect

to such change orders. Amounts due and payable on account of such change orders shall be included in the statements relating to TIR provided for above, and Tenant shall pay therefor in accordance with each such statement within thirty (30) days, and in all events by the Commencement Date.

(b) Office Space. Landlord will provide design development plans and complete sets of construction drawings and specifications and engineering drawings prepared by Landlord's architect or engineer at Landlord's expense (such construction drawings and engineering drawings are referred to herein as the "Construction Plans") to build out the Office Space according to the approved space plan and other documents identified in Exhibit C - Part II attached hereto. Landlord will submit the design development plans and the Construction Plans for the Office Space to Tenant, it being understood that Landlord will not agree to any changes to the design development plans or the Construction Plans that will increase the cost or delay the completion of the improvements described therein (the "Office Space Leasehold Improvements"). Notwithstanding the foregoing, Landlord may approve changes to the design development plans or the Construction Plans that may increase the cost of the Office Space Leasehold Improvements provided Tenant pays in advance all costs associated with such changes in accordance with this Section 3.1 (b) and executes a written change order signed by Tenant's Representative agreeing that any such delay will be deemed a Tenant Delay. Landlord and Tenant shall initial the Construction Plans for the Office Space after the same have been completed by Landlord and delivered to Tenant. The completed Construction Plans so initialed by Landlord and Tenant shall be deemed the "Office Space Complete Plans." All work described in the Office Space Complete Plans shall be performed by Landlord's Contractor.

Landlord will not approve any construction, alterations or additions' requiring unusual expense to readapt the Office Space to normal office use on lease termination or increasing the cost of construction, insurance or taxes on the Building or of Landlord's services called for by Section 5.1 unless Tenant first gives assurances acceptable to Landlord that such readaptation will be made prior to such termination without expense to Landlord and makes provisions acceptable to Landlord for payment of such increased cost. Landlord will also disapprove any alterations or additions requested by Tenant which will delay completion of the Premises or the Building. All changes and additions shall be part of the Building except such items as by writing at the time of approval the parties agree either shall be removed by Tenant on termination of this Lease or shall be removed at Tenant's costs or left at Tenant's election.

Tenant shall pay to Landlord as additional rent the Tenant improvement Reimbursement to Landlord for the Office Space. Tenant Improvement Reimbursement to Landlord for the Office Space shall be the amount equal to all costs incurred by Landlord on account of changes to the Office Space Complete Plans requested by Tenant or resulting from act, omission, delay or default by Tenant ("Tenant Delay") including in the costs so incurred the cost to Landlord of Landlord's Contractor's overhead and profit equal to twenty percent (20%) of costs of work. Tenant shall pay to Landlord the TIR for the Office Space parri passu, with the expenditure of funds by Landlord to pay costs payable by Landlord for design and construction of the Office Space Leasehold Improvements and the remainder upon substantial completion of the Office Space Leasehold Improvements, in each case upon submission by Landlord to Tenant of a statement therefor. In addition to paying TIR as provided above, Tenant shall pay an amount equal to all costs incurred by Landlord as a result of any change orders signed by Tenant and Landlord affecting the Office Space Complete Plans, including the costs and fees charged to Landlord by Landlord's Contractor with respect to such change orders. Amounts due and payable on account of such change orders shall be included in the statements relating to TIR provided for above, and Tenant shall pay therefor in accordance with each such statement within thirty (30) days, and in all events by the Commencement Date.

3.2 PREPARATION OF PREMISES FOR OCCUPANCY.

Landlord agrees to use reasonable efforts to substantially complete the Lab Space Leasehold Improvements and Office Space Leasehold Improvements (collectively the "Leasehold Improvements") by the Scheduled Term Commencement Date, which date shall, however, be extended for a period equal to that of any delays incurred by Landlord due to Force Majeure (as defined in Section 10.13) or Tenant Delay. The Premises shall be deemed ready for occupancy on the date on which (i) the Leasehold

Improvements, to be constructed by Landlord's Contractor (collectively "Landlord's Work"), are substantially complete as certified in writing to Tenant by Landlord's architect with the exception of minor items which can be fully completed within sixty (60) days without material interference with Tenant and other items which because of the season or weather or the nature of the item are not practicable to do at the time, provided that none of said items is necessary to make the Premises tenantable for the Permitted Uses; and (ii) a temporary certificate of occupancy is issued for the Premises; provided further, however, that if Landlord is unable to obtain a temporary certificate of occupancy for the Premises or any part thereof or complete construction of Landlord's Work due to long lead items (as hereinafter defined) included in the Lab Space Complete Plans or the Office Space Complete Plans (collectively, the "Complete Plans") or any act or omission of Tenant or its agents, employees, contractors, invitees or licensees or due to delay in Tenant's compliance with the provisions of Section 3.1 of this Lease or the Milestones set forth in Part III of Exhibit C hereof (herein sometimes referred to as "Tenant Delays"), then the Premises shall be deemed ready for occupancy no later than the date the Landlord's Work would have been substantially completed and a temporary certificate of occupancy would have been available but for such Tenant Delays. For purposes hereof, "long lead item" shall mean any item(s) of work included in the Complete Plans, or in any change order requested by Tenant, that cannot be completed in accordance with the Landlord's construction schedule (without overtime or acceleration of the work), provided that Landlord's Contractor advises Tenant that the item is a long lead item before commencement of construction.

Tenant shall select a specialties contractor ("Tenant's Contractor") to install telephone, computer and data processing cables, and wiring on the Premises at Tenant's direction and expense. All such work shall be coordinated with work being performed by or for Landlord on the Premises and the Building. Tenant covenants to pay for all work performed by Tenant or Tenant's Contractor, and Tenant shall apply for all permits and licenses required in connection with such work and shall pay all fees due in connection therewith. Tenant shall provide to Landlord the originals of all such permits and licenses. All such improvements, whether or not paid for by Landlord, and any other improvements which are affixed to the Premises shall be and remain the property of Landlord. During the performance of any work, Tenant must provide Landlord evidence that Tenant or its contractor has in place (i) a policy insuring against "all risks of physical loss" on a builder's risk non-reporting form, having replacement cost and agreed amount endorsements, and (ii) commercial general liability with underlying coverage totaling not less than Ten Million Dollars ($10,000,000), each such policy to name Landlord and Landlord's lenders as an additional insured (and as loss payee on policies other than public liability insurance) and to be in a form reasonably acceptable to Landlord). Such contractor also must provide evidence that it has in place workmen's compensation insurance in amounts and in form statutorily required. Without in any manner limiting Landlord's rights and Tenant's obligations under any other indemnity set forth in this Lease, Tenant shall defend, with counsel reasonably acceptable to Landlord, save harmless and indemnify Landlord from (a) claims or demands of Tenant's Contractor or anyone claiming by, through or under Tenant's Contractor, and (b) liability for injury, loss, accident, or damage to any person or property, including, without limitation, bodily injury and/or death, and from any claims, actions, proceedings and expenses and costs in connection therewith (including, without limitation, reasonable counsel fees) arising from the acts or omissions of Tenant, its agents, employees, contractor or subcontractors, in performance of any construction, remodeling or redecoration.

Landlord shall permit Tenant access for installing tele/data equipment and systems furnishings in the Premises prior to the Term if it can be done without material interference with completion of the Building or remaining portions of the Leasehold Improvements.

In the event of Tenant's failure to comply with the provisions of this Article III or the Milestones set forth in Part III of Exhibit C hereof or to submit information or to deliver final bidding and pricing documents or the Complete Plans approved by Landlord as herein required and by the date set forth in the Milestones set forth in Part III of Exhibit C hereto and if Tenant does not cure such failure within thirty (30) days of written notice thereof from Landlord, Landlord may, at Landlord's option, exercisable by notice to Tenant, terminate this Lease on the date specified in said notice to Tenant, and upon such termination Landlord shall have all the rights provided in Article IX of this Lease in the event of Tenant's default.

If for any reason, other than Force Majeure or Tenant Delay, Landlord fails to achieve Landlord's Milestone set forth in item 9 of Part III of Exhibit C hereto, Tenant may, as its sole and exclusive remedy at law or in equity, have the remedy if any, provided to Tenant in item 9 of Part III of Exhibit C hereto.

3.3 GENERAL PROVISIONS APPLICABLE TO CONSTRUCTION.

All construction work required or permitted by this Lease, shall be done in a good and workmanlike manner and in compliance with all applicable laws and all lawful ordinances, regulations, orders, permits and approvals of governmental authority and insurers of the Building. Either party may inspect the work of the other at reasonable times and promptly shall give notice of observed defects. Landlord's obligations under Section 3.1 shall be deemed to have been performed when Tenant commences to occupy any portion of the Premises for the Permitted Uses except for (i) items relating to the Leasehold Improvements which are incomplete or do not conform with the requirements of Section 3.1 and as to which Tenant shall in either case have given written notice to Landlord prior to such commencement, and (ii) latent defects relating to the Leasehold Improvements not readily observable prior to the Commencement Date, but as to which Tenant makes a claim in writing within one (1) year following the date of substantial completion of such work by Landlord's Contractor. If Tenant shall not have commenced to occupy the Premises for the Permitted Uses within 30 days after they are deemed ready for occupancy as provided in Section 3.2, a certificate of completion by a licensed architect or registered engineer shall be conclusive evidence that Landlord has performed all such obligations except for items stated in such certificate to be incomplete or not in conformity with such requirements.

3.4 REPRESENTATIVES.

Each party authorizes the other to rely in connection with their respective rights and obligations under this Article III upon approval and other actions on the party's behalf by Landlord's Representative in the case of Landlord or Tenant's Representative in the case of Tenant or by any person designated in substitution or addition by notice to the party relying.

3.5 TENANT ALLOWANCE.

Provided Tenant is not in default hereunder (beyond the giving of notice and expiration of any grace or cure period provided hereunder), Landlord shall provide the Tenant Allowance and, if applicable, the Additional Allowance in the amount specified in Section 1.1 to be applied not later than December 31, 2006, against the costs incurred by Tenant for initial space planning by Tenant's Architect, the cost of preparation and administration of the Lab Space Complete Plans and the cost incurred by Landlord in construction of the Lab Space Leasehold Improvements (including, without limitation, architects' and engineers' fees, sprinklers, fire alarms, smoke detectors, exit lights, cabling and costs of compliance with all applicable laws such as, without limitation, the Americans with Disabilities Act), the cost of obtaining all permits, licenses and fees related to Landlord's construction of the Lab Space Leasehold Improvements in accordance with this Article III and as otherwise provided in this Section.

If all costs to be incurred by Tenant on account of Leasehold Improvements (including Landlord's Contractor's fee) will exceed the Tenant Allowance and, if applicable, the Additional Allowance, Landlord may require as a condition precedent to the first disbursement of the Tenant Allowance, evidence reasonably satisfactory to Landlord that Tenant has set aside funds sufficient to pay such excess and may disburse the Tenant Allowance and Additional Allowance parri passu with the disbursement of such funds by Tenant.

No portion of the Tenant Allowance shall be used to reimburse Landlord for the $0.11 per rentable square foot Landlord agreed to pay for Tenant's initial test fit for the Premises (the "Test Fit Allowance").

3.6 LEASE COSTS.

If Tenant (i) defaults under the Lease prior to Commencement Date and fails to cure such default after any applicable notice and cure periods, (ii) fails to occupy the Premises for the conduct of its business within sixty (60) days after the Commencement Date, or (iii) fails to pay any Annual Rent or Additional Rent due upon Commencement Date, if applicable, or upon the date that the first monthly installment of Annual Rent and Additional Rent are not abated pursuant to Article I hereto, then in any such event, in addition to and not in lieu of any other rights and remedies Landlord may have pursuant to this Lease or at law or in equity, Tenant shall forthwith repay to Landlord upon demand, the Tenant Allowance, the Turnkey Costs and Additional Allowance, plus any other costs incurred by Landlord associated with the design and construction of the Leasehold Improvements including, but not limited to, design costs, engineering costs and the cost of construction, together with interest thereon at the Default Rate from the date of delivery of the Premises by Landlord in accordance with this Lease until such amount is paid by Tenant (the "Pre-Term Costs").

ARTICLE IV
RENT

4.1 RENT.

Commencing on the Commencement Date and continuing for the remainder of the Term, Tenant agrees to pay rent to Landlord, without any offset or reduction whatever (except as otherwise expressly set forth in this Lease), in an amount equal to 1/12th of the Annual Rent in equal installments in advance on the first day of each calendar month included in the Term; and for any portion of a calendar month at the beginning or end of the Term, at the proportionate rate payable for such portion, in advance, provided that the first installment of Annual Rent shall be due and payable pursuant to the Special Provisions set forth in Article I hereof. Notwithstanding the foregoing, provided that Tenant is not in default hereunder, one-half (1/2) of each monthly installment of Base Annual Rent payable by Tenant for the first twelve (12) months of the initial Term shall be abated as provided in accordance with the Special Provisions of Section 1.1 hereof.

As used herein, "Annual Rent" shall mean the sum set forth in Section 1.1. On the first day of the Second Lease Year and on the first day of each subsequent Lease Year or portion thereof during the initial Term, the amount of Annual Rent shall be increased as follows (as adjusted based upon the actual amount of the Additional Allowance as provided in Section 1.1):

LEASE YEAR	BASE ANNUAL RENT P.R.S.F.	X	RENTABLE SQUARE FEET	=	BASE ANNUAL RENT	+	ADDITIONAL ALLOWANCE CHARGE	=	ANNUAL RENT
Second	$23.69	X	17,002	=	$402,777.38	+	$30,773.62	=	$433,551.00
Third	$24.40	X	17,002	=	$414,848.80	+	$30,773.62	=	$445,622.42
Fourth	$25.13	X	17,002	=	$427,260.26	+	$30,773.62	=	$458,033.88
Fifth	$25.89	X	17,002	=	$440,181.78	+	$30,773.62	=	$470,955.40
Sixth	$26.66	X	17,002	=	$453,273.32	+	$30,773.62	=	$484,046.94
Seventh	$27.46	X	17,002	=	$466,874.92	+	$30,773.62	=	$497,648.54
Eighth	$28.29	X	17,002	=	$480,986.58	+	$30,773.62	=	$511,760.20
Ninth	$29.14	X	17,002	=	$495,438.28	+	$30,773.62	=	$526,211.90
Tenth	$30.01	X	17,002	=	$510,230.02	+	$30,773.62	=	$541,003.64
Eleventh	$30.91	X	17,002	=	$525,531.82	+	$ -0-	=	$525,531.82

The term "additional rent" shall mean Tenant's Share of Operating Costs (as defined below), Tenant's Share of Real Estate Taxes (as defined below), Tenant's Annual Electrical Cost (as defined below), Tenant Improvement Reimbursement to Landlord (whether for the Office Space or the Lab Space), and all other costs, charges and impositions, in addition to Annual Rent, payable by Tenant in accordance with the terms of this Lease.

4.2 OPERATING COSTS.

Commencing on the Commencement Date and continuing for the remainder of the Term, Tenant shall pay to Landlord, as additional rent, Tenant's Share of Operating Costs (as defined below) in monthly installments on the first day of each month during the Term and as otherwise provided in this Section 4.2. Within one-hundred eighty (180) days after the end of each fiscal year ending during the Term and within one hundred twenty (120) days after Lease termination, Landlord shall render a statement ("Landlord's Operating Cost Statement") in reasonable detail and according to usual accounting practices, certified by Landlord, and showing for the preceding fiscal year or fraction thereof, as the case may be, Landlord's operating costs ("Operating Costs") which shall:

(a) EXCLUDE, notwithstanding any other, provisions in this Section 4.2 to the contrary, the following:

(i) Ground rent or other rental payments made under any ground lease or underlying lease or payments of principal, interest, late charges, penalties or other charges made on account of any loan;

(ii) Costs of improvements or replacements to the Building which under generally accepted accounting principles are capitalized except as expressly included in Operating Costs under part (b) of this Section 4.2 ("Capital Improvements");

(iii) Costs of leasing commissions, legal, space planning, construction and other expenses incurred in procuring tenants for the Building;

(iv) Costs of painting, redecorating or other work performed solely for the benefit of another tenant, prospective tenant or occupant;

(v) Salaries, wages, or other compensation paid to officers or executives of Landlord or its property manager at the level of senior vice president and above;

(vi) Salaries, wages, or other compensation or benefits paid to employees of Landlord or its property manager who are not assigned to the operation, management, maintenance, or repair of the Building or Campus; and in the case of any offsite or other employees who are not assigned full time to the operation, management, maintenance or repair of the Building or Campus, Landlord shall reasonably allocate the compensation paid for the wages, salary, or other compensation or benefits paid to such employees among the properties to which such employees are assigned and Operating Costs shall exclude the portion of such compensation not reasonably allocated to the Building or Campus;

(vii) Any fines or penalties incurred due to the violation by Landlord of any governmental rule or authority;

(viii) Any costs for which Landlord actually receives reimbursement from insurance, condemnation awards, or any other source, including other tenants of the Building if charged to such tenants specially and not as an Operating Cost, Real Estate Tax or Electrical Cost;

(ix) Costs in excess of the deductible on applicable insurance policies for repairs, restoration, replacements or other work occasioned by (a) fire, windstorm or other casualty which Landlord is hereunder required to insure against (whether such destruction be total or partial) and (b) the exercise by governmental authorities of the right of eminent domain;

(x) Attorneys' fees and expenses and costs of litigation in connection with disputes with tenants, other occupants or prospective tenants, or with consultants, management agents, leasing agents, purchasers or mortgagees of the Building; and costs incurred by Landlord due to Landlord's violation of the terms of this Lease which would not have been incurred by Landlord but for such violation;

(xi) Costs incurred in connection with the original construction of the Building or other improvements constructed with the Building;

(xii) Costs relating to another tenant's or occupant's space which (A) were incurred in rendering any service or benefit to such tenant that Landlord was not required to provide, or were for a service in excess of the service that the Landlord was required to provide to Tenant hereunder or (B) were otherwise in excess of the Building standard services then being provided by Landlord to all tenants or other occupants in the Building, whether or not such other tenant or occupant is actually charged therefor by Landlord;

(xiii) Costs incurred in connection with the acquisition of the Lot or sale, financing, refinancing, mortgaging, selling or change of ownership of the Building and/or the Lot, including, but not limited to, attorneys' fees, title insurance premiums, and recording costs;

(xiv) Fines, interest, penalties, legal fees or costs of litigation incurred due to the late payments of loan payments, taxes and utility bills;

(xv) Landlord's or its property manager's general home office overhead expenses;

(xvi) Costs incurred for any items to the extent covered by a manufacturer's, materialman's, vendor's or contractor's warranty;

(xvii) Non-cash items, such as deductions for depreciation and amortization of the Building and the Building equipment (except as expressly included in Operating Costs under part (b) of this Section 4.2); interest on capital invested; bad debt losses; rent losses and reserves for such losses;

(xviii) Costs incurred in connection with the operation of any lobby shop or cafeteria owned, operated or subsidized by Landlord (except the non-capital costs of any cafeteria expressly included in Operating Costs under part (b) of this Section 4.2);

(xix) Costs incurred by Landlord which are associated with the operation of the business of the legal entity which constitutes Landlord as the same is separate and apart from the costs of the operation of the Building, including legal entity formation and maintenance charges;

(xx) All amounts which would otherwise be included in Operating Costs which are paid to any affiliate or subsidiary of Landlord to the extent the cost of such goods or services exceed the market rate for similar services under arms length contracts in the Washington, D.C. metropolitan area;

(xxi) Rentals and other related expenses incurred in leasing elevators or other equipment ordinarily considered to be of a capital nature;

(xxii) Contingency or replacement reserves;

(xxii) Costs incurred in the remediation or removal of Hazardous Materials (as defined in Section 10.18) released on or from the Building or Lot in violation of Environmental Laws (as defined in Section 10.18) provided, however, any such costs arising from Tenant's use of the Premises shall be charged directly to Tenant;

(xxiii) Marketing and advertising expenses;

(xxiv) Utility costs for which any tenant directly contracts and pays the supplier thereof; and;

(xxv) Costs of acquiring or renting works of art displayed in the Common Area.

(b) BUT INCLUDE, without limitation: costs of maintenance and repair of any cafeteria or fitness room generally available to tenants of the Building; expenses of any proceedings for abatement of Real Estate Taxes and assessments with respect to any fiscal year or fraction of a fiscal year; premiums for insurance; fees payable to third parties for audits of Operating Costs, provided that such costs are not incurred due to Landlord's overcharging tenants for Operating Costs; reasonable legal fees and costs payable.in seeking a reduction of Real Estate Taxes and in connection with Building service contracts; compensation and all fringe benefits, worker's compensation insurance premiums and payroll taxes paid by Landlord to, for or with respect to all persons engaged in the operating, maintaining or cleaning of the Building and Lot; all utility charges other than electricity not billed directly to tenants by Landlord or the utility; payments to Landlord's property manager and other independent contractors (including, without limitation, affiliates of Landlord, if applicable) under service contracts for cleaning, operating, managing, maintaining, repairing or testing the Building and Lot; payments made to consultants retained to advise Landlord regarding compliance by tenants of the Building with applicable Laws (as defined in Section 6.1;18); rent paid by the managing agent or imputed cost equal to the loss of market rent by Landlord for making available to the managing agent space for an office in the Building (not exceeding 1,000 rentable square feet) on the ground floor or above; and all other costs and expenses incurred in connection with owning, administering, cleaning, operating, managing, maintaining and repairing the Building and Lot, or either, and the Building's pro-rata share of all such costs and expenses applicable to owning, administering, cleaning, operating, managing, maintaining and repairing common areas on the Campus, including, without limitation, common area rent and other charges applicable to the Shady Grove Life Sciences Center. If Landlord installs or constructs a new or replacement capital item for the purpose of reducing Operating Costs or complying with requirements of law, the cost thereof as reasonably amortized by Landlord in accordance with generally accepted accounting principles, with interest at Landlord's cost of funds plus one percent (1%) per annum (the "Prime Rate"), on the unamortized amount, shall be included in Landlord's Operating Costs.

"Tenant's Share of Operating Costs" shall be equal to the product of (a) Operating Costs as indicated in Landlord's Operating Cost Statement, multiplied by (b) "Tenant's Share."

Landlord's Operating Cost Statement shall also show the average number of square feet of the Building which were occupied for the preceding fiscal year or fraction thereof. If less than ninety-five percent (95%) of the Net Rentable Area of the Building is occupied during any full or fractional year of the Term (including the Base Year), the actual Operating Costs for those costs that vary with occupancy (such as, without limitation, cleaning and janitorial) shall be adjusted for such year to an amount which Landlord estimates would have been incurred in Landlord's reasonable judgment had ninety-five (95%) of the Net Rentable Area of the Building been occupied, provided, however, that Operating Costs as so adjusted shall not exceed the actual costs Landlord would have incurred had the Building been ninety-five percent (95%) occupied.

In case of special services which are provided to Tenant but are not rendered to all areas on a comparable basis, the proportion allocable to the Premises shall be the same proportion which the Rentable Floor Area of Tenant's Space (as the same may be increased or decreased in accordance with this Lease) bears to the total rentable floor area to which such service is so rendered (such latter area to be determined in the same manner as the Total Rentable Floor Area of the Building).

Notwithstanding any other provision of this Section 4.2, if the Term expires or is terminated as of a date other than the last day of a fiscal year, then for such fraction of a fiscal year at the end of the Term, Tenant's last payment to Landlord under this Section 4.2 shall be prorated and made on the basis of Landlord's reasonable best estimate of the items otherwise includable in Landlord's Operating Cost Statement which shall be delivered to Tenant within one-hundred twenty (120) days following expiration or termination of the Term, and shall be made on or before the date 10 days after Landlord delivers such estimate to Tenant.

Tenant shall pay, as additional rent, on the first day of each month of such fiscal year and each ensuing fiscal year thereafter, "Estimated Monthly Payments" equal to 1/12th of Tenant's Share of the estimated Operating Costs for the respective fiscal year, with an appropriate additional payment or credit to be made after Landlord's Operating Cost Statement is delivered to Tenant. If the amount paid by Tenant for Tenant's Share of estimated Operating Costs is less than Tenant's Share of the actual Operating Costs, Tenant agrees to pay, as additional rent, to Landlord the amount of the differential. If the amount paid by Tenant for Tenant's Share of estimated Operating Costs is more than Tenant's Share of the actual Operating Costs, then Landlord shall credit such excess against Tenant's subsequent monthly payments for Tenant's Share of Operating Costs, as appropriate, until such excess is exhausted (or refund such excess to Tenant if at the end of the Term). Landlord may adjust such Estimated Monthly Payment from time to time and at any time during a fiscal year (but not more often than twice per fiscal year), and Tenant shall pay, as additional rent, on the first day of each month following receipt of Landlord's notice thereof, the adjusted Estimated Monthly Payment. Each of Landlord's Operating Cost Statements given by Landlord pursuant to the Lease shall be conclusive and binding upon Tenant unless, within ninety (90) days after the receipt of the statement, Tenant notifies Landlord that it wishes to audit Landlord's Operating Costs for the preceding year. If Tenant gives such notice timely requesting the right to review or audit Landlord's books and records pertaining to Operating Costs for the preceding year, Landlord shall make available to Tenant for inspection or auditing during normal business hours not more than six (6) months following delivery to Tenant of the Operating Cost Statement to which such review related, at the offices of Landlord's managing agent where such records are kept, the books and records with respect to Landlord's Operating Costs for the fiscal year in question. If such books and records are not kept in the Washington, D.C. Greater Metropolitan Area, Landlord shall upon Tenant's written request, not more often than once per year, make copies of such books and records available to Tenant for inspection or audit as herein provided at an office of Landlord or Landlord's managing agent in the Washington, D.C. Greater Metropolitan Area. Pending the resolution of any such dispute as to Landlord's Operating Cost Statement, Tenant shall pay the adjustments, including any underpayment of Tenant's Share of Operating Costs, as specified in accordance with Landlord's Operating Cost Statement, without prejudice to Tenant's position, as herein provided. If the dispute shall be resolved in Tenant's favor, Landlord shall credit or pay to Tenant (as hereinabove provided) the amount of Tenant's overpayment. In

addition, if there has been an overcharge to Tenant of Operating Costs in excess of five percent (5%) of Tenant's Share of the Operating Costs in such year, Landlord shall reimburse Tenant for its reasonable costs incurred in connection with Tenant's review of Landlord's books and records of Operating Costs.

If Landlord fails to furnish Tenant any statement of Landlord's estimate of Tenant's Share of Operating Costs for any fiscal year or if Landlord shall furnish such estimate for any fiscal year subsequent to the commencement thereof, then until the first day of the month following the month in which such estimate is furnished to Tenant, Tenant shall pay to Landlord on the first day of each month an amount equal to the monthly sum payable by Tenant to Landlord under this Section 4.2 .in respect of the last month of the preceding fiscal year.

4.3 REAL ESTATE TAXES.

Commencing on the Commencement Date and continuing for the remainder of the Term, Tenant shall pay to Landlord, as additional rent, Tenant's Share of Real Estate Taxes (as defined below), if any, in monthly installments on the first day of each month during the Term and as otherwise provided in this Section 4.3. Within one-hundred eighty (180) days after the end of each Fiscal Year ending during the Term and after Lease termination, Landlord shall render a statement ("Landlord's Real Estate Tax Statement") certified by Landlord, and showing for the preceding fiscal year or fraction thereof, as the case may be, Real Estate Taxes for the Building and Lot, accompanied by copies of the tax bills relating thereto.

Tenant's Share of Real Estate Taxes" shall be equal to the product of (a) the Real Estate Taxes as indicated in Landlord's Real Estate Tax Statement, multiplied by (b) Tenant's Share.

The term "Real Estate Taxes" as used above shall mean all taxes of every kind and nature assessed by any governmental authority on the Lot, the Building and improvements, or both, or on any easement benefiting the same, on the income derived from the Building, or on the rents payable by tenants of the Building which the Landlord shall become obligated to pay because of or in connection with the ownership, leasing and operation of the Lot, the Building and improvements, or both; installments and interest on assessments for public betterments or public improvements; special assessments, fees, charges, levies, penalties, service payments, excises, assessments, charges, and costs for transit, transit encouragement, traffic reduction programs, or any other purpose; impositions or taxes of every kind or nature whatsoever assessed or levied or imposed by any governmental entity, governmental authority or any improvement or assessment district of any kind having the direct or indirect power to tax, whether or not consented to or joined in by Landlord, against the Building or Lot or any legal or equitable interest of Landlord therein, whether now or hereafter imposed, and whether or not customary in the contemplation of the parties on the date of this Lease; subject to the following: there shall be excluded from Real Estate Taxes all federal state or local taxes based upon the net income of Landlord, excess profits taxes, excise taxes, franchise taxes, and estate, succession, inheritance and transfer taxes, provided, however, that if at any time during the Term the present system of ad valorem taxation of real property shall be changed so that in lieu of the whole or any part of the ad valorem tax on real property, there shall be assessed on Landlord a capital levy or other tax on the rents received with respect to the Lot, Building and improvements, or both, or a federal, state, county, municipal, or other local income, franchise, excise, sales, profit or similar tax, assessment, levy or charge (distinct from any now in effect) measured by or based, in whole or in part, upon any such rents, then any and all of such taxes, assessments, levies or charges, to the extent so measured or based, shall be deemed to be included within the term "Real Estate Taxes." Tenant acknowledges that in the event that Real Estate Taxes are reduced because nonprofit entities occupy the Building, the share of Real Estate Taxes paid by such tenants shall be structured so that the tax-exempt tenant(s) for which such reduction is given receives(s) the full benefit of the property tax exemption.

Notwithstanding any other provision of this Section 4.3, if the Term expires or is terminated as of a date other than the last day of a fiscal year, then for such fraction of a fiscal year at the end of the Term, Tenant's last payment to Landlord under this Section 4.3 shall be prorated and made on the basis of Landlord's reasonable best estimate of the items otherwise includable in Landlord's Real Estate Tax

Statement which shall be delivered to Tenant within one-hundred twenty (120) days after the Term expires or is terminated and shall be made on or before 10 days after Landlord delivers such estimate to Tenant. Within thirty (30) days following the date Real Estate Taxes are finally determined for the period for which Tenant made estimated payments, Tenant or Landlord, as the case may be, shall pay to the other the balance of any underpayment or overpayment, respectively, of Tenant's Share of Real Estate Taxes. This paragraph shall survive the expiration or earlier termination of this Lease.

Tenant shall pay, as additional rent, on the first day of each month of such fiscal year and each ensuing fiscal year thereafter, Estimated Monthly Real Estate Taxes equal to 1/12th of Tenant's Share of the estimated Real Estate Taxes for the respective fiscal year, with an appropriate additional payment or credit to be made after Landlord's Real Estate Tax Statement is delivered to Tenant. If the amount paid by Tenant for Tenant's Share of estimated Real Estate Taxes is less than Tenant's Share of the actual Real Estate Taxes, Tenant agrees to pay, as additional rent, to Landlord the amount of the differential. If the amount paid by Tenant for Tenant's Share of estimated Real Estate Taxes is more than Tenant's Share of the actual Real Estate Tax, then Landlord shall credit such excess against Tenant's subsequent monthly payments for Tenant's Share of Real Estate Taxes, as appropriate, until such excess is exhausted (or refund such excess to Tenant if at the end of the Term). Landlord may adjust such Estimated Monthly Real Estate Tax Payment from time to time and at any time during a fiscal year (but not more often than twice per fiscal year), and Tenant shall pay, as additional rent, on the first day of each month following receipt of Landlord's notice thereof, the adjusted Estimated Monthly Real Estate Tax Payment. Each of Landlord's Real Estate Tax Statements given by Landlord pursuant to the Lease shall be conclusive and binding upon Tenant unless, within ninety (90) days after the receipt of such statement, Tenant notifies Landlord that it wishes to audit Landlord's books and records pertaining to Landlord's Real Estate Taxes for the preceding year. If Tenant gives such notice timely requesting the right to review or audit Landlord's books and records pertaining to Landlord's Real Estate Taxes, Landlord shall make available to Tenant for inspection or auditing during normal business hours, at the offices of Landlord's managing agent where such records are kept, the books and records with respect to Landlord's Real Estate Taxes for the fiscal year in question. If such books and records are not kept in the Washington, D.C. Greater Metropolitan Area, Landlord shall upon Tenant's written request, not more often than once per year, make copies of such books and records available to Tenant for inspection or audit as herein provided at an office of Landlord or Landlord's managing agent in the Washington, D.C. Greater Metropolitan Area. Pending the resolution of any such dispute as to Landlord's Real Estate Tax Statement, Tenant shall pay the adjustments, including any underpayment of Tenant's Share of Real Estate Taxes, as specified in accordance with Landlord's Real Estate Tax Statement, without prejudice to Tenant's position, as herein provided. If the dispute shall be resolved in Tenant's favor, Landlord shall credit or pay to Tenant (as hereinabove provided) the amount of Tenant's overpayment. In addition, if there has been an overcharge to Tenant of Real Estate Taxes in excess of five percent (5%) of Tenant's Share of Landlord's Real Estate Taxes in such year, Landlord shall reimburse Tenant for its reasonable costs incurred in connection with Tenant's review of Landlord's books and records of Real Estate Taxes.

In the event that the method currently used for the computation of the assessed market value of the Building and/or the Lot is discontinued or revised by the State of Maryland, the determination of the increase in Real Estate Taxes under this Section 4.3 shall thereafter be determined by Landlord according to a formula and procedure which, in Landlord's reasonable judgment, most nearly approximates the method of determination hereinabove set forth. In the event that any business, rent or other taxes which are now or hereafter levied upon Tenant's use or occupancy of the Premises, on Tenant's leasehold improvements, on Tenant's business at the Premises or on Landlord by virtue of Tenant's occupancy of the Premises, are enacted, changed or altered so that any of such taxes are levied against Landlord or in the event that the mode of collection of such taxes is changed so that Landlord is responsible for collection or payment of such taxes, any and all such taxes shall be deemed to be a part of the Real Estate Taxes and Tenant shall pay to Landlord the full amount of all of such taxes or if they relate to all tenants in the Building, then Tenant's Share thereof.

If Landlord fails to furnish Tenant any statement of Landlord's estimate of Tenant's Share of Real Estate Taxes for any fiscal year or if Landlord shall furnish such estimate for any fiscal year subsequent to the commencement hereof, then until the first day of the month following the month in which such

estimate is furnished to Tenant, Tenant shall pay to Landlord on the first day of each month an amount equal to the monthly sum payable by Tenant to Landlord under this Section 4.3 in respect of the last month of the preceding fiscal year.

4.4 REFUNDS.

Tenant shall be entitled to its pro rata share of any refund of Real Estate Taxes received by Landlord, net of reasonable costs incurred by Landlord in obtaining such refund not to exceed Real Estate Taxes paid by Tenant with respect to the tax year to which such refund relates (it being understood that the Real Estate Taxes paid by Tenant for any tax year may fall into two separate fiscal years so long as the tax year is not the same as the fiscal year).

4.5 ELECTRICITY.

Commencing on the Commencement Date and continuing for the remainder of the Term, Tenant shall pay, as additional rent in addition to Tenant's Share of Operating Costs and Tenant's Share of Real Estate Taxes during the Term, Tenant's Annual Electrical Cost in accordance with this Section 4.5. Tenant's Annual Electrical Cost shall mean the cost to Landlord for Tenant's use of electrical energy in the Premises as shown on the Meter (as hereinafter defined). Landlord shall cause electricity for lighting and operation of Tenant's equipment, facilities and fixtures in the Premises to be metered by a separate utility meter or check meter (the "Meter"). If the Meter is a separate meter directly from the utility, the Tenant's Annual Electrical Cost shall be equal to the amount billed to Landlord on such meter. If the Meter is a check meter measuring Tenant's consumption of electricity but not separately billed by the utility, Tenant's Annual Electrical Cost shall mean the Landlord's "average cost per kilowatt hour" (as hereinafter defined) of electrical energy used on the Premises as shown on the Meter.

For every fiscal year or portion thereof beginning on the Commencement Date and during the Term hereof, as the same may be extended, Tenant shall pay, as additional rent, Tenant's Annual Electrical Cost in monthly installments on the first day of each month during the Term and as otherwise provided in this Section 4.5. As soon as practicable after the end of each fiscal year during the Term, and after Lease termination, Landlord shall render a statement (the "Landlord's Electrical Statement") in reasonable detail and according to usual accounting practices certified by Landlord and showing for the preceding calendar year or fraction thereof Tenant's Annual Electrical Cost.

Tenant shall pay, as additional rent, on the first day of each month of such fiscal year and each ensuing fiscal year thereafter, Estimated Monthly Electricity Cost Payments equal to 1/12th of Landlord's estimate of Tenant's Annual Electrical Cost for the respective fiscal year, with an appropriate additional payment or credit to be made after Landlord's Electrical Statement is delivered to Tenant. If the amount paid by Tenant for estimated Annual Electrical Cost is less than the actual Annual Electrical Cost, Tenant agrees to pay, as additional rent, to Landlord the amount of the differential. If the amount paid by Tenant for estimated Annual Electrical Cost is more than the actual Annual Electrical Cost, then Landlord, shall credit such excess against Tenant's subsequent monthly payments for Tenant's Annual Electrical Cost, as appropriate, until such excess is exhausted (or refund such excess to Tenant if at the end of the Term. Landlord may adjust such Estimated Monthly Electrical Cost Payment from time to time and at any time during a fiscal year (but not more often than twice per fiscal year), and Tenant shall pay, as additional rent, on the first day of each month following receipt of Landlord's notice thereof, the adjusted Estimated Monthly Electrical Cost Payment.

If Landlord fails to furnish Tenant any statement of Landlord's estimate of Tenant's Annual Electrical Cost for any fiscal year or if Landlord shall furnish such estimate for any fiscal year subsequent to the commencement hereof, then until the first day of the month following the month in which such estimate is furnished to Tenant, Tenant shall pay to Landlord on the first day of each month an amount equal to the monthly sum payable by Tenant to Landlord under this Section 4.5 in respect of the last month of the preceding fiscal year.

Tenant shall have the right from time to time during the Term to read the Building electricity meter and the Meter serving the Premises. Each Landlord's Electrical Statement delivered to Tenant hereunder shall be conclusive and binding upon Tenant unless, within ninety (90) days after receipt of the statement, Tenant notifies Landlord that it wishes to audit Landlord's books and records with respect to Annual Electrical Cost for the.preceding fiscal year. If Tenant gives such notice timely requesting the right to audit Landlord's books and records, Tenant shall have the right, at a reasonable time and upon reasonable notice, to examine Landlord's books and records respecting the Building which relate to the determination and computation of Tenant's Annual Electrical Cost for the fiscal year in question. If such books and records are not kept in the Washington, D.C. Greater Metropolitan Area, Landlord shall upon Tenant's written request, not more often than once per year, make copies of such books and records available to Tenant for inspection or audit as herein provided at an office of Landlord or Landlord's managing agent in the Washington, D.C. Greater Metropolitan Area.

For the purpose of this Lease, Landlord's "average cost per kilowatt hour" for any year (or applicable portion thereof at the beginning or end of the term) shall mean the cost calculated by dividing the sum of the costs charged Landlord by the public utility for electricity consumed in the Building in the applicable period by the sum of the number of kilowatt hours used by the Building during such period as measured by the Building master meter.

4.6 CHANGE OF FISCAL YEAR.

Landlord shall have the right from time to time to change the periods of accounting under Sections 4.2, 4.3 and 4.5 to any annual period other than a calendar year, and upon any such change all items referred to in Sections 4.2, 4.3 and 4.5 shall be appropriately apportioned. In all Landlord's Statements (including Operating Cost Statements or Real Estate Tax Statements or Landlord's Electrical Statement) rendered under Section 4.2, 4.3 or 4.5, amounts for periods partially within and partially without the accounting periods shall be appropriately apportioned, and any items which are not determinable at the time of a Landlord's Statement shall be included therein on the basis of Landlord's estimate, and with respect thereto Landlord shall render promptly after determination a supplemental Landlord's Statement, and appropriate adjustment shall be made according thereto. All Landlord's Statements shall be prepared on an accrual basis of accounting.

4.7 PAYMENTS.

All payments of Annual Rent and additional rent shall be made to Managing Agent, or to such other person or place as Landlord may from time to time designate. If any installment of Annual Rent or additional rent or on account of TIR is not paid within five (5) days following the due date thereof, at Landlord's election, (a) it shall bear interest at a rate equal to the average prime commercial rate from time to time established by the three largest national banks in Washington, D.C. plus 3% per annum (the "Default Rate") from such due date, which interest shall be immediately due and payable as further additional rent, and (b) Tenant shall also pay, as additional rent, a late fee equal to five percent (5%) of the late installment.

ARTICLE V
LANDLORD'S COVENANTS

5.1 LANDLORD'S COVENANTS DURING THE TERM.

Landlord covenants during the Term:

5.1.1 Building Services. Landlord shall furnish, through Landlord's employees or independent contractors, the services listed in Exhibit D.

5.1.2 Additional Building Services. Landlord shall furnish, through Landlord's employees or independent contractors, reasonable additional Building operation services upon reasonable advance request of Tenant at equitable rates from time to time established by Landlord to be paid by Tenant.

5.1.3 Repairs. Except as otherwise provided in Article VII, Landlord shall make such repairs to the Building's roof, exterior walls, floor slabs, mechanical (including HVAC), electrical, plumbing and fire/life safety systems serving the Building in general and the Premises (except for supplemental systems installed by and exclusively serving Tenant), other structural components and common facilities of the Building as may be necessary to keep them in good working condition.

5.1.4 Quiet Enjoyment. Landlord covenants that Landlord has the right to make this Lease and that Tenant on paying the rent and performing its obligations hereunder shall peacefully and quietly have, hold and enjoy the Premises throughout the Term without any manner of hindrance or molestation from Landlord or anyone claiming under Landlord, subject however to all the terms and provisions hereof.

5.1.5 Access/Security. Tenant shall have access to the Premises 24 hours per day, 7 days of the week; subject, however, to a key card access system in the Building at the main entry to the Building and at the secondary Building door (the Tenant shall receive 4 key cards for each 1,000 rentable square feet of floor area in the Premises at no cost), provided that the Building main entry door and secondary entry door may remain unlocked 7 a.m, to 11 p.m. Monday through Friday and 8 a.m. to 6 p.m. on Saturday); provided further, however, that no representation or warranty is made by Landlord as to the adequacy, completeness or integrity of said access control system and failure of such access control system shall not modify or affect the limitations on Landlord's liability under this Lease.

5.1.6 Intentionally Omitted.

5.1.7 Indemnity. Landlord shall indemnify, defend, protect and save harmless Tenant, any trustee, stockholder, officer, director or employee of Tenant ("Indemnified Tenant Parties"), to the extent permitted by law, from and against any and all liabilities, losses, damages, costs, expenses (including reasonable attorneys' fees and expenses), causes of action, suits, claims, demands or judgments of any nature arising from injury to or death of any person or damage to or loss of property on the Premises caused by the negligence or willful misconduct of Landlord or its agents or employees, except to the extent caused by the negligence or willful misconduct of Tenant or its agents, employees, contractors, licensees or sublessees. Tenant shall give Landlord prompt and timely notice of any claim made or suit against it or any other party of which it has knowledge, relating to any matter which in any way may result in indemnification pursuant to this Section 5.1.7. Subject to the prior rights, if any, of insurers, Landlord shall be entitled to control the defense and compromise of an such claim or suit to the extent of any actual or potential claim for indemnification made or reserved by Tenant (as well as any claim made against Landlord or any of those for whom it is legally responsible).

5.1.8 Tenant's Costs. Landlord shall pay all costs including, without limitation, reasonable attorneys' fees incurred by Tenant in connection with the successful enforcement by Tenant of any obligations of Landlord or remedies of Tenant under this Lease.

5.1.9 Lobby Directory. Landlord shall install, at Landlord's expense, Tenant's name on the Building directory in the Building lobby. Building standard suite signage (at the entrance to the Premises) shall be provided at Landlord's expense, but any changes to the signage may only be made in accordance with the terms of this Lease and such changes shall be at the expense of the Tenant. In the event that Landlord maintains a monument sign upon the Lot with the names of Building tenants, Landlord shall also install, at Tenant's expense, Tenant's name in Building standard signage on such monument sign.

5.1.10 Compliance. Landlord shall be responsible for the Building's overall compliance with the Americans with Disabilities Act as it relates to the common areas of the Building (including, without limitation, core area bathrooms) except to the extent that any improvement or renovation is required due to Tenant's special use of the Premises (other than general office or laboratory use). As used in this Section, the Americans with Disabilities Act shall mean the Americans with Disabilities Act of 1991,42 U.S.C. Sections 12.101, et seq. and all regulations applicable thereto promulgated as of the date hereof (collectively, "ADA"). Following the Commencement Date, Tenant shall have the responsibility to comply with the requirements of the ADA in the Premises.

5.1.11 Insurance. Landlord shall procure and maintain throughout the Term of this Lease a policy or policies of insurance, at its sole cost and expense (but subject to Section 4.2), causing the Building and any other improvements on the Lot to be insured in the amounts (with full replacement cost endorsement) and coverages required under the Ground Lease, a policy of commercial general liability insurance satisfying the terms of the Ground Lease, and such other insurance or higher limits as may be required under the Ground Lease or by the holder of any mortgage on the Building. Any insurance provided for in this Section 5.1.11 may be maintained by means of a policy or policies of blanket insurance, covering additional items or locations or insureds, provided, however, that the coverage afforded Landlord and any such other parties in interest will not be reduced or diminished by reason of the use of such blanket policy of insurance.

5.2 INTERRUPTIONS.

Landlord shall not be liable to Tenant for any compensation or reduction of rent by reason of inconvenience or annoyance or for loss of business arising from power losses or shortages or from the necessity of Landlord's entering the Premises for any of the purposes in this Lease authorized, or for repairing the Premises or any portion of the Building or Lot, or for interruption or termination (by reason of any cause reasonably beyond Landlord's control, including without limitation, loss of any applicable license or governmental approval), of the services provided by Landlord pursuant to Section 5.1. In case Landlord is prevented or delayed from making any repairs, alterations or improvements, or furnishing any service or performing any other covenant or duty to be performed on Landlord's part, by reason of any cause reasonably beyond Landlord's control, Landlord shall not be liable to Tenant therefor, nor, except as expressly otherwise provided in Article VII, shall Tenant be entitled to any abatement or reduction of rent by reason thereof, nor shall the same give rise to a claim in Tenant's favor that such failure constitutes actual or constructive, total or partial, eviction from the Premises.

Landlord reserves the right to stop any service or utility system when necessary by reason of accident or emergency or until necessary repairs have been completed. Except in case of emergency repairs, Landlord will give Tenant reasonable advance notice of any contemplated stoppage and will use reasonable efforts to avoid unnecessary inconvenience to Tenant by reason thereof.

Landlord also reserves the right to institute such policies, programs and measures as may be necessary, required or expedient for the conservation or preservation of energy or energy services or as may be necessary or required to comply with applicable codes, rules, regulations or standards.

Notwithstanding the foregoing provisions of this Section 5.2 and any other provision of this Lease to the contrary, in the event that any interruption of service(s) results from a cause arising on the Building or Lot not reasonably beyond Landlord's control or results from any negligent or willful act or omission of Landlord or its agents or their employees and as a result of such interruption the Premises or material portion thereof is made untenantable for the conduct of Tenant's business for a period of five (5) consecutive business days and during such period Tenant does not use or occupy the affected space, the Annual Rent and the additional rent payable by Tenant hereunder for the portion of the Premises which is so untenantable and unused by Tenant shall abate for the period commencing on the day after such fifth (5th) consecutive business day and ending on the day upon which the interrupted service(s) is(are) restored.

ARTICLE VI
TENANT'S COVENANTS

6.1 TENANT'S COVENANTS DURING THE TERM.

Tenant covenants:

6.1.1 Tenant's Payments. Tenant shall pay when due (a) all Annual Rent and additional rent, (b) all taxes which may be imposed on Tenant's personal property in the Premises (including, without limitation, Tenant's fixtures and equipment) regardless to whomever assessed, (c) all charges by public utilities for telephone and other utility services (including service inspections therefor) rendered to the Premises not otherwise required hereunder to be furnished by Landlord without charge and not consumed in connection with any services required to be furnished by Landlord without charge, and (d) as additional rent, all charges to Landlord for services rendered pursuant to Section 5.1.2 hereof.

6.1.2 Repairs and Yielding Up. Except as otherwise provided in Article VII, Section 5.1.3 and Section 10.11, Tenant shall keep the Premises in good order, repair and condition, reasonable wear and tear and casualty damage required hereunder to be covered by Landlord's insurance and damage due to condemnation only excepted; and at the expiration or termination of this Lease peaceably to yield up the Premises and all changes and additions therein in such order, repair and condition and free of any and all Hazardous Materials (as hereinafter defined), first removing all goods and effects of Tenant and any items, the removal of which is required by agreement or specified herein to be removed at Tenant's election and which Tenant elects to remove, and repairing all damage caused by such removal and, if required hereunder, restoring the Premises as and to the extent required and leaving them clean and neat. Notwithstanding the foregoing, Tenant shall not be obligated to remove any of the initial alterations in the Premises performed by or for Tenant before the Commencement Date except to the extent that Landlord's approval of such alterations was expressly conditioned, in writing, upon Tenant's agreement to remove the same at the end of the Term, and provided further that Tenant shall be obligated to remove Tenant's cabling from the Building risers. At least three (3) months prior to the surrender of the Premises, Tenant shall deliver to Landlord a narrative description of the actions proposed (or required by any governmental authority) to be taken by Tenant in order to surrender the Premises (including any installations permitted by Landlord to remain in the Premises) at the expiration or earlier termination of the Term, free from any residual impact from the use, storage, generation, release or disposal of Hazardous Materials ("Tenant HazMat Operations") and otherwise released for unrestricted use and occupancy (the "Surrender Plan"). Such Surrender Plan shall be accompanied by a current listing of (i) all Hazardous Materials licenses and permits held by or on behalf of Tenant with respect to the Premises, and (ii) all Hazardous Materials used, stored, handled, treated, generated, released or disposed of from the Premises, and shall be subject to the review and approval of Landlord's environmental consultant. In connection with the review and approval of the Surrender Plan, upon the request of Landlord, Tenant shall deliver to Landlord or its consultant such additional information concerning Tenant HazMat Operations as Landlord shall reasonably request. On or before such surrender, Tenant shall deliver to Landlord evidence that the approved Surrender Plan shall have been satisfactorily completed and Landlord shall have the right, at Landlord's expense except as set forth below, to cause Landlord's environmental consultant to inspect the Premises and perform such additional procedures as may be deemed reasonably necessary to confirm that the Premises are, as of the effective date of such surrender or early termination of the Lease, free from any residual impact from Tenant HazMat Operations. Landlord shall have the unrestricted right to deliver such Surrender Plan and any report by Landlord's environmental consultant with respect to the surrender of the Premises to third parties. If Tenant shall fail to prepare or submit a Surrender Plan approved by Landlord in its reasonable discretion, or if Tenant shall fail to complete the approved

Surrender Plan, or if such Surrender Plan, whether or not approved by Landlord, shall fail to adequately address any residual effect of Tenant HazMat Operations in, or about the Premises, Landlord shall have the right to take such actions as Landlord may deem reasonable or appropriate to assure that the Premises and the Project are surrendered free from any residual impact from Tenant HazMat Operations, the cost of which actions shall be reimbursed by Tenant as Additional Rent, without regard to the limitation set forth above in this Section 6.1.2.

6.1.3 Occupancy and Use. Tenant shall use and occupy the Premises only for the Permitted Uses; Tenant shall not use or permit the Premises or any portion thereof to be used for any Prohibited Use (as hereinafter defined) or by any Prohibited Person (as defined in Section 14.4 of the Ground Lease as set forth in Section 10.26 hereof). Tenant shall not injure or deface the Premises, Building, or Lot or permit animal, laboratory or other odors, noises or emissions to emanate from the Premises; and shall not permit in the Premises any use thereof which is improper, offensive, contrary to law or ordinances, or liable to create a nuisance or to invalidate or increase the premiums for any insurance on the Building or its contents or liable to render necessary any alteration or addition to the Building. For purposes hereof: (a) "Prohibited Use" shall mean (i) the manufacture or sale of consumer products (such as, without limitation, alcoholic beverages, tobacco products, or weapons but not including drugs sold over the counter or by medical prescription) recognized as hazardous to human health by federal or Maryland state governmental authorities, (ii) the publication, manufacture, sale, distribution, promotion or purveyance of pornographic material, or (iii) gambling; (b) a "Controlled Affiliate" of any person shall mean any person controlling, controlled by or under common control with such person; and (c) for purposes of the definition of "Controlled Affiliate" the term "controlled" (including the terms, "controlled," "controlling," "controlled by," and "under common control" with) means the possession, direct or indirect, of the power to: (y) vote ten percent (10%) or more of the outstanding voting securities of, or other ownership interests in, such person if the person is a company whose stock or other ownership interests are publicly traded and, if not, to vote more than fifty percent (50%) of the outstanding voting securities of, or other ownership interests in, such person, or (z) otherwise direct the management policies of such person by contract or otherwise. As used herein, a "person" shall mean any individual, partnership, corporation, limited liability company, unincorporated association, trust, estate, or other legal entity. Notwithstanding the foregoing, no federal, state, or local governmental entity, agency or authority (other than a college or university) shall be a "Prohibited Person" for the purposes of this Lease.

6.1.4 Rules and Regulations. Tenant shall comply with the Rules and Regulations set forth in Exhibit E and all other reasonable Rules and Regulations hereafter made by Landlord (not inconsistent with the terms of this Lease), of which Tenant has been given notice, for the care and use of the Building and Lot and their facilities and approaches. Landlord shall take commercially reasonable steps to enforce said Rules and Regulations, it being understood however that Landlord shall not be liable to Tenant for the failure of other tenants of the Building to conform to such Rules and Regulations, and provided further, however, that Landlord shall not apply the Rules and Regulations more strictly against Tenant than against other tenants in the Building similarly situated.

6.1.5 Safety Appliances and Licenses. Tenant shall keep the Premises equipped with all safety appliances required by law or ordinance or any other regulation of any public authority because of any particular use (including laboratory use) made by Tenant and shall procure all licenses and permits so required because of such use and, if requested by Landlord, Tenant shall do any work so required because of such particular use (including laboratory use), it being understood that the foregoing provisions shall not be construed to broaden in any way Tenant's Permitted Uses.

6.1.6 Assignment and Subletting. Tenant shall not without the prior written consent of Landlord assign this Lease, make any sublease, or permit occupancy of the Premises or any part thereof by anyone other than Tenant, voluntarily or by operation of law. As additional rent, Tenant shall reimburse Landlord promptly for reasonable legal and other expenses incurred by Landlord in connection with any request by Tenant for consent to assignment or subletting (not to exceed $1,000 in the aggregate in connection with each such request). No assignment or subletting shall affect the continuing primary liability of Tenant (which, following assignment, shall be joint and several with the assignee). No consent to any of the foregoing in a specific instance shall operate as a waiver in any subsequent instance. Landlord's consent to any proposed assignment or subletting is required both as to the terms and conditions thereof, and as to the creditworthiness of the proposed assignee or subtenant and the consistency of the proposed assignee's or subtenant's business with other uses and tenants in the Building. Landlord's consent to assignment or subletting by Tenant shall not be unreasonably withheld or delayed, provided that Tenant is not then in default under this Lease (beyond any applicable grace or cure period). In the event that any assignee (other than a Permitted Assignee) or subtenant pays to Tenant any amounts which (after deducting therefrom costs to Tenant of reasonable legal fees, brokerage fees, improvements, allowances or rent concessions made by Tenant in connection with such sublease or assignment and further deducting any Additional Allowance Charges prepaid by Tenant) exceed the Annual Rent and additional rent then payable hereunder, or pro rata portion thereof on a square footage basis for any portion of the Premises, Tenant shall promptly pay fifty percent (50%) of said excess to Landlord as and when received by Tenant. If Tenant requests Landlord's consent to assign this Lease (other than an assignment to a Permitted Assignee) or sublet (other than a sublease to a Permitted Assignee) more than fifty percent (50%) of the Premises for substantially all of the remainder of the Term, Landlord shall have the option, exercisable by written notice to Tenant given within 20 days after receipt of such request, to terminate this Lease (a) entirely in the case of an assignment or (b) with respect to the portion of the Premises desired to be sublet, as the case may be, as of a date specified in such notice which shall be not less than 30 or more than 60 days after the date of such notice.

If, at any time during the Term of this Lease, Tenant is: (i) a corporation or a trust (whether or not having shares of beneficial interest) and there shall occur any direct or indirect change in the identity of the persons or entities owning or controlling more than fifty percent (50%) of the voting rights or shares of stock or other ownership interests in Tenant or in the trustees or other persons exercising like functions and managing the affairs of Tenant; or (ii) a partnership or association or otherwise not a natural person (and is not a corporation or a trust), and there shall occur any direct or indirect change in the identity of any of the persons who then are members of such partnership or association or who comprise Tenant, Tenant shall so notify Landlord and Landlord may terminate this Lease by notice to Tenant given within 90 days thereafter if, in Landlord's reasonable judgment, the credit of Tenant is thereby impaired.

If Tenant shall at any time or times during the term of this Lease desire to assign this Lease or sublet all or a portion of the Premises, Tenant shall give written notice thereof to Landlord, which notice shall be accompanied by: (a) a conformed or photostatic copy of the proposed assignment or sublease, the effective or commencement date of which shall be at least thirty (30) days after the giving of such notice; (b) a statement setting forth in reasonable detail the identity of the proposed assignee or subtenant, the nature of its business and its proposed use of the Premises; (c) current financial information with respect to the proposed assignee or subtenant, including, without limitation, its most recent financial report and any contract of sale if Tenant is selling its business, and (d) a written confirmation by such subtenant or assignee stating that it is not a "Prohibited Person" (as defined herein). Such notice shall be deemed an offer from Tenant to Landlord whereby Landlord (or Landlord's designee) may, at its option: (i) consent to such assignment or sublease; (ii) sublease such space from Tenant upon the same terms and conditions therein set forth; (iii) if for more than 50% of

the Premises for substantially all of the remainder of the Term, terminate this Lease and enter into a new lease directly with the proposed sublessee or assignee, without any liability to Tenant; or, (iv) deny consent. Said options may be exercised by Landlord by notice to Tenant at any time within 20 days after such notice has been given by Tenant to Landlord, and during such 20-day period Tenant shall not assign this Lease or sublet such space to any person.

Landlord agrees that assignment of this Lease and subleases of all or a portion of the Premises to an Affiliate of Tenant whose financial condition is equal to or better than that of Tenant as of the date of such assignment will not require the prior approval of Landlord hereunder, provided Tenant provides Landlord written confirmation of the financial condition of such Affiliate of Tenant and complies with all terms and conditions of the immediately preceding paragraph, and provided further that any such assignee or subtenant uses the Premises for the Permitted Use and is not a Prohibited Person. Any such Affiliate of Tenant to whom or which this Lease is so assigned or to whom or which the Premises or any portion thereof is so sublet, is herein referred to as a "Permitted Assignee" and such sublease or assignment is herein referred to as a "Permitted Assignment." For purposes hereof, the term "Affiliate of Tenant' shall mean (i) any entity that is controlled by Tenant, is under common control with Tenant or controls Tenant, (ii) the successor to Tenant by consolidation or merger or sale of all or substantially all of Tenant's business and assets, provided the successor has a net worth not less than tenant's net worth as of the date of such merger, consolidation or sale. Except in the case of the term "Controlled Affiliate" (as used in Section 6.1.3), the term "Control" (including the terms "controlled," "controlling," "controlled by," and "under common control" with) as used in this Lease shall mean ownership of more than 50% of all partnership interests (including more than 50% of all general partnership interests) in a partnership or more than 50% of all classes of stock (including more than 50% of all voting stock) in a corporation or more than 50% of all voting equity interests in a mutual life insurance company. Any suite entry door signage for subtenant(s) and assignee(s) and any change in suite entry door, signage for subtenant(s) or assignee(s) of Tenant shall be at Tenant's sole expense and subject to Landlord's prior approval.

6.1.7 Indemnity. Tenant shall defend, with counsel approved by Landlord (such approval not to be unreasonably withheld or delayed), all actions against Landlord, any partner, member, trustee, stockholder, officer, manager, director, employee or beneficiary of Landlord, holders of mortgages secured by the Premises or the Building and Lot and any other party having an interest in the Premises ("Indemnified Parties") with respect to, and pay, protect, indemnify and save harmless, to the extent permitted by law, all Indemnified Parties from and against, any and all liabilities, losses, damages, costs, expenses (including reasonable attorneys' fees and expenses), causes of action, suits, claims, demands or judgments of any nature arising from (i) injury to or death of any person, or damage to or loss of property, on the Premises or connected with the use, condition or occupancy thereof or the construction, alteration or repair of any improvements thereon (including without limitation the Leasehold Improvements) or connected with Tenant's access to or use of the roof of the Building or Tenant's installation, operation, maintenance or removal of an Antenna on the Building pursuant to Article XII unless caused by the negligence or willful misconduct of Landlord or its agents or employees, (ii) violation of this Lease by Tenant, or (iii) any act, omission, fault, negligence or misconduct of Tenant or its agents, employees, contractors, licensees, sublessees or invitees (sometimes herein referred to as "Tenant's Invitees").

6.1.8 Tenant's Insurance. Tenant shall maintain commercial general liability insurance on the Premises, containing a broad form contractual liability endorsement, insuring Tenant and naming Landlord, its Mortgagee and property managing agent as an additional named insureds against all claims and demands for (i) injury to or death of any person or damage to or loss of property, on the Premises or adjoining walks, streets or ways, or connected with the use, condition or occupancy of any thereof by Tenant or Tenant's Invitees unless caused by the negligence of Landlord or its agents or employees, (ii) violation of this Lease by Tenant.

(iii) any act, fault or omission, or other misconduct of Tenant or Tenant's Invitees, (iv) any and all indemnification obligations of Tenant under this Lease including, without limitation, Section 6.1.7 and Section 18 hereof, in amounts which shall, at the beginning of the Term, be at least equal to the limits set forth in Section 1.1, and from time to time during the Term, shall be for such higher limits, if any, as are customarily carried in the area in which the Premises are located on property similar to the Premises and used for similar purposes, and shall be written on the "Occurrence Basis," and to furnish Landlord with certificates thereof. Tenant shall also maintain pollution legal liability insurance with a minimum limit of not less than $2,000,000 per occurrence and boiler and machinery insurance in adequate amounts on all fired objects and other fired pressure vessels and systems serving the Premises (if any). If fired objects and other pressure vessels and the damage that may be caused by them or result from them are not covered by Tenant's extended coverage insurance, then such insurance shall be in an amount not less than $250,000 and be issued on a replacement cost basis. Tenant shall also maintain insurance covering all of the items included in Tenant's Leasehold Improvements, heating, ventilating and air conditioning equipment maintained by Tenant, trade fixtures, merchandise and personal property from time to time in, on or upon the Premises, and alterations, additions or changes made by Tenant in an amount not less than one hundred percent (100%) of their full replacement value from time to time during the Term, providing protection against perils included within the standard form of "all risks" fire and casualty insurance policy, together with insurance against sprinkler damage, vandalism and malicious mischief. Any policy proceeds from such insurance shall be held in trust by Tenant's insurance company for the repair, construction, and restoration or replacement of the property damaged or destroyed unless this Lease shall cease and terminate under the provisions of this Lease. The insurance policies required to be obtained by Tenant under this Section shall be issued by an insurance company of recognized responsibility with a rating of "A-X" or better in the current "Best's Insurance Reports" and reasonably acceptable to Landlord, licensed to do business in the jurisdiction in which the Building is located, and shall be written as primary policy coverage and not contributing with or in excess of any coverage that Landlord or any Mortgagee or management agent may carry. All policies that Tenant is required to maintain under this Lease shall contain appropriate clauses or endorsements under which (i) such policies may not be materially changed, amended, cancelled or allowed to lapse without thirty (30) days' prior notice to Landlord, (ii) no act or omission of Tenant shall affect or limit the obligations of the insurer with respect to the Landlord, (iii) Tenant shall be solely responsible for the payment of all premiums notwithstanding the fact that Landlord is an additional insured under any such policy, and (iv) Landlord, its Mortgagee and property management agent are named an additional insureds under such policy. Any insurance provided for in this Section 6.1.8 may be maintained by means of a policy or policies of blanket insurance, covering additional items or locations or insureds, provided, however, that the coverage afforded Landlord and any such other parties in interest will not be reduced or diminished by reason of the use of such blanket policy of insurance. Neither the issuance of any insurance policy required under this Lease, nor the minimum limits specified herein with respect to Tenant's insurance coverage, shall be deemed to limit or restrict in any way Tenant's liability arising under or with respect to this Lease. On or before occupancy by Tenant of any portion of the Premises, for any reason, including the installation of cabling or systems furniture, and in all events prior to the Commencement Date, and at least thirty (30) days before the expiration of any policy or certificate furnished by Tenant under this Section, Tenant shall deliver to Landlord copies of all insurance policies required by Tenant to be maintained under the lease or appropriate certificates evidencing the issuance of such policies, together with evidence of payment of all applicable premiums.

6.1.9 Tenant's Worker's Compensation Insurance. Tenant shall keep all of Tenant's employees working in the Premises covered by worker's compensation insurance in statutory amounts not less than $500,000, and to furnish Landlord with certificates thereof.

6.1.10 Landlord's Right of Entry. Tenant shall permit Landlord and Landlord's agents entry: to examine the Premises at reasonable times and, except in emergencies, upon reasonable

prior notice, and if Landlord shall so elect, to make repairs or replacements (it being understood, however, that Landlord shall use commercially reasonable efforts to minimize disruption of Tenant's business); to remove, at Tenant's expense, any changes, additions, signs, curtains, blinds, shades, awnings, aerials, flagpoles, or the like not consented to in writing by Landlord; and to show the Premises to prospective tenants during the 12 months preceding expiration of the Term and to prospective purchasers and mortgagees at all reasonable times. If Tenant so elects, an employee of Tenant may be present during any such entry by Landlord, provided however that Landlord need not postpone any entry if no employee of Tenant is then available in the case of emergencies or if Landlord has given Tenant the prior notice herein required.

6.1.11 Loading. Tenant shall not place Tenant's Property, as defined in Section 6.1.13, upon the Premises so as to exceed a rate of 100 pounds of live load and 20 pounds of dead load per square foot and not to move any safe, vault or other heavy equipment in, about or out of the Premises except in such manner and at such times as Landlord shall in each instance approve; Tenant's business machines and mechanical equipment which cause vibration or noise that may be transmitted to the Building structure or to any other leased space in the Building shall be placed and maintained by Tenant in settings of cork, rubber, spring or other types of vibration eliminators sufficient to eliminate such vibration or noise.

6.1.12 Landlord's Costs. In case Landlord shall be made party to any litigation commenced by or against Tenant or by or against any parties in possession of the Premises or any part thereof claiming under Tenant, Tenant shall pay, as additional rent, all costs including, without implied limitation, reasonable counsel fees incurred by or imposed upon Landlord in connection with such litigation and, as additional rent, also to pay all such costs and fees incurred by Landlord in connection with the successful enforcement by Landlord of any obligations of Tenant or remedies of Landlord under this Lease.

6.1.13 Tenant's Property. All the furnishings, fixtures, equipment, effects and property of every kind, nature and description of Tenant and of all persons claiming by, through or under Tenant which, during the continuance of this Lease or any occupancy of the Premises by Tenant or anyone claiming under Tenant, may be on the Premises or elsewhere in the Building or on the Lot shall be at the sole risk and hazard of Tenant, and if the whole or any part thereof shall be destroyed or damaged by fire, water or otherwise, or by the leakage or bursting of water pipes, steam pipes, or other pipes, by theft, or from any other cause, no part of said loss or damage is to be charged to or to be borne by Landlord unless due to the gross negligence or willful misconduct of Landlord or its agents or employees.

6.1.14 Labor or Materialmen's Liens. Tenant shall pay promptly when due the entire cost of any work done or materials installed in the Premises by Tenant, its agents, employees or contractors; and shall not cause or permit any liens for labor or materials performed or furnished in connection therewith to attach to the Premises; Building or the Lot; and shall bond over any such liens which may so attach or cause the same to be discharged within thirty (30) days.

6.1.15 Changes or Additions. Tenant shall not make any changes or additions to the Premises without Landlord's prior written consent (which consent shall not be unreasonably withheld or delayed), provided that Tenant shall reimburse Landlord for all reasonable engineering fees and expenses incurred by Landlord in connection therewith if Landlord reasonably believes review of such changes or improvements by engineer(s) is appropriate, and provided further that, Tenant shall be solely responsible for assuring that all such changes or additions comply with applicable laws and regulations and in order to protect the functional integrity of the Building, all such changes and additions affecting the structure or mechanical, electrical or plumbing systems of the Building or visible from outside of the Premises shall be performed by contractors selected from a list of approved contractors prepared by Landlord and approved by Tenant, such approval not to be unreasonably withheld or delayed. Tenant may

make alterations costing less than Ten Thousand Dollars ($10,000) in each instance without Landlord's prior approval provided such alterations do not affect the structure or mechanical, electrical or plumbing systems of the Building and are not visible from outside of the Premises.

6.1.16 Holdover. Tenant shall pay to Landlord the sum of (a) the greater of 150% of (i) the then fair market rent as conclusively determined by Landlord or (ii) the total of the Annual Rent payable by Tenant during the 12-month period prior to the termination of the Lease, as escalated in accordance with Section 4.1 hereof, plus (b) all additional rent payable by Tenant, for each month or portion thereof that Tenant shall retain possession of the Premises or any part thereof after the termination of this Lease, whether by lapse of time or otherwise, and shall also pay all direct damages sustained by Landlord on account thereof. The provisions of this subsection shall not operate as a waiver by Landlord of the right of reentry provided in this Lease.

6.1.17 Financial Statements. Tenant shall deliver to Landlord within ninety (90) days following the close of each of Tenant's fiscal years during the Term, Tenant's then current financial statement audited by an independent certified public accountant, if such a current audited statement is available, and otherwise certified as true, correct and complete by Tenant's Chief Financial Officer.

6.1.18 Compliance. Tenant shall, at Tenant's sole expense, (i) comply with all laws, orders, ordinances, and regulations of federal, state, county, and municipal authorities having jurisdiction over the Premises (collectively, "Laws") and with all licenses and permits applicable to Tenant's use thereof (collectively, "Permits"), provided that in no event shall Tenant be obligated under this Section 6.1.18 to make any alterations, repairs, replacements or capital improvements in or to the Premises or any part thereof required by such Laws or Permits unless such requirements arises from a particular use or any laboratory use made of the Premises by Tenant, (ii) comply with the Declaration of Covenants, Restrictions and Easements dated July 18, 2003 by JHU as Declarant (the "Campus CCRs"), the Estoppel Certificate Waiver and Consent Assignment dated July 18, 2003 between JHU and Montgomery County, Maryland (the "Estoppel"), and such other protective covenants, restrictions applicable to the Lot or the Building of which Tenant has prior written notice, and with all requirements of the Ground Lease, as they may be amended from time to time, after notice thereof to Tenant of any such amendment, provided that no such amendment increases or enlarges Tenant's obligations under this Lease, (iii) comply with any directive, order or citation made pursuant to law by any public officer requiring abatement of any nuisance or which imposes upon Landlord or Tenant any duty or obligation arising from Tenant's occupancy or use of the Premises or from conditions which have been created by or at the request or insistence of Tenant, or required by reason of a breach of any Tenant's obligations hereunder or by or through other fault of Tenant, (iv) comply with all insurance requirements applicable to the Premises, and (v) furnish all data and information to governmental authorities, with a copy to Landlord, required by Laws or Permits. If Tenant receives notice of any such directive, order, citation or of any violation of any law, order, ordinance, regulation or any insurance requirement or of any of the protective covenants or restrictions, Tenant shall promptly notify Landlord in writing of such alleged violation and furnish Landlord with a copy of such notice. If Landlord receives notice of any such directive, order, citation, violation of any law, ordinance, regulation, insurance requirement or protective covenants or restrictions pertaining to Tenant or the Premises, Landlord shall promptly notify Tenant in writing thereof and will furnish Tenant with a copy of such notice.

6.1.19 Laboratories/Janitorial.

Tenant shall be responsible, at its sole cost and expense, for routine janitorial and trash removal services for the entire Premises including laboratory areas and all biohazard disposal services for the laboratory areas, if any, in the Premises or other space within the

Premises used in connection with the generation, use, storage, treatment, release or disposal of Hazardous Material as permitted in accordance with Section 10.18 or the housing, care, storage or handling of animals (collectively, "HazMat Facilities"). Such services shall be performed by contractors reasonably acceptable to Landlord and on a sufficient basis to ensure that the Premises including all laboratory and other HazMat Facilities of the Premises are at all times kept neat, clean, free of trash, Hazardous Material and biohazards except in appropriate, specially marked containers reasonably approved by Landlord and in compliance with applicable Laws. In addition, Tenant shall be responsible, at Tenant's sole cost and expense, for the care and safe storage of any animals housed within the Premises, including without limitation all animal husbandry and custodial services with respect thereto. Tenant shall not cause or permit animals, animal waste, food or supplies relating to animals to be used, housed or stored in the Premises or to be transported within the Building except as provided in this paragraph. All deliveries of animals or animal food or supplies to Tenant at the Building shall be made prior to 9:00 a.m. No transportation of animals, animal waste, food or supplies within the Building shall occur between the hours of 9:00 a.m. and 5:00 p.m. At all times that animals are transported within the Building, they shall be transported in an appropriate cage or other container. At no time shall any animals, animal waste, good or supplies relating to the animals be brought into, transported through, or delivered to the lobby of the Building or be transported within the Building in elevators other than the freight elevator designated by Landlord therefor. Prior to the Commencement and from time to time during the Term upon written request by Landlord, Tenant, at its sole cost and expense, shall retain a qualified environmental engineer or consultant, reasonably acceptable to Landlord, to inspect all laboratory and other HazMat Facilities in the Premises and confirm in a written report to Landlord that all such laboratories and HazMat Facilities comply with applicable Laws. If such engineer or consultant cannot issue such report because the laboratories and HazMat Facilities do not comply with applicable Laws, Tenant shall forthwith, at its sole cost and expense, take any and all actions necessary to bring such laboratories and HazMat Facilities into compliance with such Laws.

6.2 BANKRUPTCY.

Tenant acknowledges that this Lease is a lease of nonresidential real property and, therefore agrees that Tenant, as the debtor in possession, or the trustee for Tenant (collectively "the Trustee") in any proceeding under Title 11 of the United States Bankruptcy Code relating to Bankruptcy, as amended, or under any other similar Federal or state statute (collectively, the "Bankruptcy Code"), shall not seek or request any extension of time to assume or reject this Lease or to perform any obligations of this Lease which arise from or after the order of relief.

If the Trustee proposes to assume or to assign this Lease or sublet the Premises (or any portion thereof) to any person who shall have made a bona fide offer to accept an assignment of this Lease or a subletting on terms acceptable to the Trustee, the Trustee shall give Landlord and lessors and mortgagees, of Landlord of which Tenant has notice, written notice setting forth the name and address of such person and the terms and conditions of such offer, no later than 20 days after receipt of such offer, but in any event no later than 10 days prior to the date on which the Trustee makes application to the Bankruptcy Court for authority and approval to enter into such assumption and assignment or subletting. Landlord shall have the prior right and option, to be exercised by written notice to the Trustee given at any time prior to the effective date of such proposed assignment or subletting, to accept an assignment of this Lease or subletting of the Premises upon the same terms and conditions and for the same consideration, if any, as the bona fide offer made by such person, less any brokerage commissions which may be payable out of the consideration to be paid by such person for the assignment or subletting of this Lease.

The Trustee shall have the right to assume Tenant's rights and obligations under this Lease only if the Trustee: (i) promptly cures, or provides adequate assurance that the Trustee will promptly cure, any default under this Lease; (ii) compensates, or provides adequate assurance that the Trustee will promptly compensate, Landlord for any actual pecuniary loss incurred by Landlord as a result of Tenant's default under this Lease; and (iii) provides adequate assurance of future performance under this Lease.

Adequate assurance of future performance by the proposed assignee shall include, as a minimum, that: (a) the Trustee or any proposed assignee of this Lease shall deliver to Landlord a security deposit in an amount equal to at least 3 months' Rent accruing under this Lease; (b) any proposed assignee of this Lease shall provide to Landlord an audited financial statement, dated no later than 6 months prior to the effective date to such proposed assignment or sublease with no material change therein as of the effective date, which financial statement shall show the proposed assignee to have a net worth equal to at least 12 months' Rent accruing under this Lease, or, in the alternative, the proposed assignee shall provide a guarantor of such proposed assignee's obligations under this Lease, which guarantor shall provide an audited financial statement meeting the above requirements of this clause (b) and execute and deliver to Landlord a guaranty agreement in form and substance acceptable to Landlord; and (c) any proposed assignee shall grant to Landlord a security interest in favor of Landlord in all furniture, fixtures, and other personal property to be used by such proposed assignee in the Premises. All payments of Rent required of Tenant under this Lease, whether or not expressly denominated as such in this Lease, shall constitute rent for the purpose of Title 11 of the Bankruptcy Code.

The parties agree that for the purposes of the Bankruptcy Code relating to (i) the obligation of the Trustee to provide adequate assurance that Trustee will "promptly cure defaults and compensate Landlord for actual pecuniary loss, the word "promptly" shall mean that cure of defaults and compensation will occur no later than 60 days following the filing of any motion or application to assume this Lease; and (ii) the obligation of the Trustee to compensate or to provide adequate assurance that the Trustee will promptly compensate Landlord for "actual pecuniary loss," the term "actual pecuniary loss" shall mean, in addition to any other provisions contained herein relating to Landlord's damages upon default, payments of Rent, including interest at the rate of 4% per annum in excess of the Prime Rate on all unpaid Rent, all attorneys' fees and related costs of Landlord incurred in connection with any default of Tenant and in connection with Tenant's bankruptcy proceedings.

Any person or entity to which this Lease is assigned pursuant to the provisions of the Bankruptcy Code shall be deemed, without further act or deed, to have assumed all of the obligations arising under this Lease and each of the conditions and provisions hereof on and after the date of such assignment. Any such assignee shall, upon the request of Landlord, forthwith execute and deliver to Landlord an instrument, in form and substance acceptable to Landlord, confirming such assumption.

ARTICLE VII
CASUALTY AND TAKING

7.1 CASUALTY AND TAKING.

A. Repair of Damages. If the Building or Premises are damaged by fire, casualty or other destruction thereby rendering the Building or Premises totally or partially inaccessible or unusable, Landlord shall, within thirty (30) days after the date of such damage, at its sole expense reasonably determine (taking into account the time needed for effecting a satisfactory settlement with any insurance company involved, removal of debris, preparation of plans and issuance of all required government permits) how long it will take to restore the damaged area to substantially its condition prior to the fire or other casualty (the "Casualty Opinion"). If, in Landlord's Casualty Opinion, restoration of the Building and Premises substantially to the condition of the Building and Premises prior to the date of such casualty and in compliance with applicable zoning and other applicable laws, permits, approvals and regulations within one hundred eighty (180) days from the date of the damage is not reasonably possible, this Lease shall terminate at Landlord's election by written notice to Tenant within thirty (30) days after the delivery of Landlord's Casualty Opinion, which notice shall state the effective date of termination which shall not be more than sixty (60) days nor less than 30 days after the date of such notice. If in any such case the Premises are rendered totally or partially inaccessible or unusable, and Landlord does not so elect to terminate this Lease, Landlord shall, at Landlord's expense to the extent permitted by the net award of insurance available to Landlord, repair such damage; provided, however, that Landlord shall have no obligation to repair any damage to, or to replace, Tenant's personal property. Except as otherwise

provided herein, if all or a substantial part of the entire Premises is rendered untenantable by reason of the insured fire, casualty or other destruction, then installments of Base Annual Rent and additional rent shall abate for such period in the proportion which the area of the Premises so rendered untenantable bears to the total area of the Premises; and provided, further, if, prior to the date when such repairs have been completed, any portion of the Premises as damaged shall be rendered tenantable and shall be used or occupied by Tenant or any person claiming through or under Tenant, then the amount by which the Base Annual Rent and additional rent shall abate shall be equitably apportioned for the period from the date of any such use or occupancy to the date when such repairs are completed. In addition, if the Premises or the Building is damaged or destroyed within the last year of the Term and either such damage renders at least fifty percent (50%) of the Premises unusable or inaccessible or, in Landlord's Casualty Opinion, the time necessary to substantially repair and restore such damage exceeds one-sixth of the remaining Term (calculated from date of the damage), then this Lease shall terminate as of the day Landlord's Casualty Opinion is issued, and the then-applicable Base Annual Rent and additional rent shall be apportioned as of such date, including any rent abatement as provided above.

B. Termination by Tenant. Notwithstanding the foregoing, if, prior to or during the Term of this Lease the Premises is damaged by fire, casualty or other destruction rendering the Premises totally or partially inaccessible or unusable, and either (1) according to the Landlord's Casualty Opinion, restoration to substantially its condition prior to the fire or other casualty within 210 days from the date of damage is not reasonably possible, or (2) this Lease is not terminated by either Landlord or Tenant, and restoration of the Premises is not substantially completed within two (2) months following expiration of the period of time within which Landlord estimated that such restoration could be completed (as stated in Landlord's Casualty Opinion), as such period is extended due to Force Majeure (in accordance with Section 10.12 hereof), then Tenant may give to Landlord (within thirty (30) days after receipt of notice from Landlord that the restoration will require more than 210 days or within sixty (60) days after the estimated completion date set forth in Landlord's Casualty Opinion, as the case may be) thirty (30) days' notice of termination of this Lease, and, in the event such notice is given, this Lease shall terminate (whether or not the Term shall have commenced) upon the expiration of such thirty (30) days (provided Landlord has not sooner substantially completed restoration as herein required) and the then-applicable Base Annual Rent and additional rent shall be apportioned as of such date, including any rent abatement as provided above.

In no event shall Tenant's obligation to pay the Additional Allowance Charge be reduced or abated, whether or not this Lease is terminated in accordance with this Section 7.1; and upon any termination of this Lease, the unpaid balance of the Additional Allowance Charge shall be due and payable in full.

7.2 TAKING.

This Lease shall terminate on the date title thereto vests in a governmental or quasigovernmental authority pursuant to a condemnation (as hereinafter defined), and rent shall be apportioned as of such date (a) if the entire Building or the entire Premises or the occupancy of either the entire Building or the entire Premises shall be taken or condemned by any governmental or quasi-governmental authority or sold to a governmental or quasigovernmental authority under threat of such a taking or condemnation (collectively, "condemned" or "condemnation"), (b) at Landlord's election, by written notice to Tenant, if more than 30% of the Premises is rendered wholly unusable or inaccessible or otherwise untenantable as a result of any condemnation, or (c) at Landlord's election, by written notice to Tenant, if such condemnation results in a taking of more than 20% of the Building or a reduction by more than 20% of the fair market value of the Building. In addition, on the date title vests in a governmental or quasigovernmental authority pursuant to condemnation described in clause (b) or (c) of this Section 7.2 or pursuant to a condemnation which results in more than 30% of the floor area of the Premises being condemned, this Lease may also be terminated, at Tenant's election by written notice to Landlord within thirty (30) days following such taking, unless, within such thirty (30) days, Landlord offers to relocate the affected portion of the Premises to another location in the Building comparable to and substantially the same size as the area condemned. Landlord or Tenant may exercise any option given to it hereunder to terminate this Lease provided that Tenant or Landlord, as the case may be, delivers written notice to

other no later than thirty (30) days prior to the date title vests in the governmental or quasigovernmental authority. If a condemnation occurs which does not automatically result in a termination of this Lease in accordance with this Section 7.2 and neither Landlord nor Tenant has the option or timely exercises its option to terminate this Lease as herein provided, then this Lease shall continue in full force and effect as to the part of the Premises not condemned, except that, as of the date title vests in such authority, Tenant shall not be required to pay rent with respect to the part of the Premises condemned (including, without limitation, any part of the Premises condemned temporarily, in which case Tenant shall not be required to pay installments of Base Annual Rent, additional rent or any other sums with respect to such part of the Premises during such period of time.

In no event shall Tenant's obligation to pay the Additional Allowance Charge be reduced or abated, whether or not this Lease is terminated in accordance with this Section 7.2; and upon any termination of this Lease, the unpaid balance of the Additional Allowance Charge shall be due and payable in full.

7.3 RESERVATION OF AWARD.

Landlord reserves to itself any and all rights to receive awards made for damages to the Premises, Building or Lot and the leasehold hereby created, or any one or more of them, accruing by reason of exercise of eminent domain or by reason of anything lawfully done in pursuance of public or other authority. Tenant hereby releases and assigns to Landlord all Tenant's rights to such awards, and covenants to deliver such further assignments and assurances thereof as Landlord may from time to time request, and hereby irrevocably designates and appoints Landlord its attorney-in-fact to execute and deliver in Tenant's name and behalf all such further assignments thereof. It is agreed and understood, however, that Landlord does not reserve to itself, and Tenant does not assign to Landlord, any damages payable for (i) movable trade fixtures installed by Tenant or anybody claiming under Tenant, (ii) other personal property of Tenant, (iii) loss of customer good will, or (iv) moving and relocation expenses recoverable by Tenant from such authority in a separate action.

ARTICLE VIII
RIGHTS OF MORTGAGEE

8.1 PRIORITY OF LEASE.

Subject to the provisions of the second paragraph of this Section 8.1, this Lease is and shall continue to be subject and subordinate to any mortgage now or hereafter of record covering the Lot or Building or both (the "mortgaged premises") created by Landlord upon acquisition of title to the Lot or thereafter and to any and all advances hereafter made thereunder and to the interest of the holder or holders thereof in the Lot or the Building, or both of them. This Lease shall also be subject and subordinate to the Ground Lease (and all modifications and extensions thereof) under which Landlord acquires its interest in the Lot. Any such mortgage or ground lease to which this Lease shall be subordinated may contain such terms, provisions and conditions as the holder or ground lessor deems usual or customary.

Notwithstanding the foregoing, Landlord agrees to obtain a non-disturbance and attornment agreement from the holder of any mortgage (including the holder of any existing mortgage on the Building as of the Date of Lease Execution) substantially in the form attached hereto as Exhibit J which confirms the subordination of this Lease as aforesaid and whereby such holder will agree, so long as Tenant is not then in default hereunder, to recognize the rights of Tenant under this Lease and to accept Tenant as tenant of the Premises under the terms and conditions of this Lease in the event of acquisition of title by such holder (or a third party) through foreclosure proceedings or otherwise and Tenant will agree to recognize the holder of such mortgage or such purchaser as Landlord in such event, which agreement shall be made to expressly bind and inure to the benefit of the successors and assigns of Tenant and of the holder and upon anyone purchasing Landlord's interest in the mortgaged premises at any foreclosure

sale or otherwise. The holder of such mortgage shall have the election to subordinate the same to the rights and interests of Tenant under this Lease exercisable by filing with the appropriate recording office a notice of such election, whereupon the Tenant's rights and interests hereunder shall have priority over such mortgage or deed of trust. In addition, Landlord agrees to obtain a non-disturbance and attornment agreement from the ground lessor under the Ground Lease substantially in the form attached hereto as Exhibit K.

The word "mortgage" as used in this Lease includes mortgages, deeds of trust or other similar instruments evidencing other voluntary liens or encumbrances, and modifications, consolidations, extensions, renewals, replacements and substitutes thereof. The word "holder" shall mean a mortgagee, and any subsequent holder or holders of a mortgage.

8.2 RIGHTS OF MORTGAGE HOLDERS: LIMITATION OF MORTGAGEE'S LIABILITY.

Until the holder of a mortgage shall enter and take possession of the Premises for the purpose of foreclosure and until a ground lessor shall enter and take possession of the Premises upon termination of the Ground Lease, such holder or ground lessor shall have only such rights of Landlord as are necessary to preserve the integrity of this Lease as security. Upon entry and taking possession of the Premises for the purpose of foreclosing or following termination of the Ground Lease, such holder or ground lessor which takes possession of the Premises, as the case may be, shall have all rights of Landlord. Notwithstanding any other provision of this Lease to the contrary, including without limitation Section 10.4, no such holder of a mortgage or ground lessor shall be liable, either as mortgagee, ground lessor or as assignee, to perform or be liable in damages for failure to perform, any of the obligations of Landlord unless and until such holder or ground lessor shall enter and take possession of the Premises upon termination of the Ground Lease or for the purpose of foreclosure. Upon any such entry, the holder or ground lessor shall be liable to perform all of the obligations of Landlord accruing from and after such entry, subject to and with the benefit of the provisions of Section 10.4, provided that a discontinuance of any foreclosure proceeding or creation of a new or replacement ground lease shall be deemed a conveyance under said provisions to the owner of the equity or ground lessee of the Premises. For the purpose of this Lease, the word "foreclosure" shall include any trustee's sale pursuant to the terms of a deed of trust and sale in execution of any other voluntary lien or encumbrance.

8.3 INTENTIONALLY OMITTED.

8.4 NO PREPAYMENT OR MODIFICATION, ETC.

Tenant shall not pay Annual Rent, Estimated Monthly Payments, Estimated Monthly Real Estate Tax Payments, Tenant's Annual Electrical Cost, other additional rent, or any other charge more than ten (10) days prior to the due date thereof. No prepayment of Annual Rent, additional rent or other charge, no assignment of this Lease and no agreement to modify so as to reduce the rent, change the Term, or otherwise materially change the rights of Landlord under this Lease, or to relieve Tenant of any obligations or liability under this Lease shall be valid unless consented to in writing by Landlord's mortgagees of record, if any.

8.5 NO RELEASE OR TERMINATION.

No act or failure to act on the part of Landlord which would entitle Tenant under the terms of this Lease, or by law, to be relieved of Tenant's obligations hereunder or to terminate this Lease shall result in a release or termination of such obligations or a termination of this Lease unless (i) Tenant shall have first given written notice of Landlord's act or failure to act to Landlord's mortgagees of record, if any, specifying the act or failure to act on the part of Landlord which could or would give basis to Tenant's rights and (ii) such mortgagees, after receipt of such notice, have failed or refused to correct or cure the condition complained of within a reasonable time thereafter, but nothing contained in this Section 8.5 shall be deemed to impose any obligation on any such mortgagee to correct or cure any such condition. "Reasonable time" as used above means and includes a reasonable time to obtain possession of the mortgaged premises, if the mortgagee elects to do so, and a reasonable time to correct or cure the

condition if such condition is determined to exist, not exceeding one hundred twenty (120) days in the aggregate. If the condition complained of by Tenant in accordance with this Section 8.5 can be cured with the payment of money and the mortgagee elects not to obtain possession of the property, a "reasonable time" as used above shall not exceed thirty (30) days.

8.6 CONTINUING OFFER.

The covenants and agreements contained in this Lease with respect to the rights, powers and benefits of a holder of a mortgage (particularly, without limitation thereby, the covenants and agreements contained in this Article VIII) constitute a continuing offer to any person, corporation or other entity, which by accepting or requiring an assignment of this Lease or by entry or foreclosure assumes the obligations herein set forth with respect to such holder; such holder is hereby constituted a party to this Lease as an obligee hereunder to the same extent as though its name were written hereon as such; and such holder shall be entitled to enforce such provisions in its own name. Tenant agrees on request of Landlord to execute and deliver from time to time any agreement which may reasonably be deemed necessary to implement the provisions of this Article VIII.

8.7 MORTGAGEE'S APPROVAL.

If the holder of any mortgage created by Landlord as security for financing of Landlord's acquisition of the Lot or construction of the Base Building shall require a modification of the terms and provisions of this Lease as a condition to providing its financing for the said acquisition or construction or any lender shall require such modification as a condition to granting a new mortgage loan for the Building, Landlord shall have the right to cancel this Lease if Tenant refuses to execute and deliver to Landlord, within 30 days after Landlord's request therefor, a written agreement incorporating such modifications into this Lease; provided, however, that the modifications required do not result in an increase in the rent or additional rent payable by Tenant hereunder or otherwise materially increase Tenant's obligations or materially reduce. Tenant's rights hereunder.

ARTICLE IX
DEFAULT

9.1 EVENTS OF DEFAULT.

If Tenant shall fail to pay Annual Rent or additional rent to Landlord, or any installment thereof, or any other monetary obligation including but not limited to the failure to deliver any amount or letter of credit due as a rent or security deposit arising hereunder to Landlord as and when herein provided and such failure continues after written notice thereof for more than 5 business days; or if Tenant attempts or purports to transfer, assign or encumber this Lease or to sublease or grant a right of use or occupancy in the Premises without complying with Section 6.1.6 hereof; or if any other default by Tenant shall occur and continue after notice thereof for more than 30 days and such additional time, if any, (not exceeding 90 days in the aggregate) as is reasonably necessary to cure the default if the default is of such a nature that it cannot reasonably be cured in 30 days and Tenant diligently endeavors to cure such default and does within 90 days following such notice; or if Tenant becomes insolvent, fails to pay its debts as they fall due, files a petition under any chapter of the U.S. Bankruptcy Code, 11 U.S.C. 101, et seq., as it may be amended (or any similar petition under any insolvency law of any jurisdiction), or if such petition is filed against Tenant and is not dismissed within ninety (90) days; or if Tenant proposes any dissolution, liquidation, composition, financial reorganization or recapitalization with creditors, makes an assignment or trust mortgage for the benefit of creditors, or if a receiver, trustee, custodian or similar agent is appointed or takes possession with respect to any property of Tenant; or if the leasehold hereby created is taken on execution or other process of law in any action against Tenant; then, and in any such case (herein sometimes referred to as an "Event of Default"), Landlord and the agents and servants of Landlord may, in addition to and not in derogation of any remedies for any preceding breach of covenant, immediately or at any time thereafter and without further notice exercise any and all remedies permitted

by state or federal law. In the event of any Event of Default, Landlord shall also have the right to reenter and take possession of all or any portion of the Premises and expel Tenant and those claiming through or under Tenant, either by summary proceedings or by any other action at law, in equity, or otherwise, with or without terminating this Lease, without being deemed guilty of trespass and without prejudice to any other remedies of Landlord for breach of this Lease. Tenant hereby waives all rights of redemption, if any, to the extent such rights may be lawfully waived, and Landlord, without notice to Tenant, may store Tenant's effects and those of any person claiming through or under Tenant at the expense and risk of Tenant and, if Landlord so elects, may sell such effects at public auction or private sale and apply the net proceeds to the payment of all sums due to Landlord from Tenant, if any, and pay over the balance, if any, to Tenant.

9.2 TENANT'S OBLIGATIONS AFTER TERMINATION.

In the event that this Lease is terminated under any of the provisions contained in Section 9.1 or shall be otherwise terminated for breach of any obligation of Tenant, Tenant covenants to pay forthwith to Landlord, as compensation, the excess of the total rent reserved for the residue of the Term over the rental value of the Premises for said residue of the Term. In calculating the rent reserved, there shall be included, in addition to the Annual Rent and all additional rent, the value of all other consideration agreed to be paid or performed by Tenant for said residue. Tenant further covenants as an additional and cumulative obligation after any such termination to pay punctually to Landlord all the sums and perform all the obligations which Tenant covenants in this Lease to pay and to perform in the same manner and to the same extent and at the same time as if this Lease had not been terminated. In calculating the amounts to be paid by Tenant under the next foregoing covenant, Tenant shall be credited with any amount paid to Landlord as compensation as provided in the first sentence of this Section 9.2 and also with the net proceeds of any rents obtained by Landlord by reletting the Premises, after deducting all Landlord's expenses in connection with such reletting, including, without implied limitation, all repossession costs, brokerage commissions, fees for legal services and expenses of preparing the Premises for such reletting, it being agreed by Tenant that Landlord may (i) relet the Premises or any part or parts thereof for a term or terms which may at Landlord's option be equal to or less than or exceed the period which would otherwise have constituted the balance of the Term and may grant such concessions and free rent as Landlord in its sole judgment considers advisable or necessary to relet the same, (ii) make such alterations, repairs and decorations in the Premises as Landlord in its sole judgment considers advisable or necessary to relet the same, and (iii) keep the Premises vacant unless and until Landlord is able to rent the Premises to a tenant which is at least as desirable and financially responsible as Tenant is on the date of this Lease, on terms not less favorable to Landlord than those of this Lease. Notwithstanding the foregoing, Landlord shall use commercially reasonable efforts to mitigate its damages as a result of Tenant's Event of Default hereunder, provided however that no action of Landlord in accordance with the foregoing or failure to relet or to collect rent under reletting shall operate or be construed to release or reduce Tenant's liability as aforesaid.

Nothing contained in this Lease shall, however, limit or prejudice the right of Landlord to prove and obtain in proceedings for bankruptcy or insolvency by reason of the termination of this Lease an amount equal to the maximum allowed by any statute or rule of law in effect at the time when, and governing the proceedings in which, the damages are to be proved, whether or not the amount be greater, equal to or less than the amount of the loss or damages referred to above.

ARTICLE X
MISCELLANEOUS

10.1 NOTICE OF LEASE.

Tenant agrees that it will not record this Lease. Upon request of either party, both parties shall execute and deliver, after the Term begins, a short form of this Lease in form appropriate for recording or registration, and if this Lease is terminated before the Term expires, an instrument in such form

acknowledging the date of termination. All fees and recordation and transfer taxes in connection with any such recording of a short form of this Lease shall be paid by the party recording such instrument.

10.2 INTENTIONALLY OMITTED.

10.3 NOTICES FROM ONE PARTY TO THE OTHER.

All notices, consents, approvals and other communications required or permitted hereunder shall be in writing and addressed, if to the Tenant, at Tenant's Address or such other address as Tenant shall have last designated by notice in writing to Landlord and, if to Landlord, at Landlord's Address or such other address as Landlord shall have last designated by notice in writing to Tenant. Any notice shall have been deemed duly given when personally delivered to such address by hand or when delivered overnight by a nationally recognized air courier.

10.4 BIND AND INURE.

The obligations of this Lease shall run with the land, and this Lease shall be binding upon and inure to the benefit of the parties hereto and their respective successors and assigns, except that the Landlord named herein and each successive owner or ground lessee of the Building and Lot shall be liable only for the obligations accruing during the period of its ownership of the Building and Lot or a ground leasehold estate therein. The obligations of Landlord shall be binding upon, and recourse shall be limited solely to Landlord's leasehold interest in the Building and Lot. No individual partner, member, trustee, stockholder, officer, director, employee or beneficiary of Landlord shall be personally liable under this Lease, and Tenant shall look solely to Landlord's interest in the Building and Lot as aforesaid in pursuit of its remedies upon a default by Landlord hereunder, and the assets of the individual partners, members, trustees, stockholders, officers, employees or beneficiaries of Landlord shall not be subject to levy, execution or other enforcement procedure for the satisfaction of the remedies of Tenant.

10.5 NO SURRENDER.

The delivery of keys to any employee of Landlord or to Landlord's agent or any employee thereof shall not operate as a termination of this Lease or a surrender of the Premises.

10.6 NO WAIVER, ETC.

The failure of Landlord or of Tenant to seek redress for violation of, or to insist upon the strict performance of, any covenant or condition of this Lease or, with respect to such failure of Landlord, any of the Rules and Regulations referred to in Section 6.1.4., whether heretofore or hereafter adopted by Landlord, shall not be deemed a waiver of such violation nor prevent a subsequent act, which would have originally constituted a violation, from having all the force and effect of an original violation, nor shall the failure of Landlord to enforce any of said Rules and Regulations against any other tenant in the Building be deemed a waiver of any such Rules or Regulations. The receipt by Landlord of Annual Rent or additional rent with knowledge of the breach of any covenant of this Lease shall not be deemed a waiver of such breach by Landlord, unless such waiver be in writing and signed by Landlord. No consent or Waiver, express or implied, by Landlord or Tenant to or of any breach of any agreement or duty shall be construed as a waiver or consent to or of any other breach of the same or any other agreement or duty.

10.7 NO ACCORD AND SATISFACTION.

No acceptance by Landlord of a lesser sum than the Annual Rent and additional rent then due shall be deemed to be other than on account of the earliest installment of such rent due, nor shall any endorsement or statement on any check or any letter accompanying any check or payment as rent be deemed as accord and satisfaction, and Landlord may accept such check or payment without prejudice to Landlord's right to recover the balance of such installment or pursue any other remedy in this Lease provided.

10.8 CUMULATIVE REMEDIES.

The specific remedies to which Landlord may resort under the terms of this Lease are cumulative and are not intended to be exclusive of any other remedies or means of redress to which it may be lawfully entitled in case of any breach or threatened breach by Tenant of any provisions of this Lease. In addition to the other remedies provided in this Lease, Landlord and Tenant shall each be entitled to the restraint by injunction of the violation or attempted or threatened violation of any of the covenants, conditions or provisions of this Lease or to a decree compelling specific performance of any such covenants, conditions or provisions.

10.9 RIGHT TO CURE.

If Tenant shall at any time default beyond the applicable notice and cure period in the performance of any obligation under this Lease, Landlord shall have the right, but shall not be obligated, to enter upon the Premises and to perform such obligation, notwithstanding the fact that no specific provision for such substituted performance by Landlord is made in this Lease with respect to such default. In performing such obligation, Landlord may make any payment of money or perform any other act. All sums so paid by Landlord (together with interest at the Default Rate, and all necessary incidental costs and expenses in connection with the performance of any such act by Landlord) shall be deemed to be additional rent under this Lease and shall be payable to Landlord immediately on demand. Landlord may exercise the foregoing rights without waiving any other of its rights or releasing Tenant from any of its obligations under this Lease.

10.10 ESTOPPEL CERTIFICATE.

Tenant agrees, from time to time, upon not less than 15 days' prior written request by Landlord, to execute, acknowledge and deliver to Landlord a statement in writing certifying: that this Lease is unmodified and in full force and effect; that, Tenant has no defenses, offsets or counterclaims against its obligations to pay the Annual Rent and additional rent and no defenses against Tenant's obligation to perform its other covenants under this Lease; that, there are no uncured defaults of Landlord or Tenant under this Lease (or, if there have been modifications, that this Lease is in full force and effect as modified and stating the modifications, and, if there are any defenses, offsets, counterclaims or defaults, setting them forth in reasonable detail); and the dates to which the Annual Rent, additional rent and other charges have been paid and such other matters or facts as reasonably requested by Landlord. Any such statement delivered pursuant to this Section 10.10 shall be in the form attached hereto as Exhibit G or such other form as may reasonably be requested by Landlord or any prospective purchaser of Landlord's interests under this Lease or holder of a mortgage upon the premises which include the Premises or any prospective assignees of any such holder and may be relied upon by any such prospective purchaser, holder of a mortgage or assignee thereof.

10.11 WAIVER OF SUBROGATION.

Any insurance carried by either party with respect to the Premises and property therein or occurrences thereon shall include a clause or endorsement denying to the insurer rights of subrogation against the other party to the extent rights have been waived by the insured prior to occurrences of injury or loss. Each party, notwithstanding any provisions of this Lease to the contrary, hereby waives any rights of recovery against the other for injury or loss due to hazards covered by insurance containing such clause or endorsement to the extent of the indemnification received thereunder or to the extent of the indemnification such party would have received under such insurance if such party had maintained all insurance that it is required to maintain hereunder.

10.12 INTENTIONALLY OMITTED.

10.13 FORCE MAJEURE.

If either party shall be delayed in performing any obligation under this Lease for any of the reasons set forth below, except any obligation to pay Annual Rent or additional rent or any other sums of money payable hereunder, the time for such performance shall be extended by a period of time equal to such delay, and the party shall not be deemed to be in default where such delays or defaults are due to any one or more of the following (herein referred to as "Force Majeure"): war; insurrection; civil commotion; unusually severe weather; terrorism; strikes; lock-outs; riots; floods; earthquakes; fires; casualties; acts of God; epidemics; quarantine restrictions; freight embargoes; reasonably unforeseeable labor, equipment or material shortages; acts or failure to act of Montgomery County or any other public or governmental agencies or entity; continued illegal occupancy of persons in possession of the Lot or Building or any other reasonable cause relating to this Lease beyond the control or without the fault of the party claiming an extension of time to perform.

10.14 BROKERAGE.

Tenant represents and warrants that it has dealt with no broker in connection with this transaction other than Spaulding and Slye LLC and Studley, Inc. and agrees to defend, with counsel reasonably approved by Landlord, indemnify and save Landlord harmless from and against any and all cost, expense or liability for any compensation, commissions or charges claimed by a broker or agent, other than Spaulding and Slye LLC and Studley, Inc., with respect to Tenant's dealings in connection with this Lease.

10.15 SUBMISSION NOT AN OFFER.

The submission of a draft of this Lease or a summary of some or all of its provisions does not constitute an offer to lease or demise the Premises, it being understood and agreed that neither Landlord nor Tenant shall be legally bound with respect to the leasing of the Premises unless and until this Lease has been executed by both Landlord and Tenant and a fully executed copy has been delivered to each of them.

10.16 REPRESENTATIONS OF LANDLORD.

Neither Landlord nor Landlord's agents or brokers have made any representations or promises with respect to the Premises, the Building, the parking facilities, the Lot, or any other portions of the project except as herein expressly set forth. No representation is made regarding the suitability of the premises for Tenant's particular use or the compliance of Tenant's use with applicable Laws, regulations and restrictions set forth in the applicable land records. All reliance with respect to any representations or promises is based solely on those contained herein. No rights, easements, or licenses are acquired by Tenant under this Lease by implication or otherwise except as, and unless, expressly set forth in this Lease.

10.17 NO MERGER OF TITLE.

There shall be no merger of the leasehold estate created by this Lease with the fee estate in the Lot by reason of the fact that the same person or entity may own or hold (i) the leasehold estate created by this Lease or any interest in such leasehold estate and (ii) the fee estate in the Lot or any interest in such fee estate; and no such merger shall occur unless and until all persons, including Tenant, having any interest in (i) the leasehold estate created by this Lease or (ii) the fee estate in the Lot, shall join in a written instrument affecting such merger and shall duly record the same.

10.18 WAIVER OF TRIAL BY JURY.

THE PARTIES HERETO SHALL, AND THEY HEREBY DO, WAIVE TRIAL BY JURY IN ANY ACTION, PROCEEDING OR COUNTERCLAIM BROUGHT BY EITHER OF THEM AGAINST THE OTHER INVOLVING ANY MATTERS WHATSOEVER ARISING OUT OF OR IN ANY WAY CONNECTED WITH THIS LEASE, THE RELATIONSHIP OF LANDLORD AND TENANT, TENANT'S USE AND OCCUPANCY OF THE PREMISES AND/OR ANY CLAIM OF INJURY OR DAMAGE. IN THE EVENT LANDLORD COMMENCES ANY PROCEEDINGS FOR NONPAYMENT OF ANY AMOUNT DUE PURSUANT TO THIS LEASE, TENANT AGREES NOT TO INTERPOSE ANY COUNTERCLAIM (OTHER THAN MANDATORY COUNTERCLAIMS) OF WHATEVER NATURE OR DESCRIPTION IN ANY SUCH PROCEEDINGS. THIS SHALL NOT, HOWEVER, BE CONSTRUED AS A WAIVER OF TENANT'S RIGHT TO ASSERT ANY SUCH CLAIM IN ANY SEPARATE ACTION OR ACTIONS BROUGHT BY TENANT.

10.19 HAZARDOUS MATERIALS.

As used in this Lease, the term "Hazardous Materials" means hazardous wastes," as defined by the Resource Conservation and Recovery Act of 1976, 42 U.S.C. Sections 6901, et seq., as amended from time to time and the regulations adopted and publications promulgated pursuant to said Act; (ii) "hazardous substances," as defined by the Comprehensive Environmental Response, Compensation and Liability Act of 1980, 42 U.S.C. Sections 9061, et seq., as amended from time to time and the regulations adopted and publications promulgated pursuant to said Act; (iii) "toxic substances," as defined by the Toxic Substances Control Act, 15 U.S.C. Sections 2601, et seq., as amended from time to time and the regulations adopted and publications promulgated pursuant to said Act; (iv) "Hazardous Materials," as defined by the Hazardous Materials Transportation Act, 49 U.S.C. Sections 1802, et seq., as amended from time to time and the regulations adopted and publications promulgated pursuant to said Act; (v) oil or other petroleum products; (vi) any material, waste or substance which is designated as a "hazardous substance" pursuant to Section 311 of the Clean Water Act, 33 U.S.C. Sections 1251, et seq., or listed pursuant to Section 307 of the Clean Water Act, 33 U.S.C. Sections 1317, et seq.; (vii) chlorofluorocarbons, radioactive materials, asbestos in any form that is or could become friable, urea formaldehyde, polychlorinated biphenyls and radon gas; (viii) any other chemicals, biological agents, microbes, viruses, bacteria, materials or substances defined as or included in the definitions of "hazardous substances," "hazardous wastes," "restricted hazardous wastes," "toxic substances," "toxic pollutants," "bio-hazard," "biological waste," "medical waste," or words of similar import, under any applicable federal, state, or local law or regulation; or (ix) any other flammable, combustible, or explosive liquid or material. "Hazardous Materials" does not include products normally used in operating and maintaining office and classroom space, including cleaning compounds and the like provided such products are sold and used for their intended purpose in accordance with applicable Laws and regulations.

Tenant shall not cause or permit any Hazardous Materials to be generated, produced, brought upon, used, stored, treated, discharged, released, spilled, or disposed of in, on, under or about the Premises, the Building or the Lot by Tenant or Tenant's Invitees; provided, that Tenant may use and store in the Premises reasonable quantities of standard office supply products and products of the type and quantities identified on Exhibit I hereto used in the conduct of the Permitted Uses provided that (i) Tenant conducts its business according to prudent industry practices, (ii) the use and presence of Hazardous Materials is strictly and properly monitored and reported according to all Laws then applicable to the generation, use, storage, treatment, release, spill, discharge or disposal of Hazardous Materials (sometimes herein referred to as "Environmental Laws"), and (iii) Tenant complies with all applicable Laws pertaining to the generation, use, storage, treatment, release, spill, discharge or disposal thereof including, without limitation, all such Environmental Laws. As a material inducement to Landlord to allow Tenant to use hazardous material in connection with its business on the Premises, Tenant has delivered to Landlord the list attached hereto as Exhibit I identifying each type and quantities of hazardous material to be brought upon, kept, used, stored, handled, treated, generated on, or released, discharged or disposed of from the Premises and setting forth any and all governmental approvals or permits required in connection with the use, storage, treatment, generation, release or disposal of such Hazardous Materials on or from the Premises ("Hazardous Materials List"). Tenant shall deliver to Landlord an

updated Hazardous Materials List at least once a year and shall also deliver an updated list before any new hazardous material is brought onto, kept, used, stored, treated, generated on, or released or disposed of from, the Premises. Tenant shall deliver to Landlord true and correct copies of the following documents (the "HazMat Documents") relating to the use, storage, treatment, generation, release or disposal of Hazardous Materials prior to the Commencement Date, or if unavailable at that time, concurrent with the receipt from or submission to a governmental authority: permits; approvals; reports and correspondence; storage and management plans, notice of violations of any Law; plans relating to the installation of any storage tanks to be installed in the Premises (provided, said installation of tanks shall only be permitted after Landlord has given Tenant its written consent to do so, which consent may be withheld in Landlord's sole and absolute discretion); all closure plans or any other documents required by any and all federal, state and local governmental authorities for any storage tanks installed in or on the Premises for the closure of any such tanks; and a Surrender Plan (to the extent surrender in accordance with Section 6.1.2 cannot be accomplished in 3 months). Tenant is not required, however, to provide Landlord with any portion(s) of the HazMat Documents containing information of a proprietary nature which, in and of themselves, do not contain a reference to any Hazardous Materials or hazardous activities. Without in any manner limiting Landlord's rights and Tenant's obligations under any other indemnity set forth in this Lease, Tenant shall indemnify, defend, with counsel reasonably approved by Landlord, and hold Landlord harmless from and against any and all actions (including, without limitation, remedial or enforcement actions of any kind, administrative or judicial proceedings, and orders or judgments arising out of or resulting therefrom), costs, claims, damages (including, without limitation, punitive damages), expenses (including, without limitation, reasonable attorneys', consultants' and experts' fees, court costs and amounts paid in settlement of any claims or actions), fines, forfeitures or other civil, administrative or criminal penalties, injunctive or other relief (whether or not based upon personal injury, property damage, contamination of, or adverse effects upon, the environment, water tables or natural resources), liabilities or losses arising from (i) a breach of this Section 10.18 or Section 6.1.2 by Tenant or Tenant's Invitees, or (ii) the generation, use, storage, treatment, discharge, release, spill or disposal of Hazardous Materials by Tenant or Tenant's Invitees.

Landlord shall have the right to conduct annual tests of the Premises to determine whether any contamination of the Premises, Building or the Lot has occurred as a result of Tenant's use. Tenant shall be required to pay the cost of such annual test, provided that Landlord had a good faith belief (or the tests confirm) that a release of Hazardous Materials on the Premises has occurred or that Tenant has not operated its business and facilities on the Premises in compliance with the requirements of this Lease; provided further, however, that if Tenant conducts its own tests of the Building or the Lot using third party contractors and test procedures acceptable to Landlord which tests are certified to Landlord, Landlord shall accept such tests in lieu of the annual tests to be paid for by Tenant. In addition, at any time, and from time to time, prior to the expiration or earlier termination of the Term, Landlord shall have the right to conduct appropriate tests of the Premises, the Building and Lot to determine if contamination has occurred as a result of Tenant's use of the Premises. In connection with such testing, upon the request of Landlord, Tenant shall deliver to Landlord or its consultant such non-proprietary information concerning the use of Hazardous Materials in or about the Premises by Tenant or any Tenant Invitee. If contamination has occurred for which Tenant is liable under this Section, Tenant shall pay all costs to conduct such tests. If no such contamination is found, Landlord shall pay the costs of such tests, subject to Section 4.2. Landlord shall provide Tenant with a copy of all third party, non-confidential reports and tests of the Premises made by or on behalf of Landlord during the Term without representation or warranty and subject to a confidentiality agreement. Tenant shall, at its sole cost and expense, promptly and satisfactorily remediate any environmental conditions identified by such testing in accordance with all Environmental Laws. Landlord's receipt of or satisfaction with any environmental assessment in no way waives any rights which Landlord may have against Tenant.

If tanks storing Hazardous Materials located on the Premises are used by Tenant or are hereafter placed on the Premises by Tenant, Tenant shall install, use, monitor, operate, maintain, upgrade and manage such storage tanks, maintain appropriate records, obtain and maintain appropriate insurance, implement reporting procedures, properly close any storage tanks, and take or cause to be taken all other actions necessary or required under applicable Laws, as such now exist or may hereafter be adopted or

amended in connection with the installation, use, maintenance, management, operation, upgrading and closure of such storage tanks.

During any period of time after the expiration or earlier termination of this Lease required by Tenant or Landlord to complete the removal from the Premises, Building or Lot of any Hazardous Materials (including, without limitation, the release and termination of any licenses or permits restricting the use of the Premises and the completion of the approved Surrender Plan), Tenant shall continue to pay the full Annual Rent and Additional Rent in accordance with this Lease for any portion of the Premises not relet by Landlord in Landlord's sole discretion, which Annual Rent and Additional Rent shall be prorated daily.

In the event that Hazardous Materials are discovered upon, in, or under the Premises, and any governmental agency or entity having jurisdiction over the Premises requires the removal of such Hazardous Materials, Tenant shall be responsible for removing those Hazardous Materials arising out of or related to the use or occupancy of the Premises by Tenant or the actions or omissions of Tenant or Tenant's Invitees. Notwithstanding the foregoing, Tenant shall not take any remedial action in or about the Premises, the Building or the land on which the Building is located without first notifying Landlord of Tenant's intention to do so and affording Landlord the opportunity to protect Landlord's interest with respect thereto. Tenant immediately shall notify Landlord in writing upon learning of: (i) any spill, release, discharge or disposal of any Hazardous Material in, on or under the Premises, the Building, or the Lot or any portion thereof, (ii) any enforcement, cleanup, removal or other governmental or regulatory action instituted, contemplated, or threatened (if Tenant has notice thereof) pursuant to any applicable laws, rules or regulations relating to Hazardous Materials; (iii) any claim made or threatened by any person against Tenant, the Premises, the Building or the land on which the Building is located relating to damage, contribution, cost, recovery, compensation, loss or injury resulting from or claimed to result from any Hazardous Materials; and (iv) any reports made to any governmental agency or entity arising out of or in connection with any Hazardous Materials in, on, under, or about or removed from the Premises, the Building or the land on which the Building is located including any complaints, notices, warnings, reports or asserted violations in connection therewith. Tenant also shall supply to Landlord as promptly as possible, and in any event within 5 business days after Tenant first receives or sends the same, copies of all claims, reports, complaints, notices, warnings or asserted violations relating in any way to the Building, the Lot or the Premises or Tenant's use or occupancy thereof.

10.20 PARKING.

Tenant may under this Lease and the Campus CCRs and without charge (except as hereinafter expressly provided) during the initial Term use no more than 3.5 parking spaces for each 1,000 rentable square feet of floor area in the Premises in such location or locations upon the Campus as may be designated from time to time by Landlord in accordance with the Ground Lease and Campus CCRs, which shall be in common with other tenants and subject to the rights of other tenants, on a first-come, first-serve basis; provided all such parking shall be subject to the terms of the Ground Lease and Campus CCRs. Use of all such parking spaces shall be in compliance with all rules, regulations, and restrictions set forth by (a) Landlord, (b) all governmental authorities, and (c) the Campus CCRs. Tenant shall reimburse Landlord for the expense of towing any vehicle parked in violation of such rules, regulations, and restrictions where the violation has resulted from the improper use of such space by an employee, licensee, invitee or guest of Tenant; and shall pay to Landlord, upon written demand therefor, a penalty equal to twice the penalty imposed in accordance with the Campus CCRs (currently $25) per violation of such rules, regulations, and restrictions by any identified employee, invitee, licensee or guest of the Tenant. Landlord reserves the right, from time to time, without notice or liability to Tenant to (i) install gates to control access to the parking facility or (ii) to alter or relocate the parking facility, including the right to relocate the parking facility on or off the Lot. Notwithstanding the preceding sentence, but subject to the provisions of the remainder of this Section 10.20 and Section 2.1 of this Lease, throughout the Term, as extended, Tenant's parking spaces shall be located in a parking area or areas immediately adjacent to the Building.

10.21 SURVIVAL.

Tenant's liability for amounts which become due under this Lease and the terms and conditions of the covenants and indemnities set forth in Sections 3.1, 6.1.7,10.13 and 10.18 and the provisions of Landlord's covenants and indemnities under Sections 5.1.7 shall remain effective after the expiration or sooner termination of this Lease, for the period of any applicable statutes of limitations.

10.22 APPLICABLE LAW AND CONSTRUCTION.

This Lease shall be governed by and construed in accordance with the laws of the State of Maryland (not including its choice of law rules). If any term, covenant, condition or provision of this Lease or the application thereof to any person or circumstances shall be declared invalid or unenforceable by the final ruling of a court of competent jurisdiction having final review, the remaining terms, covenants, conditions and provisions of this Lease and their application to persons or circumstances shall not be affected thereby and shall continue to be enforced and recognized as valid agreements of the parties, and in the place of such invalid or unenforceable provision, there shall be substituted a like, but valid and enforceable, provision which comports to the findings of the aforesaid court and most nearly accomplishes the original intention of the parties.

This Lease, including the exhibits and riders hereto, contains the entire agreement of the parties hereto. There are no oral or written agreements between Landlord and Tenant affecting this Lease. This Lease may be amended, and the provisions hereof may be waived or modified, only by instruments in writing executed by Landlord and Tenant.

The titles of the several Articles and Sections contained herein are for convenience only and shall not be considered in construing this Lease.

Unless repugnant to the context, the words "Landlord" and "Tenant" appearing in this Lease shall be construed to mean those named above and their respective heirs, executors, administrators, successors and assigns, and those claiming through or under them respectively. If there be more than one tenant, the obligations imposed by this Lease upon Tenant shall be joint and several.

The term "Business Day" or "business day" shall mean any day other than a Saturday, Sunday or a day on which the United States Government offices in the State of Maryland are closed on account of holiday ("Legal Holiday"). Any expression of a time period measured by days which does not expressly provide that it refers to business days shall be deemed to be calendar days. Any time a time period will expire on a day which is a Saturday, Sunday, or Legal Holiday, or if such time period is measured by business days, not a business day, such time period shall be deemed to extend to the next day which is not such a day.

10.23 CONFIDENTIALITY.

The terms of this Lease are privileged and confidential, intended only for the use of Landlord and Tenant. Both parties shall keep the terms of this Lease and any negotiations or agreements related hereto and, in the case of Landlord, any financial statements or financial reports concerning Tenant delivered to Landlord inn accordance with Section 6.1.16 or Section 6.1.17 (except to the extent such financial statements or financial reports are published or filed with any governmental authority) strictly confidential and shall not disclose the same to any other persons or entities excepting only (i) attorneys agents or employees involved in this transaction who have agreed to keep all such information confidential as herein provided (ii) as mutually and specifically agreed otherwise, (iii) as required by order of any court or governmental authority with jurisdiction, (iv) proposed subtenants and assignees and their attorneys and agents, or (v) attorneys, agents or employees of the ground lessor under the Ground Lease and all lenders, investors or purchasers involved in any transaction relating to the sale or financing of the Land and Building or any interest therein or any interest in Landlord.

10.24 METHOD OF MEASUREMENT.

Rentable Floor Area of the Premises and Building shall be measured in accordance with Appendix A attached hereto and made a part hereof. If Landlord or Tenant so elects by written notice to the other (provided that such notice is delivered not later than thirty (30) days following the Commencement Date), Landlord's Architect shall prepare (at the expense of the party requesting such measurement) a measurement of the Premises, and if the rentable square footage of the Premises is determined to be more or less than the Rentable Floor Area of Tenant's Space as set forth in Section 1.1 hereof, then in either such case this Lease shall be amended in writing, adjusting for all purposes hereunder the specified Rentable Floor Area of Tenant's Space, and the calculation of Annual Rent, Tenant Allowance and Additional Allowance in accordance with Section 1.1 and Section 4.1 of this Lease. Notwithstanding anything herein to the contrary, the measurement of the rentable square footage of the Building set forth in this Lease and, unless remeasured in accordance with this Section 10.24, the measurement of the rentable square footage of the Premises set forth in this Lease, is and shall be binding upon Landlord and Tenant for all purposes under this Lease. If the rentable square footage of the Premises is remeasured following timely written notice in accordance with this Section 10.24, then such remeasurement of the rentable square footage of the Premises shall thereafter be binding upon Landlord and Tenant for all purposes under this Lease. In no case except as expressly provided in this Section 10.24 shall (i) the Premises or the Building be subject to remeasurement or (ii) the Annual Rent, Tenant Allowance and Additional Allowance or other charges hereunder be recalculated based upon any actual or asserted correction of the measurement of either or both of the Building or Premises.

10.25 APPROVALS.

If Landlord approves plans, specifications, contracts, contractors, sublessees or assignees, subleases or assignments for any purpose under this Lease, such approval shall be solely for the purpose of confirming that the plans, specifications, contract, contractor, sublease, assignment, sublessee or assignee complies or fails to comply with the terms and conditions of this Lease and the Rules and Regulations of Landlord applicable thereto (and, in the case of contractors, assignees or sublessees, that their business, reputation, credit history and financial condition are or are not satisfactory to Landlord). In no event shall such approval constitute approval of the plans, specifications, contractors, contract, sublessees or assignees, subleases or assignments for any other reason or purpose and in no event shall Landlord have any liability or obligation for or under the same.

10.26 GROUND LEASE PROVISIONS.

Tenant acknowledges that the Ground Lease contains the following provisions which are incorporated herein by reference (as used in the following three paragraphs only, "Landlord" shall mean JHU as ground landlord under the Ground Lease, "Tenant" shall mean MCC3, LLC, as ground tenant under the Ground Lease, "Subtenants" shall mean tenants of the Building, "this Lease" shall mean the Ground Lease, "Sublease" shall mean a lease of space in the Building, "MCC Land" shall mean the Montgomery County Campus of JHU, and the "Memorandum of Lease" shall mean the memorandum of ground lease relating to the Ground Lease, which is to be filed among the land records of Montgomery County, Maryland):

> "14.2 Permitted Subleases. Tenant shall give Landlord ten (10) days' advance written notice of the identify of any proposed Subtenant before entering into a Sublease with such Subtenant. Tenant shall have the right to sublease all or any portions of the Improvements without Landlord's prior approval to one or more Subtenants provided that (i) the Subtenant is not a Prohibited Person and (ii) the uses permitted under the Sublease to such Subtenant comply with the requirements of applicable zoning and land use ordinances and regulations, covenants, conditions, and restrictions of record, including, without limitation, the Estoppel and the Campus CCRs (collectively, "Land Use Restrictions") as such Land Use Restrictions are in effect as of the date hereof, unless subsequent land use ordinances and regulations are more restrictive, in which case the more restrictive land use ordinances and regulations shall become applicable to the uses permitted under this Lease, subject to permitted exemptions and grandfather provisions

allowing the continuation of existing uses. If after the date hereof, land use ordinances and regulations become more permissive as to permitted uses, such more permissive land use ordinances and regulations shall not be applicable to the uses permitted under this Lease to the extent they are more permissive until Landlord and Tenant shall have specifically agreed in writing that the more permissive land use ordinances and regulations will be applicable. Tenant shall deliver a photocopy of each executed Sublease to Landlord within thirty (30) business days following execution of the same.

14.3 Landlord Approval. If Tenant desires to determine whether Landlord would object to a Subtenant because Landlord believes that the Subtenant is a Prohibited Person, Tenant may, if it so elects, give Landlord prior written notice of the identity of the Person with which Tenant contemplates entering into a Sublease together with comprehensive information regarding such Person in reasonable detail sufficient to assess whether such Person is a Prohibited Person in accordance with this Article XIV. Tenant's notice to Landlord shall, on the face of the envelope and on the top of the first page of the notice, state the following in all capital letters: "PROHIBITED PERSON NOTICE UNDER SECTION 14.3 OF THE PHASE III GROUND LEASE, MONTGOMERY COUNTY CAMPUS. APPROVAL DEEMED GIVEN IF OBJECTION IS NOT MADE IN WRITING WITHIN TEN (10) BUSINESS DAYS OF RECEIPT OF THIS NOTICE." Landlord will then advise Tenant in writing within ten (10) business days as to whether it objects to the proposed Subtenant in question, stating in reasonable detail the grounds for Landlord's objection. Each Subtenant under a proposed Sublease delivered to Landlord shall be deemed approved unless Landlord advises Tenant of Landlord's objection to the Subtenant under such Sublease within the aforesaid period following receipt of the same. If Landlord timely objects in writing to any proposed Subtenant as herein provided, and Tenant disagrees with Landlord's objection, then representatives of Landlord and Tenant shall meet to discuss the reasons for Landlord's objection and why Tenant believes such objection is not justified.

14.4 Prohibited Persons. For purposes hereof, "Prohibited Person" shall mean a Person: (a) that is generally known to the public to engage directly in: (i) the manufacture or sale of consumer products (such as, without limitation, alcoholic beverages, tobacco products, or weapons, but not including drugs sold over the counter or by medical prescription) recognized as hazardous to human health by federal or Maryland state governmental authorities, (ii) the publication, manufacture, sale, distribution, promotion or purveyance of pornographic material, or (iii) gambling; or (b) who or which (including any member of an entity's executive management in the course of employment) has been convicted within the ten (10) year period preceding the date of this Lease of any violation of law that constitutes a felony; or (c) which is a university or college (or any Affiliate thereof) other than Landlord or a college or university which is an Affiliate of Landlord; or (d) engaging in a mission likely to involve activities on the MCC Land which are themselves disruptive or a direct risk to the physical security of people or property on the MCC Land. Notwithstanding the foregoing, no federal, state or local governmental entity, agency or authority (other than a college or university) shall be a "Prohibited Person" for the purposes of this Lease. Sections 14.1, 14.2, 14.3, and 14.4 shall constitute covenants that run with the Land and shall be included in the Memorandum of Lease. Sections 14.2, 14,3 and 14.4 shall be incorporated into each and every Sublease and Nondisturbance and Attornment Agreement with respect to such Sublease. Each and every Sublease shall state that the use of the premises subject to such Sublease for any of the proscribed activities shall be a default under the Sublease and cause for eviction."

ARTICLE XI
SECURITY DEPOSIT

Tenant's Security Deposit in the amount set forth in Section 1.1 shall, following receipt thereof by Landlord, be held by Landlord, as security, without interest, for and during the Term, which deposit shall be returned to Tenant following the termination of this Lease upon delivery of Landlord's Statement for

the final fiscal year or portion thereof within the Term, provided that all Annual Rent and additional rent due from Tenant has been paid and there exists no breach of any undertaking of Tenant. If all or any part of the Security Deposit is applied to an obligation of Tenant hereunder, Tenant shall immediately upon request by Landlord restore the Security Deposit to its original amount. Tenant shall not have the right to call upon Landlord to apply all or any part of the Security Deposit to cure any default or fulfill any obligation of Tenant, but such use shall be solely in the discretion of Landlord. Upon any conveyance by Landlord of its interest under this Lease, the Security Deposit may be delivered by Landlord to Landlord's grantee or transferee. Upon any such delivery, Tenant hereby releases Landlord herein named of any and all liability with respect to the Security Deposit, its application and return, and Tenant agrees to look solely to such grantee or transferee for the return of such security. It is further understood that this provision shall also apply to subsequent grantees and transferees.

Tenant shall have the right to deliver to Landlord an unconditional, irrevocable letter of credit (the "Letter of Credit") in substitution for the cash Security Deposit, subject to the following terms and conditions. Such letter of credit shall be (a) in form and substance satisfactory to Landlord in its reasonable discretion; (b) at all times in the amount of the Security Deposit, and shall permit multiple draws; (c) issued by a commercial bank reasonably acceptable to Landlord from time to time and located in the Washington, D.C. metropolitan area; (d) made payable to, and expressly transferable and assignable at no charge by, the owner from time to time of the Building or, at Landlord's option, the holder of any mortgage (which transfer/assignment shall be conditioned only upon the execution of a written document in connection therewith); (e) payable at sight upon presentment to a local branch of the issuer of a simple sight draft; (f) of a term not less than one year; and (g) at least 60 days prior to the then-current expiration date of such letter of credit either (1) renewed (or automatically and unconditionally extended) from time to time through the ninetieth (90th) day after the expiration of the Lease Term, or (2) replaced with cash in the amount of the Security Deposit. Notwithstanding anything in this Lease to the contrary, any cure or grace periods set forth in this Lease shall not apply to any of the foregoing, and, specifically, if Tenant fails to timely comply with the requirements of subsection (g) above, then Landlord shall have the right to immediately draw upon the letter of credit without notice to Tenant. Landlord may draw upon the whole or any part of the Letter of Credit in the event of any Event of Default by Tenant under the Lease and if any part of the amount so drawn is applied to an obligation of Tenant herein, Tenant shall forthwith restore the Letter of Credit to its original amount. Each Letter of Credit shall be issued by a commercial bank that has a credit rating with respect to certificates of deposit, short term deposits or commercial paper of at least P-2 (or equivalent) by Moody's Investor Service, Inc., or at least A-2 (or equivalent) by Standard & Poor's Corporation, and shall be otherwise acceptable to Landlord in its sole and absolute discretion. If the issuer's credit rating is reduced below P-2 (or equivalent) by Moody's Investor Service, Inc., or below A-2 (or equivalent) by Standard & Poor's Corporation, or if the financial condition of such issuer changes in any other materially adverse way, then Landlord shall have the right the require that Tenant obtain from a different issuer a substitute letter of credit that complies in all respects with the requirements of this Section, and Tenant's failure to obtain such substitute letter of credit within 10 days following Landlord's written demand therefor (with no other notice or cure or grace period being applicable thereto, notwithstanding anything in this Lease to the contrary) shall entitle Landlord to immediately draw upon the then existing Letter of Credit in whole or in part, without notice to Tenant. In the event the issuer of any Letter of Credit held by Landlord is placed into receivership or conservatorship by the Federal Deposit Insurance Corporation or any successor or similar entity, then, effective as of the date such receivership or conservatorship occurs, said Letter of Credit shall be deemed to not meet the requirements of this Section, and, within 10 days thereof, Tenant shall replace such Letter of Credit with other collateral acceptable to Landlord in its reasonable discretion (and Tenant's failure to do so shall, notwithstanding anything in this Lease to the contrary, constitute an Event of Default for which there shall be no notice or grace or cure periods being applicable thereto other than the aforesaid ten (10) day period). Any failure or refusal of the issuer to honor the Letter of Credit shall be at Tenant's sole risk and shall not relieve Tenant of its obligations hereunder with respect to the Security Deposit.

ARTICLE XII
SATELLITE DISH ANTENNA
AND
SUPPLEMENTAL AIR UNITS

Subject to and without interfering with the rights or equipment of other tenants of the Building and provided no Event of Default has occurred, Tenant shall have the right to install, maintain, and repair a satellite dish antenna (the "Antenna") and supplemental air conditioning units (the "Air Units") on the roof of the Building under and subject to the following conditions:

a. Tenant shall comply with Section 6.1.15 of the Lease, all Laws (as defined in Section 6.1.18) and Requirements (as hereinafter defined) and shall obtain, and deliver to Landlord written evidence of, any approval(s) required under any Restrictions. For purposes hereof, "Restrictions" means and includes the Campus CCRS, the Estoppel, Landlord's Rules and Regulations and any and all other recorded restrictions or covenants applicable to the Building or the Lot. The Antenna and Air Units shall also conform with the Building's structural and load requirements and shall not be visible from street level.

b. Tenant shall obtain Landlord's prior approval of (i) the number of Air Units to be located on the roof, (ii) the location of the Antenna and Air Units on the roof, and (iii) the specifications for the Antenna and Air Units. If Landlord approves installation of the Antenna or Air Units, Tenant agrees to consult with Landlord's engineer and roofing contractor prior to installation and strictly to comply with their recommendations and requirements. Tenant shall pay all costs incurred by Landlord in connection with the Antenna and Air Units, including without limitation all architectural, engineering, contractors' and legal fees.

c. At least three (3) business days prior to installation, Tenant shall notify Landlord of the date and time of the installation. Tenant shall install the Antenna and Air Units only if a representative of Landlord is present with Tenant at the installation.

d. Tenant shall maintain the Antenna and Air Units in a safe, good, and orderly condition and in compliance with all Laws and Restrictions. The installation, maintenance, repair, and removal of the Antenna and Air Units shall be performed at Tenant's sole expense in a manner which will not impair the integrity of, damage, or adversely affect the warranty applicable to, the roof or any other portion of the Building.

e. No later than the expiration or sooner termination of the Term, at Tenant's sole expense, Tenant shall remove the Antenna and Air Units and repair any and all damage arising from the installation, operation or removal of the Antenna or Air Units.

f. Tenant's indemnification of Landlord pursuant to Section 6.1.7 of this Lease also applies to the Antenna and Air Units and Tenant's use of any portion of the Building therefor. Without limiting the foregoing, Tenant solely shall be responsible for any and all damages, losses or injury caused by or in any way relating to the Antenna or Air Units, including, but not limited to, damage or injury caused by reason of the Antenna or Air Units collapsing or being blown from the roof.

g. Tenant's right to install and use the Antenna and Air Units shall be limited to Tenant's primary business operation on the Premises. Tenant shall have no right to permit the Antenna or Air Units to be used by other entities for profit.

EXECUTED as a sealed instrument in two or more counterparts on the day and year first above written.

ATTEST:

/s/ Kathleen Edu
- ----------

LANDLORD:

MCC3, LLC

By: Spaulding and Slye MCC3 LLC, manager

By: Spaulding and Slye LLC, manager

By: /s/ M. Dunston

Name:
Title:

ATTEST:

/s/ Cristina a Murphy
- ----------

TENANT:

VANDA PHARMACEUTICALS, INC.

By: /s/ Chip Clark/Mihael Polymeropoulos

Name: Chip Clark/Mihael Polymeropoulos
Title: CBO/CEO

EXHIBIT A

LEGAL DESCRIPTION OF LOT

DESCRIPTION OF LEASE AREA FOR PHASE 3 BUILDING
ACROSS THE PROPERTY OF THE JOHNS HOPKINS UNIVERSITY
LIBER 7687 AT FOLIO 544 PARCEL M
MONTGOMERY COUNTY MEDICAL CENTER
P.B.142 P.16292

Being a piece or parcel of land, situate, lying and being in the Gaithersburg (9th) Election District of Montgomery County, Maryland and running in, through, over and across the property conveyed by Montgomery County, Maryland to The Johns Hopkins University by a deed dated May 7, 1987 and recorded among the Land Records of Montgomery County, Maryland in Liber 7687 at Folio 544, said property also being Parcel M, as shown on a plat of subdivision entitled "PLAT 7, PARCEL M, MONTGOMERY COUNTY MEDICAL CENTER", recorded among said Land Records in Plat Book 142 as Plat 16292, and being more particularly described as shown in the datum of said plat and as shown on an ALTA/ACSM LAND TITLE SURVEY prepared by Loiederman Soltesz Associates, Inc. of Rockville, Maryland dated June 26, 2003, and said piece or parcel of land being more particularly described as follows

Beginning for the same at a point within the limits of said Parcel M, said point lying South 74(degrees)33'35" East, 79.26 feet from the beginning of the North 27(degrees)45'39" West, 517.81 foot plat line of said plat and running thence across said Parcel M, the following ten (10) courses and distances

1. 178.37 feet along the arc of a curve deflecting to the left, having a radius of 1,010.00 feet and a chord of North 61(degrees)09'18" East, 178.14 feet to a point; thence

2. North 56(degrees)05'44" East, 96.30 feet to a point; thence

3. South 33(degrees)54'16" East, 188.23 feet to a point; thence

4. 145.02 feet along the arc of a curve deflecting to the right, having a radius of 1,215.75 feet and a chord of South 30(degrees)29'14" East, 144.94 feet to a point; thence

5. South 66(degrees)40'47" West, 70.18 feet to a point; thence

6. 8.22 feet along the arc of a curve deflecting to the left, having a radius of 100.00 feet and a chord of South 64(degrees)19'27" West, 8.22 feet to a point; thence

7. South 61(degrees)58'06" West, 122.59 feet to a point lying North 41(degrees)19'42" West, 430.19 feet from the end of the North 22(degrees)25'53" East, 94.89 foot plat line of said Plat 16292; thence

8. North 28(degrees)01'54" West, 92.86 feet to a point; thence

9. South 61(degrees)58'06" West, 119.11 feet to a point; thence

10. North 22(degrees)43'55" West, 221.65 feet to the point of beginning; containing 84,782 square feet or 1.9463 acres of land.

EXHIBIT B

PLAN SHOWING TENANT'S SPACE

B - 1

Exhibit B-1

JOHNS HOPKINS UNIVERSITY
MONTGOMERY COUNTY CAMPUS
BUILDING 3

THIRD FLOOR

Vanda Pharmaceuticals Inc.

[THIRD FLOOR MAP]

Exhibit B-2

JOHNS HOPKINS UNIVERSITY
MONTGOMERY COUNTY CAMPUS
BUILDING 3

Third Floor

Vanda Pharmaceuticals Inc.

Vanda Right of First Offer Space, subject to the conditions set forth in section 2.5 of the Lease.

[THIRD FLOOR MAP]

EXHIBIT C

PART I

BUILDING STANDARD COMPLETED SHELL

STRUCTURE:	Structural steel frame with composite concrete floor slabs, 125 Ibs/square foot floor load capacity.
EXTERIOR:	Architectural precast concrete spandrel panels and column covers, reflective insulated "punch" style windows, and curtain wall atrium. Penthouse screen to be light gauge profile metal panel.
COLUMN SPACING:	Perimeter bays to be 22' x 41'- 9".
ROOF:	Roofing system consists of Carlisle (or equivalent) EPDM roofing system with 15-year warranty. 2" x 18" x 18" standard concrete pavers, or rubber walk mats, to be provided for access to all mechanical equipment. No pavers / mats will be provided at the roof perimeter.
FLOOR-TO-FIOOR HEIGHT:	Slab-to-slab distance of 14'-6" on all floors. Except for the main lobby, bathrooms, egress corridors, and other building core spaces as shown on the plans, no ceiling systems will be provided in the base building.
HVAC SYSTEM:	The system will utilize a series of roof top units with a total cooling capacity of approximately 405 tons. Each RTU will supply between 19,000 cfm and 22,000 cfm through a vertical shaft to a loop duct. Each RTU will be provided with supply and relief exhaust fans, heating coil, DX cooling coil, filtration and a condensing section. Air will be supplied to all spaces through VAV terminal units. Perimeter terminal units will be provided at the rate of one (1) per every 2,000 square feet. Duct risers and trunk lines will be installed with the base building. Interior VAVs, diffusers, perimeter slot diffusers, and flex duct to be provided by tenant through the improvement allowance. Heat to be provided by electric reheat coils within fan-powered VAV terminal units and by electric preheat coils within the packaged rooftop units. Supplemental heat required for stairwells, vestibules, MEP rooms, etc., will be provided by electrical wall or ceiling mounted unit heaters. Building HVAC design criteria shall be: Summer - 75 degrees F. db, +/- 1 maximum relative humidity. degree F. 50% Winter - 70 degrees F. db, +/-1 degree F. Outside air for ventilation will be provided via a rooftop Air Handling Unit at the rate of 20 CFM per person consistent with current ASHRAE Guidelines for acceptable office use indoor air quality. The building will be designed to accept future HVAC systems to support additional load requirements anticipated with the addition of lab tenants.
ELECTRICAL SYSTEM:	5.0 watts/square feet general purpose on the tenant floor and 2.0 watts/square feet available for lighting on tenant floor. Single electrical service entrance with single pad mounted transformer outside of building. 480V plug-in bus riser with

step down dry type transformers with K factor for 120/208V for Tenant power distribution at each floor.

LIFE SAFETY: Fire sprinkler and base building fire alarm system will be installed per building code. Vertical sprinkler riser distribution to each floor and sprinkler loop with upturned heads at a ratio not exceeding one (1) head per 225 square feet will be installed with the base building.

WET COLUMNS: Four (4) wet columns per floor. Access to domestic water taps and vent riser taps will be available at the toilet rooms. Wet columns will contain domestic cold water, plumbing vent, A/C condensate drain riser, sanitary waste line, and rain leaders.

LAB COLUMNS: Water at (4) locations at each wet column. Laboratory waste stubs and vent risers will be provided at a maximum of eight (8) locations with in the building. Four (4) sets each will be stubbed into tenant areas on either side of the atrium.

ENERGY MANAGEMENT: The building will utilize all electric DDC control system or equivalent. This will allow remote troubleshooting and adjustment of set-points, as well as programmed start, stop and system optimization.

ELEVATORS: Two (2) hydraulic passenger elevators with a 3,500 Ib. capacity with a standard size cab, and 1 hydraulic freight elevator with a 4,500 Ib. capacity with standard cab. Cab finishes for the passenger elevators shall include carpeted floors and custom laminated or wood veneer walls. The doors and frames shall be painted to match interior decor. Entrance on the 1st level to be stainless steel; entrances on the 2nd and 3rd levels to be painted. Ceilings will be perforated metal. The cab finish for the freight elevator will be selected from the manufactures stock interiors. Entrance frames at all levels will be painted. Each elevator will be equipped with call buttons and indicator lights at all levels.

REST ROOMS: 2 sets of women's and men's rest rooms will be fully finished on each floor with base building. (Total of 6 rest rooms)

Floors: The toilet room floors will receive a standard 12" x 12" domestic ceramic tile, such as keystones mosaics unglazed Daltile or equal.

Walls/Base: All toilet room walls will be floor-to-floor height dry wall partitions with acoustical batt insulation. All wet walls to receive a minimum of 6' high unglazed 6" x 6" domestic ceramic tile similar to Daltile semi-gloss or matte wall tile. Ceramic tile base, with a cove profile will be provided around the full perimeter of each toilet room.

Ceilings: Suspended drywall taped, sanded and painted with down lights and access panels as required.

Vanities: Cast resin vanity top with under counter basin.

Toilet Partitions and Accessories: Ceiling hung painted metal partitions in conjunction with standard toilet room accessories including soap dispensers, towel dispensers, trash receptacles, paper holders, etc. Individual full height mirrors at each lavatory location.

FIRST FLOOR MAIN LOBBY AND ELEVATOR LOBBY:	The first floor base building main elevator lobby shall include the finishes outlined below. It shall be designed and constructed to optimize appearance while allowing reasonable maintenance of high traffic areas. Floors: To be, or a combination of, natural stone, terrazzo, ceramic tile or carpet. Manufactures standard walk off mats at entries. Walls/Base: Base material to be stainless steel laminate on plywood substrate. Walls to be painted gypsum board with "pitcon" reveals. Ceilings: Drywall ceilings coffered and painted with reveals. Access panels as required. Down lighting and light cove fluorescent strip lighting.
FIBER OPTICS:	Vertical risers to accommodate fiber optic lines for connection to the Internet are provided to each floor of the building. Fiber optic provider(s) to be determined. All communication closets to be equipped with standard closet function type locks.
PARKING:	Initially, a surface lot will be constructed at the rear of the building with approximately 308 parking spaces. The remaining spaces to be provided elsewhere on the campus pursuant to the terms of the CCRs.
WINDOWS:	Windows will be manufactures standard color lightly reflective, insulated glass set in prefinished aluminum frames with a thermal break design. Window units will be fixed, with no operating sash.
BUILDING CORE FINISHES-TYPICAL FLOORS:	Electrical, mechanical, telephone and janitor closets located on each floor. Drinking fountains will be installed at the core per code. Floors: Elevator lobby floors to be carpet with carpet border and carpet base. Walls: Walls in elevator lobbies to be painted gypsum board with "Pitcon" reveals. Walls in corridors to be painted gypsum board. Core doors for stairwells, electrical, telephone, and toilet rooms all installed. Core doors 3'x8', solid core, stain grade (paint grade @ utility rooms) complete with frame, trim, hardware, locking devices and closer where required. Ceilings: Ceiling in elevator lobbies will be painted gypsum board.
OFFICE AREA FINISHES:	Walls: Exterior walls to be clad with drywall, taped and sanded. 1-inch slat Venetian blinds to be installed on all exterior windows. Ceilings: Ceilings will be open and ready to receive tenant grid and tile.
STAIRS:	Base building stairways as required by code for standard office use. Floors: Exposed sealed concrete with painted stringers and risers. Walls: All stair side gypsum board will be provided with 2 coats semi-gloss latex paint.

	Ceilings: The underside of the exposed stairway will be painted. Stairwell ceiling to be exposed and painted.
	Metals: All handrails, stringers, etc. will be painted.
	Base: 4" covered vinyl base will be installed around each floor level stairway landing.
ELECTRICAL, MECHANICAL AND TELEPHONE ROOMS :	Floors: The floors will be sealed concrete with 4" vinyl base.
	Walls: They will be sheetrock, blocked, taped, sanded and painted. Framing voids to receive sound attenuating insulation.
	Ceilings: Exposed structure will remain unfinished.
JANITOR'S CLOSET:	Floors: The floors will be sealed concrete with vinyl base.
	Walls: Sheetrock walls will be painted.
	Ceilings: Exposed structure will remain unfinished.
FINISH HARDWARE:	All door hardware will be as manufactured by Schlage, Russwin, Corbin or equal to meet ADA requirements with function appropriate to intended usage. Base building and tenant locksets will be lever style hardware with US 26D satin chrome finish. Hinges to be satin chrome finish. Also included are kick plates for service area and all toilet room doors.
INTERIOR SIGNAGE:	Core area rooms will be furnished with commercial grade signage including rest rooms, mechanical and electrical rooms, stairwells, etc. A building directory, with the ability to have multiple suites and names listed, will be installed in the main lobby. All other exterior and interior signage are will be provided by the Tenant.
MISCELLANEOUS POWER:	The base building shall include miscellaneous use duplex 120 volt receptacles in equipment rooms, bathrooms, mechanical rooms, lobbies, storage areas and corridors. Exterior service outlets will be provided near the roof mounted HVAC equipment. Provide GFI protection per code.
EMERGENCY POWER & LIGHTING:	Emergency lighting will be accomplished with battery ballasts in fluorescent lighting fixtures. The fire alarm control panel will be provided with battery backup. Elevators shall return to the ground floor and open doors upon power loss. All work support generator and/or UPS components shall be installed by Tenants and/or included as part of the Tenant Improvement Allowance. An empty conduit "only" will be stubbed from the main electrical room to a future pad location if a tenant should require back up generation.
TELEPHONE SERVICE:	An underground telephone service conduit, as required by the carrier, will be provided and extended to the building telephone service room. Telephone equipment and wiring to the individual floors and tenant spaces will be provided by the tenant.

SPECIAL SYSTEMS:

Fire alarm system - a complete UL approved fire management alarm system will be provided to comply with local fire department requirements for shell building use and occupancy. All fire alarm features required in the tenant area to complete the system such as strobes, pull stations, etc., will be provided by the tenant.

SECURITY SYSTEMS:

A security system will be provided to allow after hour electronic access at building entry locations "only."

INTERIOR LIGHTING:

Elevator Lobbies
The lobbies, corridors, vestibules, elevator lobbies, etc. will be lit with PL down light fixtures, uplights or cove lighting to an average of 35 foot candles.

Electrical Rooms, Mechanical Rooms, Janitor's Closets, and Dock Areas Lighting in these areas will be 4' or 8' wall or ceiling mounted fluorescent strip fixtures to an average of 40 foot candles.

Toilet Rooms
Toilet rooms will be lit with PL down light fixtures with light coves consisting of fluorescent strip fixtures and drywall ledger provided in each toilet room.

Stairs
Stairwell lighting will consist of ceiling mounted or wall mounted fluorescent lighting fixtures, included as part of base building cost.

EXHIBIT C

PART II

OFFICE SPACE PLAN

See attached.

DATE: 9-Jun-05 SPAULDING & SYLE

PROJECT: VANDA PHARMACEUTICALS, INC. CONSTRUCTION
SITE: 3rd Floor @ JHU@MCC#3
Rockville, MD

JOB #: NA REV DATE: 29-Jul-05
R.S.F.: 14,524 OFFICE "ONLY"
PLAN DATE: 05/04/05 FLOOR PLAN-OPTION 1-V.E. OPTION -PLUS
PREP'D BY: JWM

CONCEPTUAL ESTIMATE - V.E. OPTION - PLUS

QUALIFICATIONS/ASSUMPTIONS

THIS ESTIMATE IS LIMITED TO WORK SHOWN IN THE OFFICE AREA'S "ONLY". WE HAVE NOT INCLUDED ANY WORK IN THE LAB.

ALL WORK PERFORMED DURING NORMAL WORKING HOURS

WINDOW STOOLS ARE EXISTING.

ALL MECHANICAL, ELECTRICAL, AND SPRINKLER SYSTEMS AND/OR EQUIPMENT HAS SUFFICIENT CAPACITY & IS WORKING PROPERLY

SPRINKLER MAIN LOOP IS EXISTING

SECURITY WORK IS EXCLUDED

TEL/DATA NOT INCLUDED, RING AND STRING ONLY

FURNITURE, FIXTURES AND FREE STANDING EQUIPMENT NOT INCLUDED IN PRICING

THIS PROPOSAL DOES NOT INCLUDE ANY BACK UP GENERATION OR UPS WORK.

WSSC FEE'S TO BE PAID BY OTHERS

ITEMIIZED QUANTITY/SCOPE SURVEY

	DESCRIPTION OF WORK	QNTY	UNIT	UNIT COST	SUBTOTAL	TOTAL
A	DEMOLITION					
	REMOVE WALLS	0	LF			
	REPAIR CEILINGS	0	AL			
	DUMPSTERS	8	EA			
	REMOVE TRASH	1	LS			
B	DRYWALL/ACOUSTICAL					
	CEILING HIGH PARTITIONS 9'-0" - Insulated/5/8" BD	1098	LF			
	FULL HEIGHT PARTITIONS - 14-6" - Insulated/5/8" BD	441	LF			
	2X4 ACT CEILING 9/16 GRID, "CORTEGA" TILE	14,524	SF			
	2X2 ACOUSTICAL CEILING SYSTEM - VINYL @ LDG STORAGE	0	SF			
	DRYWALL CEILINGS AT UPGRADE AREA'S	0	SF			
	SPRAY ON FIREPROOFING REPAIR	1	LS			
C	PROTECTION AND TRASH REMOVAL					
	TEMP PROTECTION	1	LS			
	DAILY LABOR AND DAILY CLEANING	8	WK			
	FINAL CLEANUP	14,524	SF			

Chip clark
8/1/05

D	MILLWORK/CARPENTRY		
	PLAM CABINETS (BASE, WALL AND TOP)	47	LF
	RECEPTION DESK (N.l.C.)	0	AL
	CREDENZA AT MEETING ROOM	8	LF
	HALF MOON "BAR" @ PANTRY (PER ARCHITECT)	1	AL
	MAPLE TRIM AT WALL TALKER	80	LF
	COAT SHELF AND ROD	4	LF
	IN WALL BLOCKING	14,524	SF
E	DOORS/FRAMES/HARDWARE		
	NEW PAINT GRADE (Masonite) DOORS/HM FRM/HDW (STD)	49	LVS
	SUITE ENTRY DOORS PER NOTES	2	LVS
	STOREFRONT DOORS @ CONFERENCE / MEETING	0	LVS
	REKEYING	1	LS
F	GLASS/GLAZING		
	SIDELIGHTS @ INTERIOR OFFICES (3/8" TEMP, NO SILICONE)	0	SF
	CLERESTORY GLASS AT WORK STATIONS (1/4" TEMP. NO SIL.)	400	SF
	SIDELIGHTS AT PERIMETER OFFICES (3/8" TEMP. NO SILICONE)	441	SF
	SIDELIGHTS AT CONF AND MTG ROOMS (3/8" TEMP.)	240	SF
G	FLOORING		
	CARPET-ENCLOSED OFFICE AREAS	650	SY
	CARPET UPGRADE AREAS	1,055	SY
	VCT @ PANTR, SERVER, AND COPY/FAX ROOMS	620	SF
	VINYL BASE	3,580	LF
	MINOR FLOOR PREPERATION	1	AL
H	WALL FINISHES		
	PRIME & PAINT NEW WALLS (EGGSHELL)	32,220	SF
	PAINT NEW DOORS AND FRAMES	51	EA
	PAINT DRYWALL CEILINGS	0	SF
	WALL TALKER MARKER BOARDS	124	SF
	MISC TOUCH UP	1	LS
I	SPECIALTIES		
	BUILDERS GRADE REFRIGERATOR @ PANTRY(s)	2	EA
	BUILDERS GRADE DISHWASHER AT PANTRY(S)	2	EA
	ELECTRONIC PROJECTION SCREENS AT LG CONFERENCE	1	EA
	ROOF PENETRATION AND BLOCKING	1	AL
	MISC SUPPORT STEEL AT ROOFTOP CONDENSING UNIT	1	AL
	ROOF REPAIR ALLOWANCE	1	AL
	HVAC		
	DIST. DUCT AND DIFFUSERS	14,524	SF
	VAV'S AND TSTATS PER NOTES	10	EA
	AIR BALANCING	14,524	SF
	SUPPLEMENTAL HVAC AT SERVER ROOM	5	TNS
	SUPPLEMENTAL UNIT TIE IN TO BASE BLDG BMS	0	LS
	EXHAUST FANS	0	EA
	PLUMBING		
	PANTRY SETS	2	EA
	INSTANT HOTS	2	EA

DESCRIPTION OF WORK

		QNTY	UNIT
L	SPRINKLER ALLOWANCE		
	ADD/RELOCATE HEADS AS REQUIRED	14,524	SF
M	ELECTRICAL		
	DUPLEX OUTLETS (4 per office ilo of 5)	187	EA
	GFI OUTLETS	4	EA
	DEDICATED CIRCUITS	8	EA
	TEL/DATA RING WITH STRING	142	EA
	NEW LIGHTS THROUGHOUT SPACE (8X10 GRID)	182	EA
	DOWNLIGHTS / WALLWASHERS AT UPGRADE AREAS	20	EA
	PENDANT LIGHTS PER NOTES	5	EA
	SINGLE POLE SWITCHES	50	EA
	THREE WAY SWITCHES	10	EA
	SYSTEMS FURNITURE CONNECTIONS	12	EA
	FLOOR BOXES AT CONFERENCE ROOM(S)	2	EA
	HVAC & PLUMBING WIRING	1	LS
	EXIT LIGHTS AS REQUIRED	12	EA
	PANELS AT SERVER ROOM	1	EA
	DEMO AND SAFING	0	AL
	FIRE ALARM WORK	14524	SF
	PERMIT	1	LS
	ATS FOR BASE BUILDING GENERATOR	0	EA
			SUBTOTAL
N	GENERAL CONDITIONS		
	GENERAL CONDITIONS ALLOWANCE	$ -	LS
			SUBTOTAL
			CONSTRUCTION FEE (5.0%)
			TOTAL HARD COSTS

[FLOOR PLAN]

VANDA PHARMACEUTICALS, INC

Chip Clark
8/1/05

VANDA PHARMACEUTICALS
9605 MEDICAL CENTER DRIVE - 3RD FLOOR
ROCKVILLE, MD 20850

DATE: JULY 29, 2005

PLAN NOTES FOR OFFICE SPACE "ONLY"

DIVISION - 1 GENERAL REQUIREMENTS

- - CONTRACTOR TO PROVIDE ALL NECESSARY DEMOLITION AS REQUIRED FOR NEW CONSTRUCTION SHOWN.

DIVISION - 2 SITE REQUIREMENTS - N/A

DIVISION - 3 CONCRETE 3 - N/A

DIVISION - 4 MASONRY - N/A

DIVISION - 5 METALS

- - CONTRACTOR TO FURNISH AND INSTALL AII MISCELLANEOUS METAL ASSOCIATED WITH NEW OUTDOOR UNIT OF SPLIT SYSTEM TO BE INSTALLED ON ROOF.

- - CONTRACTOR TO FURNISH AND INSTALL AT NEW PARTITIONS U.N.O WITH 3 5/8" METAL STUDS SPACED: 24" O.C. FOR WALLS.

DIVISION - 6 WOOD AND PLASTICS

- - CONTRACTOR TO FURNISH AND INSTALL PLASTIC LAMINATE CABINETS (BASE AND WALL AT TWO(2) PANTRY AREAS, AND CREDENZA BASE*** AT THE MEETING ROOM) AT AREAS INDICATED AS MILLWORK.

- - "HALF MOON" BAR AT PLAN WEST PANTRY NOT TO EXCEED $2,500.00 FURNISHED AND INSTALLED.

- - ALL INTERIOR MILLWORK SURFACES SHALL BE MELAMINE. PLASTIC LAMINATE TO BE STANDARD GRADE AND COLOR BY NEVAMAR OR EQUAL. RECEPTION DESK TO BE PROVIDED AND INSTALLED BY THE TENANT.

- - ONE PAINT GRADE ROD AND SHELF AT PANTRY.

***NOTE: 24" x 36" VISION KITS FOR THE FIFTEEN (15) INTERIOR OFFICE DOORS CAN BE SUBSTITUTED FOR THE CREDENZA BASE DESCRIBED ABOVE.

DIVISION - 7 THERMAL AND MOSITURE PROTECTION

- - CONTRACTOR TO FURNISH AND INSTALL BATT INSULATION IN ALL NEW PARTITIONS.

DIVISION - 8 DOORS, WINDOWS AND GLAZING

- - CONTRACTOR TO FURNISH SOLID CORE PAINT GRADE, MASONITE, WOOD DOORS (3' - 0" x 7' - 0" MINIMUM) U.N.O.

- - CONTRACTOR TO FURNISH AND INSTALL ALL DOOR FRAMES TO BE 2" PAINTED HOLLOW METAL, U.N.O.

- - CONTRACTOR TO FURNISH AND INSTALL 3/8" TEMPERED GLASS SIDELIGHTS WITH TOP AND BOTTOM EXPOSED ALUMINIUM GLAZING CHANNELS AT ALL PERIMETER OFFICES WHERE INDICATED. SIDELIGHTS NOT TO EXCEED 21 SQUARE FEET EACH. NO SILICONE BETWEEN GLASS AND ADJACENT DRYWALL JAMB.

- - CONTRACTOR TO FURNISH AND INSTALL SEGMENTED 3/8" TEMPERED GLASS WALL PANELS WITH TOP AND BOTTOM EXPOSED ALUMINIUM GLAZING CHANNELS AT MEETING ROOM AND CONFERENCE ROOMS #1 AND #2. WALL PANELS NOT TO EXCEED 240 SQUARE FEET IN TOTAL SILICONE SEALANT TO BE PROVIDED BETWEEN EACH GLASS PANEL AND THE ADJACENT DRYWALL JAMBS.

- - CONTRACTOR TO FURNISH AND INSTALL DOUBLE DOOR WHICH IS 8' -0" HIGH FULL HEIGHT TEMPERED VISION GLASS, PLAIN SLICED MAPLE STYLE AND RAIL AT SUITE ENTRY.

- - CONTRACTOR TO FURNISH AND INSTALL 1/4" TEMPERED GLASS CLERESTORY WITH TOP AND BOTTOM ALUMININIUM GLAZING CHANNEL GLASS TO START AT 4' - 8" AFF TO 7' - 2" AFF ABOVE WORKSTATIONS AT INTERIOR OFFICES. CLERESTORY NOT TO EXCEED 400 SF IN TOTAL. NO SILICONE BETWEEN GLASS PANELS OR ADJACENT DRYWALL JAMB.

Chip Clark
8/1/05

DIVISION - 9 FINISHES

- - CONTRACTOR TO FURNISH AND INSTALL GYPSUM BOARD AT NEW INTERIOR PARTITIONS AND AT ALL SHELL CONDITIONS IF REQUIRED. CONTRACTOR TO FURNISH AND INSTALL 5/8" GYPSUM BOARD AT ALL INTERIOR PARTITIONS.

- - CONTRACTOR TO FURNISH AND INSTALL INTERIOR PARTITIONS TO UNDERSIDE OF DECK AS INDICATED ON THE ATTACHED PLAN. TOTAL LINEAR FEET NOT TO EXCEED 441 FEET. ALL OTHER PARTITIONS TO BE FROM FLOOR TO UNDERSIDE OF FINISHED CEILING.

- - CONTRACTOR TO FURNISH AND INSTALL ACOUSTICAL CEILING SYSTEM, WHICH SHALL BE 9/16" FLATGRID. CEILING PANELS TO BE 2'x2' OR 2'x4' ARMSTRONG "CORTEGA".

- - CONTRACTOR TO PAINT ALL WALLS (EGGSHELL) U.N.O. FINISHES WILL BE NEUTRAL WITH 5 TO 6 ACCENT WALLS.

- - CONTRACTOR TO PAINT ALL PAINT GRADE DOORS AND FRAMES SEMI-GLOSS.

- - CONTRACTOR TO FURNISH AND INSTALL CONTINUOUS VINYL WALL COVE BASE BY JOHNSONITE OR EQUAL.

- - CONTRACTOR TO FURNISH AND INSTALL CARPET TYPE 1, PROVIDE ALLOWANCE OF $20/SY INSTALLED IN ALL AREAS U.N.O.

- - CONTRACTOR TO FURNISH AND INSTALL BROADLOOM CARPET TYPE 2, PROVIDE ALLOWANCE OF $18/SY INSTALLED IN ALL ENCLOSED OFFICES.

- - CONTRACTOR TO FURNISH AND INSTALL RESILIENT FLOORING, PROVIDE ALLOWANCE OF $2.00/ SF INSTALLED IN ALL COPY/FAX AREAS, MAIL ROOMS, STORAGE ROOMS, SERVER ROOMS, AND BREAK ROOMS W/PANTRIES.

DIVISION - 10 SPECIALTIES

- - CONTRACTOR TO FURNISH AND INSTALL ONE (1) RECESSED ELECTRIC PROJECTION SCREEN IN CONFERENCE ROOM #1.

DIVISION - 11 EQUIPMENT

- - CONTRACTOR TO FURNISH AND INSTALL BUILDERS GRADE REFRIGERATOR WITH ICEMAKER AND DISHWASHER AT TWO (2) PANTRY'S. REFRIGERATORS NOT TO EXCEED $800.00 EACH AND DISHWASHERS NOT TO EXCEED $300.00 EACH.

DIVISION - 12 FURNISHINGS

- - CONTRACTOR TO FURNISH AND INSTALL "WALL TALKER" (30' -6" LINEAR FEET X 4' - 0" H TOTAL FOR TWO AREAS) AS SHOWN ON PLAN. MOUNTED ON GYPSUM BOARD PARTITION WITH MAPLE FRAME.

DIVISION - 13 SPECIAL CONSTRUCTION

- - CONTRACTOR TO FURNISH AND INSTALL WET PIPE SPRINKLER SYSTEM AS REQUIRED BY LOCAL AND NATIONAL CODES THROUGHOUT SPACE.

- - CONTRACTOR TO FURNISH AND INSTALL CODE COMPLIANT FIRE ALARM SYSTEM THROUGHOUT SPACE.

DIVISION - 14 CONVEYING SYSTEM

DIVISION - 15 MECHANICAL

- - CONTRACTOR TO FURNISH AND INSTALL CODE COMPLAINT MECHANICAL ZONING AS REQUIRED BY SQUARE FOOTAGE TAKEN. SEE DIVISION 16 FOR ELECTRICAL REQUIREMENT. CONTRACTOR TO FURNISH AND INSTALL SEPARATE ZONE CONTROL AT ALL CONFERENCE ROOMS, OFFICES WITH (2) EXPOSURES AND PANTRY'S.

- - CONTRACTOR TO FURNISH AND INSTALL (1) 5 TON, MAXIMUM, DEDICATED 24 HOUR SPLIT SYSTEM AIR CONDITIONING UNIT TO FEED SERVER ROOM SIMILAR TO LIEBERT MINI MATE WITH CONDENSING UNIT ON ROOF.

- - CONTRACTOR TO FURNISH AND INSTALL STAINLESS STEEL SINK WITH GOOSENECK FAUCET AND WATER LINE FOR COFFEE MAKER AT TWO (2) PANTRY LOCATIONS. COLD WATER SHALL BE EXTENDED FROM EXISTING TOILET ROOMS, AND HOT WATER FROM NEW HEATER, DRAIN PIPING SHALL BE EXTENDED TO NEAREST BASE BUILDING WET STACK.

- - CONTRACTOR SHALL FURNISH & INSTALL SERIES FAN-POWERED VAV BOXES (WITH ELECTRIC HEATING COILS WHEN SERVING EXTERIOR PERIMETER AREAS) TO MEET SPECIFIC SPACE REQUIREMENTS. EXISTING UNITS SHALL BE USED IN PLACE, OR RELOCATED, AS APPROPRIATE. PERIMETER BOXES SHALL BE LIMITED TO APPROXIMATELY 600 SQUARE FEET, OR FOUR OFFICES. INTERIOR ZONES SHALL BE LIMITED TO 1200 SQUARE FEET.

- - EXISTING SYSTEM IS PACKAGED ROOFTOP UNITS WITH MAIN SUPPLY LOOP DUCT AND SOME OF THE FAN-POWERED BOXES, AND PLENUM RETURN

- - CONTRACTOR SHALL FURNISH AND INSTALL AN ELECTRIC, POINT OF USE, INSTANTANEOUS WATER HEATER TO SERVE THE PANTRY SINKS.

DIVISION - 16 ELECTRICAL

- - CONTRACTOR TO FURNISH AND INSTALL ELECTRICAL POWER AS REQUIRED IN ALL AREAS BY CODE.

- - CONTRACTOR TO FURNISH AND INSTALL POWER TO ALL WORKSTATION (PRE-WIRED FURNITURE) AND OFFICES TO SUPPORT 1 CPU, 1 MONITOR, 1 TASK LIGHT, AND 2 CONVENIENCE OUTLETS FOR EACH WORKSTATION OR OFFICE.

- - CONTRACTOR TO FURNISH AND INSTALL RING AND PULL STRING AND OR CONDUIT (AS REQUIRED BY CODE) TO SUPPORT 3 CATEGORY 5 CABLES PER WORKSTATION AND OFFICE. CONTRACTOR SHALL MAKE FULL PROVISIONS FOR SUPPORT AREAS AND OTHER ENCLOSED SPACES. (NOTE: 2 LOCATIONS AT OFFICES GREATER THAN 120 SF) DATA CABLING TO BE SUPPLIED AND INSATLLED BY TENANT.

- - CONTRACTOR TO FURNISH AND INSTALL ONE (1) 100 AMP ELECTRICAL PANEL AT SERVER ROOM THAT SHALL BE CONNECTED TO A TENANT PROVIDED UPS.

- - CONTRACTOR TO FURNISH AND INSTALL LIGHTING IN ALL SPACES U.N.O. TO BE 2'X2' 12-18 CELL PARABOLIC FLUORESCENT FIXTURE BY LIGHTOLIER OR EQUAL FIXTURE TO BE PLACED IN A 8'X10' GRID.

TYPICAL LIGHTING DIAGRAM

- - CONTRACTOR TO FURNISH AND INSTALL SPECIAL LIGHTING TO BE 10 DOWN LIGHTS, 10 WALL WASHERS. ALL OF THE FIXTURE TO BE LIGHTOLIER, CALCULITE SERIES WITH LENS OR EQUAL.

- - CONTRACTOR TO FURNISH AND INSTALL 5 DECORATIVE PENDANT FIXTURES THROUGHOUT THE PROJECT BUT INSTALLED PRIMARILY IN PANTRY AREAS. ALLOW $250 PURCHASE PRICE ALLOWANCE PER FIXTURE.

- - CONTRACTOR TO FURNISH AND INSTALL POWER FOR CARD READERS AT ALL EXTERIOR DOORS.

- - CONTRACTOR TO FURNISH AND INSTALL POWER FOR ELECTRIC STRIKES OR MAG LOCK AS DIRECTED BY EXTERIOR DOOR SPECIFICATIONS.

- - CONTRACTOR TO FURNISH AND INSTALL POWER FOR CARD READERS AT 3 INTERIOR DOORS.

- - CONTRACTOR TO FURNISH AND INSTALL ONE (1) FLUSH MOUNTED FLOOR BOX FOR MINIMUM OF 4 POWER DEVICES AND 4 TELEPHONE AND DATA PORTS IN EACH CONFERENCE ROOM.

GENERAL

- - QUANTITIES FOR ALL MATERIALS, PRODUCTS, SYSTEMS ETC. TO BE PER THE QUANTITIES SHOWN ON THE ATTACHED CONCEPTUAL ESTIMATE - V.E. OPTION - PLUS, REVISION DATE 29-JULY-05.

- - SEE QUALIFICATIONS AND ASSUMPTIONS ON THE ATTACHED CONCEPTUAL ESTIMATE.

- - ALL WORK ASSOCIATED WITH THE WET LAB TO BE PERFORMED UNDER A SEPARATE AGREEMENT.

EXHIBIT C

PART III

MILESTONE SCHEDULE

	MILESTONE	DATE	EXCLUSIVE REMEDY PER SECTION 3.2 OF THE LEASE
1.	Intentionally omitted.		
2.	Tenant shall have submitted to Landlord design development drawings for Tenant's Lab Space Leasehold Improvements which Landlord shall review and return comments on to Tenant within then (10) business days following receipt of the same.	08-10-05	If the Tenant does not meet its obligation in this milestone, one day of Tenant Delay shall occur for each day the Tenant is delayed in meeting such obligation, and Landlord shall have the rights and remedies set forth in Section 3.2 hereof.
3.	Tenant shall have submitted to Landlord Tenant's construction drawings and specifications for Tenant's Lab Space Leasehold Improvements which Landlord shall review and return comments on to Tenant within ten (10) business days following receipt of the same.	08-31 -05	If the Tenant does not meet its obligation in this milestone, one day of Tenant Delay shall occur for each day the Tenant is delayed in meeting such obligation and Landlord shall have the rights and remedies set forth in Section 3.2 hereof.
4.	Tenant shall attend all scheduled design progress meetings as requested by Landlord or Landlord's Architect as required for completion of Construction Plans for the Office Space.	Weekly, or as required	If the Tenant does not meet its obligation in this milestone, one day of Tenant Delay shall occur for each day the Tenant is delayed in meeting such obligation and Landlord shall have the rights and remedies set forth in Section 3.2 hereof.
5.	Tenant shall have submitted final bid and pricing documents for Tenants Lab Space Leasehold Improvements to Landlord's Contractor; and Landlord's Contractor shall provide Tenant with final pricing for review and approval within forty-five (45) days following receipt of such final bid and pricing documents.	09-19-05	If the Tenant does not meet its obligation in this milestone, one day of Tenant Delay shall occur for each day the Tenant is delayed in meeting such obligation and Landlord shall have the rights and remedies set forth in Section 3.2 hereof.

	MILESTONE	DATE	EXCLUSIVE REMEDY PER SECTION 3.2 OF THE LEASE
6.	Tenant (i) delivers to Landlord written approval of the 100% Complete Construction plans for the Office Space and subject to Tenant's written comments with respect thereto, provided such comments do not increase the cost of the Work or cause a delay in meeting any subsequent Milestone Dates, and (ii) authorizes Landlord's Contractor to order for Tenant all required long lead time items.	09-26-05	If the Tenant does not meet its obligation in this milestone, one day of Tenant Delay shall occur for each day the Tenant is delayed in meeting such obligation and Landlord shall have the rights and remedies set forth in Section 3.2 hereof.
7.	Tenant shall submit to Landlord the Lab Space Complete Plans (as defined in the Lease).	09-30-05	If the Tenant does not meet its obligation in this milestone, one day of Tenant Delay shall occur for each day the Tenant is delayed in meeting such obligation and Landlord shall have the rights and remedies set forth in Section 3.2 hereof.
8.	Tenant shall review and approve final pricing for Lab Space Leasehold Improvements within 5 business days following receipt of the same.	10-03-05	If the Tenant does not meet its obligation in this milestone, one day of Tenant Delay shall occur for each day the Tenant is delayed in meeting such obligation and Landlord shall have the rights and remedies set forth in Section 3.2 hereof.
9.	Landlord is to have substantially completed the Leasehold Improvements.	January 1, 2006	If for any reason this milestone is not reached, Landlord shall have until March 1, 2006, to reach the milestone. If milestone as so extended (as so extended, the "Outside Date") is not reached for any reason other than Tenant Delay or Force Majeure, the Commencement Date shall be postponed one day for each day of said delay by Landlord, and Tenant will be entitled, as its sole remedy, to a credit against Base Annual Rent due hereunder in an amount equal to the product of (i) the rate of Base Annual Rent due per day during the first Lease Year multiplied by the number of days following the Outside Date until Landlord achieves this milestone.

EXHIBIT D

LANDLORD'S SERVICES
IN
COMMON AREAS

I. CLEANING

A. General

1. All cleaning work will be performed generally between 5 p.m. and 12 midnight, Monday through Friday, unless otherwise necessary for stripping, waxing, etc.

2. Abnormal waste removal (e.g., computer installation paper, bulk packaging, wood or cardboard crates, refuse from cafeteria operation, etc.) shall be Tenant's responsibility.

B. Daily Operations (5 times per week)

1. Lavatories

a. Sweep and wash floors with disinfectant.

b. Wash both sides of toilet seats with disinfectant.

c. Wash mirrors, basins, bowls, and urinals.

d. Spot clean toilet partitions.

e. Empty and disinfect sanitary napkin disposal receptacles.

f. Refill toilet tissue, towel, soap, and sanitary napkin dispensers.

2. Public Areas

a. Wipe down entrance doors and clean glass (interior and exterior) and adjacent glass.

b. Vacuum elevator carpets and wipe down doors and walls.

c. Clean water coolers.

d. Vacuum all carpets daily and mop all floors daily, as needed.

e. Sweep stairways daily, as needed.

C. Operations As Needed (but not less than every other day)

1. Public Areas

a. Buff resilient floor areas.

D. Weekly Operations

1. Common Area, Lavatories, Public Areas

a. Hand-dust and wipe clean horizontal surfaces with treated cloths to include furniture, office equipment, window-sills, door ledges, chair rails, baseboards, convector tops, etc., within normal reach.

b. Remove finger marks from private entrance doors, light switches, and doorways.

E. Monthly Operations

1. Public Areas

a. Thoroughly vacuum seat cushions on chairs, sofas, etc.

b. Vacuum and dust grillwork.

2. Common Area Lavatories

a. Wash down interior walls and toilet partitions.

F. As Required and Weather Permitting (at least once per year)

1. Clean inside of all windows in Building.

2. Clean outside of all windows in Building.

G. Yearly

1. Public Areas

a. Strip and wax all resilient tile floor areas.

II. HEATING, VENTILATING, AND AIR CONDITIONING

A. Heating, ventilating, and air conditioning as required to provide reasonably comfortable temperatures for normal business day occupancy (excepting Sundays and holidays); Monday through Friday, HVAC shall operate from 7:00 a.m. to 6:00 p.m. and Saturday from 9:00 a.m. to 1:00 p.m. or, at Tenant's expense, at such other hours as requested by Tenant.

B. Maintenance of any additional or special air conditioning equipment and the associated operating cost will be at Tenant's expense.

III. WATER

Hot water for lavatory purposes and cold water for drinking, lavatory and toilet purposes.

IV. ELEVATORS

Elevators for the use of all tenants and the general public for access to and from all floors of the Building Programming of elevators (including, but not limited to, service elevators) shall be as Landlord from time to time determines best for the Building as a whole. At least one elevator shall be in service at all times.

V. RELAMPING OF LIGHT FIXTURES

Tenant will reimburse Landlord for the cost of non-building standard lamps, ballasts and starters and the cost of replacing same within the Premises.

VI. INTENTIONALLY OMITTED

VII. ELECTRICITY

A. Landlord, at Tenant's expense in accordance herewith, shall furnish electrical energy required for lighting, electrical facilities, equipment, machinery, fixtures, and appliances used in or for the benefit of the Premises, in accordance with the provisions of the Lease of which this Exhibit is a part. Landlord will install Meters for all electricity provided to the Premises (other than Building heating, ventilating and air conditioning). The cost of installation of the Meters shall be borne by the Tenant.

B. Tenant shall not, without prior written notice to Landlord in each instance, connect to the Building electric distribution system any fixtures, appliances or equipment other than normal office machines such as personal computers, printers, facsimile machines, or any fixtures, appliances or equipment which Tenant on a regular basis operates beyond normal buildings operating hours.

C. Tenant's use of electrical energy in Premises shall not at any time exceed the capacity of any of the electrical conductors or equipment in or otherwise serving the Premises. In order to insure that such capacity is not exceeded and to avert possible adverse effect upon the Building electrical service, Tenant shall not, without prior written notice to Landlord in each instance, connect to the Building electrical distribution system any fixtures, appliances or equipment which operate on a voltage in excess of 120 volts nominal or make any alteration or addition to the electric system of the Premises. Unless Landlord shall reasonably object to the connection of any such fixtures, appliances or equipment, all additional risers or other equipment required therefor shall be provided by Landlord, and the cost thereof shall be paid by Tenant upon Landlord's demand.

D. Landlord may, at any time, elect to discontinue the furnishing of electrical energy, provided that Landlord is required to do so by law, regulation or order of any governmental body having jurisdiction, or by the utility company providing such electrical service. In the event of any such election by Landlord: (1) Landlord agrees to permit Tenant to receive electrical service directly from the public utility supplying service to the Building and to permit the existing feeders, risers, wiring and other electrical facilities serving the Premises to be used by Tenant and/or such public utility for such purpose to the extent they are suitable and safely capable; (2) Landlord agrees to pay such charges and costs, if any, as such public utility may impose in connection with the installation of Tenant's meters and to make or, at such public utility's election, to pay for such other installations as such public utility may require, as a condition of providing comparable electrical service to Tenant which costs as reasonably amortized by Landlord, with legal interest paid by Landlord on the unamortized amount, shall be added to Landlord's Operating Costs; and (3) Tenant shall thereafter pay, as additional rent but directly to the utility furnishing the same, all charges for electrical services to the Premises.

VIII. WATER AND GAS

If Tenant or any other tenant in the Building shall operate a wet laboratory in its demised premises, Landlord may cause the water and gas lines serving such wet laboratories to be metered by a separate check meter (the "Water and Gas Check Meters") installed at the Tenant's or such other tenant's cost. In the event Tenant operates such a separately metered wet laboratory, Tenant shall pay, as additional rent in addition to Tenant's Share of Operating Costs,

Tenant's Share of Real Estate Taxes and Tenant's Annual Electrical Cost in accordance with Article IV of the Lease, Tenant's Annual Water and Gas Costs and the cost to the Landlord for consumption of water and gas in wet laboratories in the Building shall be excluded from Landlord's Operating Costs.

Tenant's Annual Water and Gas Costs shall mean the cost to Landlord at the "average unit cost" for water or gas, as the case may be, for Tenant's use of water or gas in Tenant's wet laboratory as shown on the Water and Gas Check Meters. For purposes hereof, the average unit cost of gas and/or water for any year or applicable portion thereof shall mean the cost calculated by dividing the sum of the costs charged Landlord by the public utility for gas or water consumed in the Building in the applicable period by the sum of the applicable units (i.e., gallons or other applicable unit of measure) of water or gas used by the Building during such period as measured by the Building Master Gas or Master Water Meter as the case may be.

For every fiscal year or portion thereof during the Term hereof, as the same may be extended, Tenant shall pay, as additional rent, Tenant's Annual Water and Gas Cost in monthly installments on the first day of each month during its Term and as otherwise provided in this Part VIII of Exhibit D. As soon as practicable after the end of each fiscal year during the Term, and after Lease termination, Landlord shall render a statement (the "Landlord's Utility Statement") in reasonable detail and according to usual accounting practices certified by Landlord and showing for the preceding calendar year or fraction thereof Tenant's Annual Water and Gas Cost.

Tenant shall pay, as additional rent, on the first day of each month of such fiscal year and each ensuing fiscal year thereafter, Estimated Monthly Utility Cost Payments equal to 1/12th of Landlord's estimate of Tenant's Annual Water and Gas Cost for the respective fiscal year, with an appropriate additional payment or credit to be made after Landlord's Utility Statement is delivered to Tenant. If the amount paid by Tenant for Estimated Monthly Utility Cost Payments is less than the actual Annual Water and Gas Cost, Tenant agrees to pay, as additional rent, to Landlord the amount of the differential. If the amount paid by Tenant for Estimated Monthly Utility Cost Payments is more than the actual Annual Water and Gas Cost, then Landlord, shall credit such excess against Tenant's subsequent monthly payments of Estimated Monthly Utility Cost Payments, as appropriate, until such excess is exhausted (or refund such excess to Tenant if at the end of the Term). Landlord may adjust such Estimated Monthly Utility Cost Payment from time to time and at any time during a fiscal year (but not more often than twice per fiscal year), and Tenant shall pay, as additional rent, on the first day of each month following receipt of Landlord's notice thereof, the adjusted Estimated Monthly Utility Cost Payment.

If Landlord fails to furnish Tenant any statement of Landlord's estimate of Tenant's Annual Water and Gas Cost for any fiscal year or if Landlord shall furnish such estimate for any fiscal year subsequent to the commencement hereof, then until the first day of the month following the month in which such estimate is furnished to Tenant, Tenant shall pay to Landlord on the first day of each month an amount equal to the monthly sum payable by Tenant to Landlord under this Section in respect of the last month of the preceding fiscal year.

Tenant shall have the right from time to time during the Term to read the Building Master Gas Meter and Master Water Meter and the Gas and Water Check Meters serving the Premises. Each Landlord's Utility Statement delivered to Tenant hereunder shall be conclusive and binding upon Tenant unless, within ninety (90) days after receipt of the statement, Tenant notifies Landlord that it wishes to audit Landlord's books and records with respect to Annual Water and Gas Cost for the preceding fiscal year. If Tenant gives such notice timely requesting the right to audit Landlord's books and records, Tenant shall have the right, at a reasonable time and upon reasonable notice, to examine Landlord's books and records respecting the Building which relate to the determination and computation of Tenant's Annual Water and Gas Cost for the fiscal year in question.

EXHIBIT E

RULES AND REGULATIONS

A. Roads, parking, sidewalks, doorways, vestibules, halls, stairways and similar areas shall not be obstructed by tenants or their agents, employees, sublessees, contractors, licensees or invitees, or used for any purpose other than ingress and egress to and from the Premises and for going from one part of the Building to another part of the Building or from one part of the campus to another part of the campus.

B. Plumbing fixtures and appliances shall be used only for the purpose for which constructed, and no sweepings, rubbish, rags, or other unsuitable material shall be thrown or placed therein. The cost of repairing any stoppage or damage resulting to any such fixtures or appliances from misuse on the part of a tenant or such tenant's officers, agents, servants, and employees shall be paid by such tenant.

C. No signs, posters, advertisements, or notices shall be painted or affixed on any of the windows or doors, or other part of the Building, except of such color, size, and style, and in such places, as shall be first approved in writing by the building manager. No nails, hooks, or screws shall be driven into or inserted in any part of the Building, except by Building maintenance personnel.

D. No awning or other projections shall be attached to the outside walls or windows. No curtains, blinds, shades, screens or signs other than those furnished by Landlord shall be attached to, hung in, or used in connection with any window or door of the Premises without prior written consent of Landlord.

E. Directories will be placed by Landlord, at Landlord's own expense, in conspicuous places in the Building. No other directories shall be permitted.

F. Tenant may request heating and/or air conditioning during other periods in addition to normal working hours by submitting its request in writing to the office of the Managing Agent of the Building during normal business hours, Monday through Friday, no later than 24 hours prior to the time such service is required. All such requests for service shall be delivered on forms available from the office of the Managing Agent. The request shall clearly state the start and stop hours of the "off-hour" service. Tenant shall submit to the Building Manager a list of personnel authorized to make such request. The Tenant shall be charged for such operation in the form of additional rent; such charges are to be determined by the Managing Agent and shall be fair and reasonable and reflect the additional operating costs involved.

G. The Premises shall not be used (i) by any Prohibited Person (as defined in Section 6.1.3 of the Lease), or (ii) for conducting any barter, trade, or exchange of goods or sale through promotional give-away gimmicks or any business involving the sale of secondhand goods, insurance salvage stock, or fire sale stock, and shall not be used for any auction or pawnshop business, any fire sale, bankruptcy sale, going-out-of-business sale, moving sale, bulk sale, or any other business which, because of merchandising methods or otherwise, would tend to lower the first-class character of the Building.

H. Tenants shall not do anything, or permit anything to be done, in or about the Building, or bring or keep anything therein, that will in any way increase the possibility of fire or other casualty or obstruct or interfere with the rights of, or otherwise injure or annoy, other tenants, or do anything in conflict with the valid pertinent Laws, rules, or regulations of any governmental authority.

I. Tenant shall not place a load upon any floor of the premises which exceeds the floor load per square foot which such floor was designed to carry or which is allowed by applicable building code. Landlord may prescribe the weight and position of all safes and heavy installations which Tenant desires to place in the Premises so as properly to distribute the weight thereof. Landlord shall have the authority

to prescribe the weight and position of safes or other heavy equipment which may overstress any portion of the floor. All damage done to the Building by the improper placing of heavy items which overstress the floor will be repaired at the sole expense of the Tenant. Landlord reserves the right to have Landlord's structural engineer review Tenant's floor loads on the Premises at Tenant's expense.

J. A tenant shall notify the building manager when safes or other heavy equipment are to be taken into or out of the Building. Moving of such items shall be done during the hours that Landlord may determine under the supervision of the building manager, after receiving written permission from him.

K. Suite entry doors and doors to public corridors, when not in use, shall be kept closed.

L. All deliveries must be made via the service entrance and service elevators during normal business hours or as otherwise directed or scheduled by Landlord. Prior approval must be obtained from Landlord for any deliveries that must be received after normal business hours.

M. Each tenant shall cooperate with Building employees in keeping the Premises neat and clean. Nothing shall be swept or thrown into the corridors, halls, elevator shafts, or stairways. No birds, animals, or reptiles, or any other creatures, shall be brought into or kept in or about the Building.

N. Building employees shall not be required to perform, and shall not be requested by any tenant or occupant to perform, any work outside of their regular duties, unless under specific instructions from the office of the Managing Agent of the Building.

O. Business machines and mechanical equipment belonging to Tenant which cause noise and/or vibration that may be transmitted to the structure of the building or to any leased space so as to be objectionable to Landlord or any tenants in the Building shall be placed and maintained by Tenant, at Tenant's expense, in setting of cork, rubber, or spring type noise and/or vibration eliminators sufficient to eliminate vibration and/or noise. Tenants shall not make or permit any improper noises in the Building, or otherwise interfere in any way with other tenants or persons having business with them.

P. Tenants shall not use or keep in the Building any flammable or explosive fluid or substance, or any illuminating material, unless it is battery powered, UL-approved except as expressly permitted in the Lease.

Q. Tenants' employees or agents, or anyone else who desires to enter the Building, may be required to provide appropriate identification and sign in upon entry, and sign out upon leaving, giving the location during such person's stay and such person's time of arrival and departure, and shall otherwise comply with any reasonable access control procedures as Landlord may from time to time institute.

R. Landlord has the right to evacuate the Building in event of emergency or catastrophe or for the purpose of holding a reasonable number of fire or emergency drills.

S. If any governmental license or permit shall be required for the proper and lawful conduct of tenant's business, tenant, before occupying the Premises, shall procure and maintain such license or permit and submit it for Landlord's inspection. Tenant shall at all times comply with the terms of any such license or permit.

T. Tenant covenants and agrees that its use of the Premises shall not cause a discharge of more than its pro rata share on a square foot basis of the design flow gallonage per day of sanitary (nonindustrial) sewage allowed under the sewage discharge permit(s) for the Building. Discharges in excess of that amount, and any discharge of industrial sewage, shall only be permitted if Tenant, at its sole expense, shall have obtained all necessary permits and licenses therefor, including without limitation permits from state and local authorities having jurisdiction thereof. Tenant shall submit to Landlord on December 1 of each year of the Term of this Lease a statement, certified by an authorized officer of Tenant, which contains the following information: name of all chemicals, gases, and Hazardous Materials,

used, generated, or stored on the Premises; type of substance (liquid, gas or granular); quantity used, stored or generated per year; method of disposal; permit number, if any, attributable to each substance, together with copies of all permits for such substance; and permit expiration date for each substance.

U. Garbage, trash, rubbish, and refuse shall be kept in sanitary closed containers approved by Landlord so as not to be visible to the public within the demised area. The following rules and regulations shall apply to "dry" trash: (1) all "dry trash shall be properly bagged in plastic bags and sealed; and (2) all "dry" trash shall be delivered at such times and in such areas of the Project as, from time to time, may be designated by Landlord. The following rules and regulations apply to "semi-wet", and "wet garbage": (1) Tenant shall be solely responsible for the cost of purchasing such equipment as is necessary to convert "wet garbage" into a sanitary condition satisfactory to Landlord for disposal by Landlord after delivery by Tenant to the designated area; and (2) if, at Landlord's sole discretion, a refrigerated trash handling room becomes necessary, it will be Tenant's sole responsibility to pay all reasonable costs incurred to install such improvements in any area designated by Landlord.

V. Tenant will not display, paint, or place, or cause to be displayed, painted or placed, any handbills, bumper stickers, or other advertising or promotional materials or devices on any part of the Building or on any vehicles parked in the parking areas of the Building whether belonging to Tenant or to Tenant's employees or agents or to any other person except individuals may have decals or bumper stickers on own cars.

W. Tenant shall use the Common Areas for ingress and egress only, and shall not use any portion of the Common Areas for business or promotional purposes, nor shall Tenant place any obstruction (including, without limitation, vending machines) thereon. Tenant shall not use, suffer, or permit to be used any part or portion of the Common Areas for any "quick-type service" of, among other things, cigarettes, food, beverages, ice cream, popcorn, candy, gum, or any other edibles, whether or not such "quick-type service" is effected through machines or other dispensing devices.

X. Tenant shall not use or operate any electric or electrical devices or other devices that emit sound waves or are dangerous to other tenants and occupants of the Building or that would interfere with the operation of any device or equipment or telephone, radio or television broadcasting or reception from or within the Building or elsewhere, or with the operation of roads or highways in the vicinity of the Building, and shall not place or install any projections, antennae, aerials, or similar devices inside or outside of the Premises, without the prior written approval of Landlord which approval shall not be granted if such device could be seen or heard by any tenant or visitor to the campus.

Y. Door keys for doors in the Premises will be furnished at the Commencement of the Lease by Landlord. Tenant shall not affix additional locks on doors and shall purchase duplicate keys only from Landlord and will provide to Landlord the means of opening safes, cabinets, or vaults left on the Premises following expiration or sooner termination of the Term. In the event of the loss of any keys so furnished by Landlord, Tenant shall pay to Landlord the cost thereof.

Z. Tenant (without Landlord's approval therefor, which approval will be signified on Tenant's Plans submitted pursuant to the Lease) may not and Tenant shall not permit or suffer anyone to: (a) cook in the Premises; (b) place vending or dispensing machines of any kind in or about the Premises; (c) at any time sell, purchase or give away, or permit the sale, purchase, or gift of food in any form.

AA. Tenant shall not use the name of the Building or use pictures or illustrations of the Building in advertising or other publicity without prior written consent of Landlord. Landlord shall have the right to prohibit any advertising by Tenant which, in Landlord's opinion, tends to impair the reputation of the Building or its desirability for offices, and upon written notice from Landlord, Tenant will refrain from or discontinue such advertising.

BB. Tenant assumes full responsibility for protecting its space from theft, robbery and pilferage, which includes keeping doors locked and other means of entry to the Premises closed and secured.

CC. Landlord reserves the right to rescind any of these Rules and Regulations and make such other and further rules and regulations not inconsistent with the express terms of the lease as in the reasonable judgment of Landlord shall from time to time be needed for the safety, protection, care, and cleanliness of the Building, the operation thereof, the preservation of good order therein, and the protection and comfort of its tenants, their agents, employees, and invitees, which Rules and Regulations when made and notice thereof given to a tenant shall be binding upon him in like manner as if originally herein prescribed. In the event of any conflict, inconsistency, or other difference between the terms and provisions of these Rules and Regulations, as now or hereafter in effect and the terms and provisions of the Lease to which these Rules and Regulations are attached, Landlord shall have the right to rely on the term or provision in either such Lease or such Rules and Regulations which is most restrictive on Tenant and most favorable to Landlord.

EXHIBIT F

INTENTIONALLY OMITTED

EXHIBIT G

ESTOPPEL CERTIFICATE

The undersigned ("Tenant") hereby certifies to_____ _____("_____"), as follows:

1. Lease. Tenant is the current tenant under that certain Lease dated _____, 20___ (the "Original Lease") by and between _____ ("Landlord") and Tenant, pursuant to which Tenant leases approximately_____square feet (the "Premises") in the building located at_____(the "Building").

2. No Modifications. The Original Lease has not been modified, changed, altered, supplemented, amended or terminated in any respect, except as indicated below (if none, please state "none"; the Original Lease, as modified, changed, altered, supplemented or amended as indicated below, is referred to collectively as the "Lease"):

_____
_____
_____
_____

3. Copy. A true, correct and complete copy of the Lease is attached hereto.

4. Validity. The Lease represents the valid and binding obligation of Tenant in accordance with its terms and is in full force and effect on the date hereof. The Lease represents the entire agreement and understanding between Landlord and Tenant with respect to the Premises, the Building and the land on which the Building is situated. Tenant has not exercised any right or option to terminate the Lease, and no such rights or options remain, except_____.

5. No Concessions. Except as set forth in the Lease, Tenant is not entitled to, and has made no agreement with Landlord or its agents or employees concerning, free rent, partial rent, rebate of rent payments, credit or offset or reduction in rent, or any other type of rental concession including, without limitation, lease support payments, lease buy-outs, or assumption of any leasing or occupancy agreements of Tenant.

6. Term. Except for _____, all conditions precedent to the commencement of the initial term of the Lease have been fully satisfied or waived. The initial term of the Lease began on_____, 20____. The termination date of the present term of the Lease, excluding unexercised renewal terms, is_____, 20___, or, if the commencement date has not yet been set,_____months after the commencement date. [IF TRUE: The commencement date has occurred and Tenant has accepted possession of and currently occupies the entire Premises.] Tenant has not sublet all or any portion of the Premises to any sublessee, has not assigned, transferred, mortgaged, hypothecated or otherwise encumbered any of its rights or interests under the Lease and has not entered into any license or concession agreements with respect thereto, except for the following in accordance with the Lease: ___ _____.

7. Options. Except as set forth in the Lease, Tenant has no outstanding options or rights to renew or extend the term of the Lease, or expansion options, or cancellation options, rights of first refusal, or rights of first offer to lease other space within the Building. Tenant has no outstanding options, rights of first refusal or rights of first offer to purchase the Premises or any part thereof or all or any part of the Building and/or the land on which the Building is situated.

8. Rents. The obligation to pay rent began (or begins) on _____, 20___. The current monthly base rent payable under the Lease is $._____. The monthly base rental payment (excluding pass through charges) has been paid through the month of_____,_____. Tenant is also obligated to pay its proportionate share of ad valorem taxes, insurance and operating expenses on the Building, to the extent provided in the Lease. Tenant's estimated share of ad valorem taxes, insurance and operating expenses on the Building has been paid by Tenant through _____,_____. Except for payments of its estimated share of ad valorem taxes, insurance and operating expenses being paid in accordance with the Lease, no rent (excluding security deposits described in Paragraph 9 below) has been paid more than one (1) month in advance of its due date.

9. Security Deposits. Tenant's security deposit, if any, which has been previously deposited with Landlord is $_____(if none, please state "none"). The security deposit___is, or_____ is not, represented by a letter of credit.

10. No Default. To the best knowledge of Tenant, no event has occurred and no condition exists that constitutes, or that with the giving of notice or the lapse of time or both, would constitute, a default by Landlord or, to Tenant's knowledge, Tenant under the Lease. As of the date set forth below, to the best knowledge of Tenant, Tenant has no existing claims against Landlord or defenses to the enforcement of the Lease by Landlord and Tenant is not currently entitled to any rent abatements or offsets against the rents owing under the Lease. Without limiting the foregoing, there are no development- and construction-related deadlines related to obligations of, or items to be accomplished by, Landlord under the Lease that have not been satisfied. To Tenant's knowledge, Tenant's current use and operation of the Premises complies with all covenants and operating requirements in the Lease.

11. Allowances. All required allowances, contributions or payments (whether or not currently due and payable) by Landlord to Tenant on account of Tenant's tenant improvements have been received by Tenant and all of Tenant's tenant improvements have been completed in accordance with the terms of the Lease, except as indicated below (if none, please state "none"):

_____
_____
_____

12. No Bankruptcy Proceedings. No voluntary actions or, to Tenant's best knowledge, involuntary actions are pending against Tenant under the bankruptcy, insolvency, or reorganization laws of the United States or any state thereof.

13. Address. The current address for notices to be sent to Tenant under the Lease is set forth below.

14. Reliance. Tenant acknowledges that_____has or will hereafter acquire [INSERT ADDRESSEE'S INTEREST AS MORTGAGEE OR INVESTOR AS THE CASE MAY BE] and thus indirectly an interest in the Lease, the Premises, the Building and the land on which the Building is located and that_____is relying upon this Tenant's Estoppel Certificate in connection therewith. Tenant further acknowledges that this Tenant's Estoppel Certificate may be relied upon by, and inures to the benefit of, _____ and each of its partners and any current or future lender with a lien or mortgage upon the Building and each of their respective successors and assigns.

16. Authority. The undersigned is duly authorized to execute this Tenant's Estoppel Certificate on behalf of Tenant.

Executed as of the_____day of_____, 20___.

TENANT:

VANDA PHARMACEUTICALS, INC.

By: _____
Name:
Title:

Tenant's Current Address for Notices:

_____
_____
_____

EXHIBIT H

LEASE COMMENCEMENT DATE AGREEMENT

This Lease Commencement Date Agreement is entered into this _____ day of ___, 20_____, by MCC3, LLC ("Landlord"), a Delaware limited liability company, and _____ ("Tenant"), a _____, pursuant to the provisions of that certain Lease (the "Lease") dated _____, 20___, by and between Landlord and Tenant covering certain space in the office building located at _____ _____ (the "Building"). All terms used herein with their initial letter capitalized shall have the meaning assigned to such terms in the Lease.

WITNESSETH:

1. The Premises have been delivered to, and accepted by, the Tenant.

2. The Commencement Date is the _____ day of _____, 20__, and the Term Expiration Date is the day of _____, 20___.

3. The number of square feet of rentable area in the Premises is _____ rentable square feet.

4. The amount of additional allowance expended by Landlord is _____ Dollars ($_____).

5. The Annual Rent with respect to the Premises for the first Lease Year is an amount equal to the product of _____Dollars ($_____) multiplied by the total number of square feet of rentable area in the Premises. The amount of Annual Rent shall be increased as follows:

LEASE YEAR	BASE ANNUAL RENT P.R.S.F.		RENTABLE SQUARE FEET		BASE ANNUAL RENT		ADDITIONAL ALLOWANCE CHARGE		ANNUAL RENT
SECOND	$ 23.69	X	17,002	=	$402,777.38	+	$30,773.62	=	$433,551.00
THIRD	$ 24.40	X	17,002	=	$414,848.80	+	$30,773.62	=	$445,622.42
FOURTH	$ 25.13	X	17,002	=	$427,260.26	+	$30,773.62	=	$458,033.88
FIFTH	$ 25.89	X	17,002	=	$440,181.78	+	$30,773.62	=	$470,955.40
SIXTH	$ 26.66	X	17,002	=	$453,273.32	+	$30,773.62	=	$484,046.94
SEVENTH	$ 27.46	X	17,002	=	$466,874.92	+	$30,773.62	=	$497,648.54
EIGHTH	$ 28.29	X	17,002	=	$480,986.58	+	$30,773.62	=	$511,760.20
NINTH	$ 29.14	X	17,002	=	$495,438.28	+	$30,773.62	=	$526,211.90
TENTH	$ 30.01	X	17,002	=	$510,230.02	+	$30,773.62	=	$541,003.64
ELEVENTH	$ 30.91	X	17,002	=	$525,531.82	+	$ -0-	=	$525,531.82

6. As of the date hereof the Lease has not been modified and is in full force and effect and there are no defaults thereunder.

7. The Base Year is the 12-month period beginning on _____, 20 ____ and ending on _____, 20___.

8. The Tenant's Share is ___% based on the Rentable Floor Area of Tenant's Space divided by the Total Rentable Floor Area of the Building (i.e., _____ rentable square feet).

9. The Building Address is _____.

10. The amount of the unamortized costs per Section 2.4 of the Lease to be paid by Tenant in the event Tenant exercises its early termination option under Section 2.4 is $_____.

IN WITNESS WHEREOF, Landlord and Tenant have set their hands and seals hereunto and have caused this Lease Commencement Date Agreement to be executed by duly authorized officials thereof, the day and year respectively set forth hereinabove.

LANDLORD:

MCC3, LLC

By: Spaulding and Slye MCC3 LLC, manager

By: Spaulding and Slye LLC, manager

By: _____
Name:
Title:

TENANT:

VANDA PHARMACEUTICALS, INC.

By: _____
Name:
Title:

EXHIBIT I

ACCEPTABLE FORM OF LETTER OF CREDIT

Irrevocable Letter of Credit No.:_____

_____, 20___

_____

_____

_____

Account Party: _____

Beneficiary: _____

Amount: $_____ U.S. Dollars

Expiration Date: _____,____

Ladies and Gentlemen:

We hereby issue this irrevocable, unconditional letter of credit number _____ (the "CREDIT") in your favor, payable in immediately available funds in one or more draws of any sum or sums not exceeding in the aggregate _____ _____/100 dollars ($_____), by your draft(s) at sight in the form attached hereto as Exhibit A presented at _____.

This Credit shall be automatically renewed from year to year commencing on the first anniversary of the date hereof unless we shall give 60 days prior written notice to Beneficiary, by certified mail, return receipt requested, at the address set forth above, of our intent not to renew this Credit at the expiration of such 60 day period. During such thirty (60) day period, this Letter of Credit shall remain in full force and effect and Beneficiary may draw up to the full amount hereof when accompanied by the statement described in this Credit.

We will accept any and all such representatives as authorized and any and all statements delivered hereunder as conclusive, binding and correct without having to investigate or having to be responsible for the accuracy, truthfulness, correctness, or validity thereof, and notwithstanding the claim of any person to the contrary.

Drafts presented under this Credit shall specify the number of this Credit as set forth above and shall be presented on or before the Expiration Date hereof.

This Credit is assignable and transferable and may be transferred one or more times, without charge, upon our receipt of your written notice that an agreement has been executed to transfer or assign this Credit.

We hereby engage with you that drafts drawn under and in compliance with the terms of this Credit will be duly honored upon presentation to us.

This Credit sets forth in full the terms of our undertaking and such undertaking shall not in any way be modified, amended, amplified or limited by reference to any document, instrument or agreement referred

to herein, or by any document, instrument, or agreement in which this Credit is referred to, or to which this Credit relates, and any such reference shall not be deemed to incorporate herein by reference any such document, instrument or agreement.

Except as otherwise expressly stated herein, this Credit is subject to the Uniform Customs and Practice for Documentary Credits (1993 Revision) International Chamber of Commerce Publication No. 500, and to the extent not inconsistent therewith, the laws of the Commonwealth of Virginia, including without limitation, the Uniform Commercial Code in effect therein.

[BANK]

By: _____
Authorized Officer

EXHIBIT A TO LETTER OF CREDIT

Acceptable Form of Sight Draft in Connection with
Irrevocable Standby Letter of Credit

To: Bank of America, N.A.

From: MCC3, LLC

Re: Irrevocable Standby Letter of Credit Number: _____ (the "Letter of Credit")

Upon receipt of this sight draft and the original Letter of Credit:

Pay to the order of: MCC3, LLC

the amount of _____Dollars and _____cents.

Qualified Retirement Plan
Flexible Standardized 401(k) Plan
General Information Sheet / Summary Plan Description

EMPLOYER INFORMATION

Your Employer has adopted a 401(k) Plan for the benefit of you and your co-workers. This Plan is designed to help you meet your financial needs during your retirement years. Your Employer must follow certain rules and requirements to maintain this Plan. This General Information Sheet provides some of the details of the Plan and should be used in conjunction with the Summary Plan Description (SPD) Booklet which is provided by your Employer. Definitions of terms referenced with capitalization in this document can be found in the Definitions portion of the SPD Booklet.

Name of Plan	VANDA PHARMACEUTICALS INC 401(k) Profit Sharing Plan & Trust
Name of Adopting Employer	VANDA PHARMACEUTICALS INC
Address	47 HULFISH STREET SUITE 310
Telephone 609-683-3667	Employer's Federal Tax Identification Number 03-0491827
Plan Sequence Number 001	Employer's Fiscal Year End 12/31

SECTION ONE: EFFECTIVE DATES

This is the initial adoption of a plan by the Employer. The Plan Effective Date is _____.

If this is a restatement of an existing qualified plan (a Prior Plan), the Prior Plan was initially effective on 01/01/2003.

The restatement Effective Date is 06/24/2005.

SECTION TWO: ELIGIBILITY

See Section titled Eligibility and Participation of the SPD Booklet.

AGE AND SERVICE: You will become eligible to participate in the Plan after you satisfy the age and service requirements as identified for each contribution type.

Age:	Elective Deferrals 21	Matching Contributions 21	Employer Profit Sharing Contributions 21
YEARS OF ELIGIBILITY SERVICE:	Elective Deferrals 0	Matching Contributions 0	Employer Profit Sharing Contributions 0

Are all Employees considered to have met the age and service requirements described above if employed on the Plan Effective Date of this Plan?
[X] Yes [ ] No

EXCLUSION OF CERTAIN CLASSES OF EMPLOYEES

All Employees may become eligible to participate in the Plan except the following.

[X] Employees covered by the terms of a collective bargaining agreement (e.g., union agreement) unless the collective bargaining agreement specifies that the Employees must be covered by the Plan.

[X] Employees who are nonresident aliens and receive no earned income from the Employer within the United States.

[X] Employees who become Employees as a result of an asset or stock acquisition, merger, or similar transaction involving a change in the Employer of a trade or business (during the transition period only).

HOURS REQUIRED FOR ELIGIBILITY: The number of Hours of Service you must be employed to complete a Year of Eligibility Service is 1000. The number of Hours of Service you must exceed to avoid a Break in Eligibility Service is 500.

Employees shall be given credit for eligibility purposes for Hours of Service with the following predecessor employers(s):
_____.

ENTRY DATES: The Entry Dates upon which you can begin Plan participation are:
MONTHLY

SECTION THREE: CONTRIBUTIONS

See Section titled Contributions to the Plan of the SPD Booklet.

EMPLOYER PROFIT SHARING CONTRIBUTIONS: The amount of the Employer Profit Sharing Contribution, if any, will be determined according to a discretionary formula in an amount determined each year by the managing body of the Employer and will be allocated to each Qualifying Participant's Individual Account under the formula checked below:

[X] PRO RATA FORMULA. Under this formula, each Qualifying Participant's Individual Account will receive a pro rata allocation. This allocation is based on the Qualifying Participant's Compensation in relation to the total Compensation of all Qualifying Participants.

[ ] FLAT DOLLAR FORMULA. Under this formula, all Qualifying Participants' Individual Accounts will receive equal contributions.

[ ] INTEGRATED FORMULA. Under this formula, each Qualifying Participant's Individual Account will receive a base contribution. In addition, Qualifying Participants will receive an additional allocation (called an excess contribution) based on their Compensation which exceeds the integration level. The integration level shall be:

[ ] The Taxable Wage Base.

[ ] $_____ (a dollar amount less than the Taxable Wage Base).

[ ] _____ percent (not more than 100 percent) of the Taxable Wage Base.

QUALIFYING PARTICIPANT: For any Plan Year that an Employer Profit Sharing Contribution is made, you will be entitled to share in that contribution (and, thus, be a Qualifying Participant) if you satisfy the following conditions: (1) You are a Participant, and (2) If you terminate employment, you work at least 500 Hour(s) of Service during the Plan Year.

ELECTIVE DEFERRALS: Elective Deferrals will be permitted under this Plan and may commence on 05/01/2003.

Once you become eligible to particpate in the Plan, your Employer will provide you with a Salary Reduction Agreement to be completed before the next plan Entry Date. To change the amount of, cease, or resume your Elective Deferrals, you must complete a revised Salary Reduction Agreement. Unless otherwise stated by your Employer, you may revise your Salary Reduction Agreement the first day of the Plan Year and the first day of the seventh month of the Plan Year.

By completing a Salary Reduction Agreement to make an Elective Deferral to this Plan, your Compensation will be reduced each pay period by an amount equal to a percentage of your Compensation from 1% to 96% in increments of 1%.

If you make an excess Elective Deferral to the Plan, you must submit a request in writing for the return of the excess to the Plan Administrator no later than April 15 following the end of the tax year in which you made the excess Elective Deferral.

MATCHING CONTRIBUTIONS: Will your Employer make Matching Contributions?

[X] Yes, but only on Elective Deferrals [ ] No

If Matching Contributions will be made under this Plan, your Employer will make contributions on behalf of Qualifying Contributing Participants making Elective Deferrals based upon the formula selected below.

[X] An amount equal to 50% of your Elective Deferral which does not exceed 6% of your Compensation.

[ ] An amount equal to the sum of ____% of the portion of your Elective Deferrals which does not exceed ____% of your Compensation plus _____% of the portion of your Elective Deferrals which exceeds _____% of your Compensation but does not exceed ____% of your Compensation.

[ ] An amount, if any, equal to a percentage of your Elective Deferrals which the Employer will determine each year.

[ ] Other formula: _____.

No Matching Contribution will be made in excess of ____% of your Compensation for any Plan Year.

QUALIFYING CONTRIBUTING PARTICIPANT: For any Plan Year that a Matching Contribution is made, you will be entitled to receive Matching Contributions if you contribute Elective Deferrals, and if you terminate employment, you work at least 0 Hour(s) of Service during the Plan Year.

SAFE HARBOR CODA CONTRIBUTIONS: Will your Plan follow the Safe Harbor CODA provisions? [ ] Yes [X] No

If "yes", contributions to automatically meet certain nondiscrimination requirements will be made to your Individual Account as follows:

[ ] BASIC MATCHING CONTRIBUTIONS. An amount equal to your Elective Deferrals that does not exceed 3% of your Compensation for the Plan Year, plus 50% of your Elective Deferrals that exceeds 3% of your Compensation for the Plan Year but does not exceed 5% of your Compensation for the Plan Year.

[ ] ENHANCED MATCHING CONTRIBUTIONS. An amount equal to your Elective Deferrals that does not exceed _____ percent of your Compensation for the Plan Year plus ___ percent of your Elective Deferrals that exceeds _____ percent of your Compensation for the Plan Year but does not exceed _____ percent of your Compensation for the Plan

Year.

[ ] SAFE HARBOR NONELECTIVE CONTRIBUTIONS. If you are a Participant, you will receive Safe Harbor Nonelective Contributions to your Individual Account in an amount equal to 3% of your Compensation for the Plan Year, regardless of whether or not you make Elective Deferrals to the Plan.

In addition to the above Safe Harbor Contributions, additional Matching Contributions within Safe Harbor limits will be made as follows.

[ ] _____ percent of your Elective Deferrals that do not exceed six percent of your Compensation for the Plan Year.

[ ] _____ percent of your Elective Deferrals that do not exceed ____ percent of your Compensation for the Plan Year plus _____ percent of your Elective Deferrals not to exceed six percent of your Compensation for the Plan Year.

[ ] An amount equal to your Elective Deferrals up to a percentage of your Compensation for the Plan Year determined by your Employer from year to year. This percentage will in no event exceed four percent of your Compensation for the Plan Year.

OTHER CONTRIBUTIONS: You can make rollover and / or transfer contributions from a qualified plan, and pre-tax contribution amounts from a Traditional IRA. You cannot make Nondeductible (after-tax) Employee Contributions.

You will be permitted (if eligible) to make Catch-up Contributions after December 31, 2001.

Will Matching Contributions be made with regard to Catch-up Contributions? [X] Yes [ ] No If "yes" is selected, the Matching Contribution formula identified on your General Information Sheet will be followed.

SECTION FOUR: VESTING AND FORFEITURES

See Section titled Vesting and Forfeitures of the SPD Booklet.

You will always be fully vested in all contributions derived from Elective Deferrals, Qualified Nonelective Contributions (if any), Safe Harbor Basic Matching Contributions (if any), and Safe Harbor Nonelective Contributions (if any).

Your rollover and transfer contributions, if allowed, are 100% vested immediately. The vesting schedules below apply to your Employer Profit Sharing Contributions and Matching Contributions.

YEARS OF VESTING SERVICE	VESTED PERCENTAGE FOR EMPLOYER PROFIT SHARING CONTRIBUTIONS AND WATCHING CONTRIBUTIONS							
Profit Sharing Matching	Option 1 [ ] Option 1 [ ]	Option 2 [X] Option 2 [ ]	Option 3 [ ] Option 3 [ ]	Option 4 [ ] Option 4 [ ]	Option 5	[ ] (Complete if chosen)	Option 5	[X] (Complete if chosen)
Less than 1	0%	0%	100%	0%	_____		0%	
1	0%	0%	100%	0%	_____		25%	
2	0%	20%	100%	0%	_____		50%	
3	0%	40%	100%	20%	_____	(not less than 20%)	75%	(not less than 20%)
4	0%	60%	100%	40%	_____	(not less than 40%)	100%	(not less than 40%)
5	100%	80%	100%	60%	_____	(not less than 60%)	_____	(not less than 60%)
6	100%	100%	100%	80%	_____	(not less than 80%)	_____	(not less than 80%)
7	100%	100%	100%	100%	_____	(not less than 100%)	_____	(not less than 100%)

NOTE: If no option is selected, Option 3 shall be deemed to be selected for both Employer Profit Sharing Contributions and Matching Contributions

TOP-HEAVY PLAN: The following vesting schedule will apply if this is a Top-Heavy Plan.

YEARS OF VESTING SERVICE	[X] Option 1	[ ] Option 2
1	0%	0%
2	20%	0%
3	40%	100%
4	60%	100%
5	80%	100%
6	100%	100%

HOURS REQUIRED FOR VESTING: The number of Hours of Service you must complete to

be credited with a Year of Vesting Service is 1,000. The number of Hours of Service you must exceed to avoid a Break in Vesting Service is 500.
_____.

Employees shall be given credit for vesting purposes for Hours of Service with the following predecessor employer(s):

EXCLUSION OF CERTAIN YEARS OF VESTING SERVICE: All of your years of service will be counted for vesting of your Individual Account except the following (if checked):

[ ] Years of Service before you turn age 18.

[ ] Years of Service before the Employer maintained this Plan or a predecessor plan.

FORFEITURES: Forfeitures of Employer Profit Sharing and Matching Contributions will be allocated to the Individual Accounts of Qualifying Participants.

SECTION FIVE: DISTRIBUTIONS AND LOANS

See Section titled Distribution of Benefits, Claims Procedure and Loans of the SPD Booklet.

DISTRIBUTIONS: You can withdraw your Individual Account if you terminate employment before Normal Retirement Age, you become disabled, or you reach Normal Retirement Age but continue to work. You can request a distribution from the Plan of your vested interest in the Plan upon attainment of age 59(1/2), even if you continue to work.

Unless one of the situations above exists, you cannot withdraw your Individual Account attributable to Employer Profit Sharing and Matching Contributions, rollover contributions, or transfer contributions while you are still employed.

Can you withdraw Elective Deferrals on account of hardship? Yes No

LOANS: Can you receive loans from the Plan? Yes No (If "yes", refer to the Loan Disclosure and Basic Loan Agreement.)

FORM OF DISTRIBUTION: You may request a distribution of the vested portion of your Individual Account in the form of a Lump Sum, Installment Payments, or Annuity Contracts.

INVOLUNTARY CASH OUT: If your account balance exceeds $1,000, but is less than $5,000, the Plan Administrator may instruct that you receive your distribution in the form of a single sum payment. When determining the value of the account, rollover contributions will not be included.

REA SAFE HARBOR / QUALIFIED JOINT AND SURVIVOR ANNUITY: The REA Safe Harbor provisions of the Plan do apply.

SECTION SIX: DEFINITIONS

See Section titled Definitions of the SPD Booklet.

PLAN YEAR. The Plan Year ends on December 31.

HOURS OF SERVICE EQUIVALENCIES: Service will be determined on the basis of actual hours you are or entitled to be, paid.

COMPENSATION: Compensation for each Participant will be determined over the Plan Year. Compensation includes Elective Deferrals made according to a Salary Reduction Agreement. Generally, and unless otherwise required by the Plan or the Internal Revenue Code or Regulations, Compensation will mean only the Compensation paid to the Employee after becoming a Participant.

NORMAL RETIREMENT AGE: Normal Retirement Age under the Plan is age

SECTION SEVEN: MISCELLANEOUS

See Section titled Miscellaneous of the SPD Booklet.

INVESTMENT DIRECTION Can you direct the investment of your Individual Account? Yes No

(If " yes", see your plan Administrator for rules and procedures that will apply.)

PLAN ADMINISTRATOR: The Employer is the Plan Administrator. If the Employer is not the Plan Administrator, additional information will be contained in this section or attached in a separate addendum.

AGENT FOR SERVICE OF LEGAL PROCESS

Name of Adopting Employer VANDA PHARMACEUTICALS INC

Address 47 HULFISH STREET SUITE 310

City PRINCETON State NJ Zip 08542-

Telephone 609-683-3667

NOTE: The Agent for Service of Legal Process is the person upon whom any l

FLEXIBLE 401(k) PLAN

STANDARDIZED ADOPTION AGREEMENT

EMPLOYER INFORMATION

Name of Adopting Employer VANDA PHARMACEUTICALS INC

Address 47 HULFISH STREET SUITE 310

City PRINCETON State NJ Zip 08542-

Telephone 609-683-3667 Adopting Employer's Federal Tax Identification Number 03-0491827

Name of Plan VANDA PHARMACEUTICALS INC 401(k) Profit Sharing Plan & Trust

Plan Sequence Number 001 Adopting Employer's Fiscal Year End (specify month and day) 12/31 Account Number 107492-0030-8488

Type of Business (Select one):

[ ] Sole Proprietorship [ ] Partnership [X] C Corporation [ ] S Corporation Other (specify)_____

SECTION ONE: EFFECTIVE DATES
COMPLETE PART A OR B

PART A. EFFECTIVE DATE

This is the initial adoption of a profit sharing plan by the Employer.

The Effective Date of this Plan is _____.

NOTE: The Effective Date is usually the first day of the Plan Year in which this Adoption Agreement is signed.

PART B. RESTATEMENT DATE

This is a restatement of an existing qualified plan (a Prior Plan).

The Prior Plan was initially effective on 0l/01/2003

The Effective Date of this restatement is 06/24/2005

NOTE: The Effective Date is usual the first day of the Plan Year in which this Adoption Agreement is signed.

SECTION TWO: ELIGIBILITY
COMPLETE PARTS A OR B

PART A. AGE AND YEARS OF ELIGIBILITY SERVICE REQUIREMENT

1. EMPLOYER PROFIT SHARING CONTRIBUTIONS

AGE REQUIREMENT. An Employee will be eligible to become a Participant in the Plan for purposes of receiving an allocation of any Employer Profit Sharing Contribution made pursuant to Section Three of the Adoption Agreement after attaining age 21 (no more than 21).

YEARS OF ELIGIBILITY SERVICE REQUIREMENT. An Employee will be eligible to become a Participant in the Plan for purposes of receiving an allocation of any Employer Profit Sharing Contribution made pursuant to Section Three of the Adoption Agreement after completing 0 (enter 0, 1, 2 or any fraction less than 2) Years of Eligibility Service.

2. ELECTIVE DEFERRALS

AGE REQUIREMENT. An Employee will be eligible to become a Contributing Participant (and thus be eligible to make Elective Deferrals) after attaining age 21 (no more than 21).

YEARS OF ELIGIBILITY SERVICE REQUIREMENT. An Employee will be eligible to become a Contributing Participant in the Plan (and thus be eligible to make Elective Deferrals) after completing 0 (enter 0, 1 or any fraction less than 1) Years of Eligibility Service.

3. MATCHING CONTRIBUTIONS

AGE REQUIREMENT. If Matching Contributions (or Qualified Matching Contributions, if applicable) will be made to the Plan, a Contributing Participant will be eligible to receive Matching Contributions (or Qualified Matching Contributions, if applicable) after attaining age 21 (no more than 21).

YEARS OF ELIGIBILITY SERVICE REQUIREMENT. If Matching Contributions (or Qualified Matching Contributions, if applicable) will be made to the Plan, a Contributing Participant will be eligible to receive Matching Contributions (or Qualified Matching Contributions, if applicable) after completing 0 (enter 0, 1, 2 or any fraction

less than 2) Years of Eligibility Service.

NOTE: If any of the age requirements in this Section Two, Part A, are left blank, it shall be deemed there is no age requirement for such item. If more than one Year of Eligibility Service is selected for item 1 or item 3, the immediate 100 percent vesting schedule of Section Four of the Adoption Agreement will automatically apply for contributions described in such item. If any Year of Eligibility Service requirement is left blank, the Years of Eligibility Service required for such item shall be deemed to be 0. If a fraction is selected, an Employee will not be required to complete any specified number of Hours of Service to receive credit for a fractional year.

PART B. UNIVERSAL ELIGIBILITY CRITERIA

1. EMPLOYEES EMPLOYED AS OF EFFECTIVE DATE

Will an Employee employed as of the Effective Date of this Plan who has not otherwise met the requirements of Part A above be considered to have met those requirements as of the Effective Date (select one)?

OPTION 1: [X] Yes.

OPTION 2: [ ] NO.

NOTE: If no option is selected. Option 2 shall be deemed to be selected.

2. EXCLUSION OF CERTAIN CLASSES OF EMPLOYEES

An Employee will be eligible to become a Participant in the Plan unless such Employee is (select any that apply)

a.[X] Included in a unit of Employees covered by a collective bargaining agreement between the Employer and Employee representatives, if retirement benefits were the subject of good faith bargaining and if two percent or less of the Employees who are covered pursuant to that agreement are professionals as defined in Section 1.410(b)-9 of the Income Tax Regulations. For this purpose, the term "employee representatives" does not include any organization more than half of whose members are Employees who are owners, officers, or executives of the Employer.

b.[X] A nonresident alien (within the meaning of Section 7701(b)(l)(B) of the Code) who received no earned income (within the meaning of Section 911 (d)(2) of the Code) from the Employer which constitutes income from sources within the United States (within the meaning of Section 861(a)(3) of the Code).

c.[X] Employees who became Employees as the result of a transaction under Section 410(b)(6)(C) of the Code. Such Employees will be excluded during the period beginning on the date of the transaction and ending on the last day of the first Plan Year beginning after the date of the transaction. A transaction under Section 410(b)(6)(C) of the Code is an asset or stock acquisition, merger, or similar transaction involving a change in the employer of the employees of a trade or business.

3. HOURS REQUIRED FOR ELIGIBILITY PURPOSES

a. 1000 Hours of Service (no more than 1,000) shall be required to constitute a Year of Eligibility Service.

b. 500 Hours of Service (no more than 500 but less than the number of specified in item 3(a), above) must be exceeded to avoid a Break in Eligibility Service.

c. For purposes of determining Years of Eligibility Service, an Employee shall be given credit for Hours of Service with the following predecessor employer(s) (complete if applicable).
_____

4. ENTRY DATES

The Entry Dates for participation shall be (select one):

OPTION 1: [ ] The first day of the Plan Year and the first day of the seventh month of the Plan Year.

OPTION 2: [X] Other (specify) MONTHLY

NOTE:If no option is selected, Option 1 shall be deemed to be selected. Option 2, can be selected only if the eligibility requirements and Entry Dates are coordinated such that each Employee will become a Participant in the Plan no later than the earlier of (1) the first day of the Plan Year beginning after the date the Employee satisfies the age and service requirements of Section 410 (a) of the Code; or (2) six months after the date the Employee satisfies such requirements.

SECTION THREE: CONTRIBUTIONS
COMPLETE PARTS A THROUGHH

PART A. EMPLOYER PROFIT SHARING CONTRIBUTIONS

1. CONTRIBUTION FORMULA (select one):

OPTION 1: [X] Discretionary Formula. For each Plan Year the Employer will contribute an amount to be determined from year to year.

OPTION 2: [ ] Fixed Formula. _____ percent of the Compensation of all Qualifying Participants under the Plan for the Plan Year.

Option 3: [ ] Fixed Percent of Profits Formula. _____ percent of the Employer's profits that are in excess of $____.

OPTION 4: [ ] Frozen Plan. This Plan is frozen effective ___ and the Employer will not make additional contributions to the Plan after such date.

OPTION 5: [ ] Not applicable. The Employer will not make Employer Profit Sharing Contributions to this Plan.

NOTE: If no option is selected, Option 1 shall be deemed to be selected.

2. ALLOCATION FORMULA (select one):

OPTION 1: [X] Pro Rata Formula. Employer Profit Sharing

Contributions shall be allocated to the Individual Accounts of Qualifying Participants in the ratio that each Qualifying Participant's Compensation for the Plan Year bears to the total Compensation of all Qualifying Participants for the Plan Year.

OPTION 2: [ ] Flat Dollar Formula. Employer Profit Sharing Contributions allocated to the Individual Accounts of Qualifying Participants for each Plan Year shall be the same dollar amount for each Qualifying Participant.

OPTION 3: [ ] Integrated Formula. Employer Profit Sharing Contributions shall be allocated pursuant to the integrated allocation formula in Section 3.01(B)(2) of the Plan.

The integration level shall be (select one):

SUBOPTION (a): [ ] The Taxable Wage Base.

SUBOPTION (b): [ ] $_____(a dollar amount less than the Taxable Wage Base).

SUBOPTION (c): [ ] _____ percent (not more than 100 percent) of the Taxable Wage Base.

NOTE: If no option is selected, Suboption (a) shall be deemed to be selected.

NOTE: If no option is selected. Option I shall be deemed to be selected.

3. QUALIFYING PARTICIPANTS

A Participant will be a Qualifying Participant and thus entitled to share in the Employer Profit Sharing Contribution for any Plan Year only if the Participant is a Participant who satisfies all of the eligibility requirements in Section Two of the Adoption Agreement regarding Employer Profit

Sharing Contributions on at least one day of such Plan Year and, if such Participant has incurred a Termination of Employment, satisfies the following Hours of Service requirement (select one):

OPTION 1: [X] The Participant completes at least 500 Hours of Service during the Plan Year.

Option 2: [ ] The Participant completes at least _____(not more than 500) Hours of Service during the Plan Year. However, this condition will be waived for the following reason(s) (select at least one):

SUBOPTION (a): [ ] The Participant's Death.

SUBOPTION (b): [ ] The Participant's Termination of Employment after having incurred a Disability.

SUBOPTION (c): [ ] The Participant's Termination of Employment after having reached Normal Retirement Age.

SUBOPTION (d): [ ] This condition will not be waived.

NOTE: If no suboption is selected, Suboptions (a), (b) and (c) will be deemed to be selected.

NOTE: If no option is selected, Option 1 shall be deemed to be selected.

4. CONTRIBUTIONS TO DISABLED PARTICIPANTS

Will a Participant who has incurred a Disability be entitled to an Employer Profit Sharing Contribution pursuant to Section 3.01 (B) of the Plan (select one)?

OPTION 1: [ ] YES.

OPTION 2: [X] NO.

NOTE: If no option is selected, Option 2 shall be deemed to be selected.

PART B. ELECTIVE DEFERRALS

1. AUTHORIZATION OF ELECTIVE DEFERRALS

Will Elective Deferrals be permitted under this Plan (select one)?

OPTION 1: [X] YES.

OPTION 2: [ ] NO.

NOTE: If no option is selected. Option 1 shall be deemed to be selected. Complete the remainder of Section Three only if Option 1 is selected. Elective Deferrals may commence on 05/01/2003

NOTE: This date may be no earlier than the date this Adoption Agreement is signed because Elective Deferrals cannot be made retroactively.

2. LIMITS ON ELECTIVE DEFERRALS

a. If Elective Deferrals are permitted under the Plan, a Contributing Participant may elect under a salary reduction agreement to have his or her Compensation reduced by an amount as described below (select one):

OPTION 1: [X] An amount equal to a percentage of the Contributing Participant's Compensation from 0 percent to 96 percent in increments of 1 percent.

OPTION 2: [ ] An amount of the Contributing Participant's Compensation not less than $ _____ and not more than $ _____.

The amount of such reduction shall be contributed to the Plan by the Employer on behalf of the Contributing Participant. For any taxable year, a Contributing Participant's Elective Deferrals shall not exceed the limit contained in Section 402(g) of the Code in effect at the beginning of such taxable year.

NOTE: Unless specified otherwise in this Adoption Agreement, bonuses shall be included in Compensation and will, therefore, be subject to a Participant's salary reduction agreement.

3. SEPARATE DEFERRAL ELECTION FOR BONUSES

Instead of or in addition to making Elective Deferrals through payroll deduction, may a Contributing Participant be permitted to make a separate deferral election to contribute to the Plan, as an

Elective Deferral, part or all of a bonus rather than receive such bonus in cash (select one)?

OPTION 1: [ ] YES.

OPTION 2: [X] NO.

NOTE: If no option is selected, Option 2 shall be deemed to be selected. A separate deferral election made with respect to a bonus shall not be subject to the limits described under the portion of this Adoption Agreement titled "Limits on Elective Deferrals" unless such limits are prescribed by the Code or related regulations.

4. CLAIMING EXCESS ELECTIVE DEFERRALS

A Participant who claims Excess Elective Deferrals for the preceding calendar year must submit his or her claim in writing to the Plan Administrator by (select one)

OPTION 1: [ ] March 1.

Option 2: [X] Other (specify a date not later than April 15.) April 15

NOTE: If no option is selected, Option I shall be deemed to be selected.

5. AUTOMATIC ELECTIVE DEFERRALS

a. AUTHORIZATION OF AUTOMATIC ELECTIVE DEFERRALS

If an Employee who has met the eligibility requirements set forth in Section Two, Part B of the Adoption Agreement fails to provide the Employer a salary reduction agreement, will a portion of such eligible Employee's Compensation be automatically withheld and contributed to the Plan as an Elective Deferral?

OPTION 1: [ ] YES.

OPTION 2: [X] No.

NOTE: If no option is selected, Option 2 shall be deemed to be selected. Complete the remainder of Part B, item 5 only if Option I is selected.

b. AMOUNT OF AUTOMATIC ELECTIVE DEFERRALS

The following percentage or amount of each eligible Employee's Compensation will be automatically withheld and contributed to the plan as an Elective Deferral (select and complete one):

OPTION 1: [ ] _____Percent.

OPTION 2: [ ] $ _____.

NOTE: If no option is selected, Option 1 shall be deemed selected and three percent of Compensation shall be deemed to be entered.

PART C. MATCHING CONTRIBUTIONS

1. AUTHORIZATION OF MATCHING CONTRIBUTIONS

Will the Employer make Matching Contributions to the Plan on behalf of a Qualifying Contributing Participant (select one)?

OPTION 1: [X] Yes, but only with respect to a Contributing Participant's Elective Deferrals.

OPTION 2: [ ] Yes, but only with respect to a Participant's Nondeductible Employee Contributions.

OPTION 3: [ ] Yes, with respect to both Elective Deferrals and Nondeductible Employee Contributions.

OPTION 4: [ ] No.

NOTE: If no option is selected, Option 4 shall be deemed to be selected. Complete the remainder of Part C only if Option 1, 2 or 3 is selected.

2. MATCHING CONTRIBUTION FORMULA

If the Employer will make Matching Contributions, then the amount of such Matching Contributions made on behalf of a Qualifying Contributing Participant each Plan Year shall be (select one):

OPTION 1: [X] An amount equal to 50 percent of such Contributing Participant's Elective Deferral (and/or Nondeductible Employee Contribution, if applicable) which does not exceed 6 percent of the Contributing Participant's Compensation.

OPTION 2: [ ] An amount equal to the sum of _____ percent of the portion of such Contributing Participant's Elective Deferral (and/or Nondeductible Employee Contribution, if applicable) which does not exceed _____ percent of the Contributing Participant's Compensation plus _____ percent of the portion of such Contributing Participant's Elective Deferral (and/or Nondeductible Employee Contribution, if applicable) which exceeds _____ percent but does not exceed _____ percent of the Contributing Participant's Compensation.

OPTION 3: [ ] Such amount, if any, equal to that percentage of each Contributing Participant's Elective Deferral (and/or Nondeductible Employee Contribution, if applicable) which the Employer, in its sole discretion, determines from year to year.

OPTION 4: [ ] Other formula (specify an amount equal to a percentage of the Elective Deferrals (and/or Nondeductible Employee Contribution, if applicable) of each Contributing Participant entitled thereto.)_____

NOTE: If Option 4 is selected, the formula specified can only allow Matching Contributions to be made with respect to a Contributing Participant's Elective Deferrals (and/or Nondeductible Employee Contribution, if applicable). The proper amount of Matching Contributions may be determined either periodically throughout the Plan Year (e.g., each payroll period) or at the end of each Plan Year as long as the proper amount is determined in a uniform and nondiscriminatory manner.

3. PLAN YEAR LIMIT ON MATCHING CONTRIBUTIONS

Notwithstanding the Matching Contribution formula specified above, no Matching Contribution in excess of $ _____ or _____ percent of a Contributing Participant's Compensation will be made with respect to any Contributing Participant for any Plan Year.

4. QUALIFYING CONTRIBUTING PARTICIPANTS

A Contributing Participant who satisfies the eligibility requirements described in Section Two of the Adoption Agreement regarding Elective Deferrals and Matching Contributions will be a Qualifying Contributing Participant and thus entitled to share in Matching Contributions for any Plan Year only if the Participant is a Contributing Participant and, if such Contributing Participant has incurred a Termination of Employment, satisfies the following Hours of Service requirement (select one):

OPTION 1: [ ] The Contributing Participant completes at least 500 Hours of Service during the Plan Year.

OPTION 2: [X] The Contributing Participant completes at least 0 (not more than 500) Hours of Service during the Plan Year. However, this condition will be waived for the following reason(s) (select at least one):

SUBOPTION (a): [ ] The Contributing Participant's Death.

SUBOPTION (b): [ ] The Contributing Participant's Termination of Employment after having incurred a Disability.

SUBOPTION (c): [ ] The Contributing Participant's Termination of Employment after having reached Normal Retirement Age.

SUBOPTION (d): [X] This condition will not be waived.

NOTE: If no suboption is selected, Suboptions a, b and c will be deemed to be selected.

NOTE: If no option is selected, Option 1 shall be deemed to be selected.

PART D. QUALIFIED NONELECTIVE CONTRIBUTIONS

1. QUALIFIED NONELECTIVE CONTRIBUTION FORMULA

For each Plan Year, the Employer may contribute an amount to be determined from year to year.

2. ALLOCATION OF QUALIFIED NONELECTIVE CONTRIBUTIONS

Allocation of Qualified Nonelective Contributions to Participants entitled thereto shall be made (select one):

OPTION 1: [X] In the ratio which each non-Highly Compensated Employee Participant's Compensation for the applicable Plan Year bears to the total Compensation of all non-Highly Compensated Employee Participants for such Plan Year.

OPTION 2: [ ] In the ratio which each Participant's Compensation for the applicable Plan Year bears to the total Compensation of all Participants for such Plan Year.

OPTION 3: [ ] In the ratio which each non-Highly Compensated Employee Participant's Compensation not in excess of $ ____ for the applicable Plan Year bears to the total Compensation of all non-Highly Compensated Employee Participants not in excess of $ _____ for such Plan Year.

OPTION 4: [ ] In an amount, determined pursuant to Section 3.09 of the Plan, required to satisfy either the Actual Deferral Percentage test described in Section 3.13 of the Plan, the Actual Contribution Percentage test described in Section 3.14 of the Plan, or both.

NOTE: If no option is selected, Option 4 shall be deemed to be selected.

PART E. QUALIFIED Matching CONTRIBUTIONS

1. QUALIFIED MATCHING CONTRIBUTION FORMULA

If the Employer will make Qualified Matching Contributions, then the amount of such Qualified Matching Contributions made on behalf of a Qualifying Contributing Participant each Plan Year shall be (select one):

OPTION 1: [ ] An amount equal to _____ percent of such Contributing Participant's Elective Deferral (and/or Nondeductible Employee Contribution, if applicable) which does not exceed _____ percent of the Contributing Participant's Compensation.

OPTION 2: [ ] An amount equal to the sum of _____ percent of the portion of such Contributing Participant's Elective Deferral (and/or Nondeductible Employee Contribution, if applicable) which does not exceed _____ percent of the Contributing Participant's Compensation plus _____ percent of the portion of such Contributing Participant's Elective Deferral (and/or Nondeductible Employee Contribution, if applicable) which exceeds _____ percent of the Contributing Participant's Compensation.

OPTION 3: [X] Such amount, if any, as determined by the Employer in its sole discretion, equal to that percentage of the Elective Deferrals (and/or Nondeductible Employee Contribution, if applicable) of each Contributing Participant entitled thereto which would be sufficient to cause the Plan to satisfy either the Actual Deferral Percentage test (described in Section 3.13 of the Plan) or the Actual Contribution Percentage test (described in Section 3.14 of the Plan) for the Plan Year or both.

OPTION 4: [ ] Other formula (specify an amount equal to a percentage of the Elective Deferrals (and/or Nondeductible Employee Contribution, if applicable) of each Contributing Participant entitled thereto.)_____

NOTE: If no option is selected, Option: shall be deemed to be selected.

2. PARTICIPANTS ENTITLE 1 TO QUALIFIED MATCHING CONTRIBUTIONS

Qualified Matching Contributions, if made to the Plan, will be made on behalf of (select one):

OPTION 1: [X] Each Contributing Participant who makes Elective Deferrals who is a non-Highly Compensated Employee.

OPTION 2: [ ] All Contributing Participants who make Elective Deferrals.

NOTE: If no option is selected, Option 1 shall be deemed to be selected.

3. PLAN YEAR LIMIT ON QUALIFIED MATCHING CONTRIBUTIONS

Notwithstanding the Qualified Matching Contribution formula

specified above, no Qualified Matching Contribution in excess of $_____ or _____ percent of a Contributing Participant's Compensation will be made with respect to any Contributing Participant for any Plan Year.

PART F. SAFE HARBOR CODA CONTRIBUTIONS

A Plan intending to satisfy the requirements of Sections 401(k)(12) and 401(m)(11) of the Code generally must satisfy such requirements, including the notice requirement, for the entire Plan Year. See Notice 98-52, 1998-46 I.R.B. 16, Notice 2000-3, 2000-4 I.R.B. 413, and Rev. Proc 2000-20, 2000-6 I.R.B. 553, for more information.

1. APPLICATION OF SAFE HARBOR CODA

Will the safe harbor CODA provisions of Section 3.15 of the Plan apply (select one) ?

OPTION 1: [ ] YES.

OPTION 2: [X] NO.

NOTE: If no option is selected, Option 2 will be deemed to be selected. Complete the remainder of this Part F only if Option 1 is selected. If Option 1 is selected, the safe harbor CODA provisions of the Plan shall apply for the Plan Year and any provisions relating to the ADP or ACP tests shall not apply.

2. ADP TEST SAFE HARBOR CONTRIBUTIONS

In lieu of Basic Matching Contributions, the Employer will make the following contributions for the Plan Year (select one):

OPTION 1: [ ] Enhanced Matching Contributions

The Employer will make Matching Contributions to the Individual Account of each Eligible Employee in an amount equal to the sum of

(i) The Employee's Elective Deferrals that do not exceed _____ percent of the Employee's Compensation for the Plan Year plus

(ii) _____percent of the Employee's Elective Deferrals that exceed _____ percent of the Employee's Compensation for the Plan Year and that do not exceed _____ percent of the Employee's Compensation for the Plan Year.

NOTE: In the blank in (i) above and the second blank in (ii) above, insert a number that is equal to or greater than three, but less than or equal to six. The first and last blanks in (ii) must be completed so that, at any rate of Elective Deferrals, the Matching Contribution is at least equal to the Matching Contribution receivable if the Employer were making Basic Matching Contributions, but the rate of match cannot increase as Elective Deferrals increase. For example, if "4" is inserted in the blank in (i), (ii) need not be completed.

OPTION 2: [ ] Safe Harbor Nonelective Contributions

The Employer will make a Safe Harbor Nonelective Contribution to the account of each Eligible Employee in an amount equal to ____ (not less than three) percent of the Employee's Compensation for the Plan Year.

Option 3: [ ] Not Applicable

The Employer will make Basic Matching Contributions as described in Section 3.15 of the Plan.

3. RECIPIENT PLAN

The ADP Test Safe Harbor Contributions will be made to (select one only if Option 1 is selected for item 1 above):

OPTION 1: [X] This Plan.

OPTION 2: [ ] Other plan (specify plan of the Employer) _____

NOTE: If no option is selected, Option 1 shall be deemed to be selected. Option 2 may be selected only if this Plait is a Plan that is paired with another defined contribution plan.

4. ACP TEST SAFE HARBOR MATCHING CONTRIBUTIONS

NOTE: No additional contributions are required in order to satisfy the requirements for a safe harbor CODA. However, if the Employer desires to make Matching Contributions other than Basic or Enhanced Matching Contributions, then the following must be completed.

For the Plan Year, the Employer will make ACP Test Safe Harbor Matching Contributions to the Individual Account of each Eligible Employee in the amount of (select one):

OPTION 1: [ ] _____ percent of the Employee's Elective Deferrals that do not exceed six percent of the Employee's Compensation for the Plan Year.

OPTION 2: [ ] _____ percent of the Employee's Elective Deferrals that do not exceed _____ percent of the Employee's Compensation for the Plan Year plus _____ percent of the Employee's Elective Deferrals thereafter, but no Matching Contributions will be made on Elective Deferrals that exceed six percent of Compensation.

NOTE: The number inserted in the third blank cannot exceed the number inserted in the first blank.

Option 3: [ ] The Employee's Elective Deferrals that do not exceed a percentage of the Employee's Compensation for the Plan Years. Such percentage is determined by the Employer for the year but in no event can exceed four percent of the Employee's Compensation.

PART G. OTHER CONTRIBUTIONS

1. ROLLOVER CONTRIBUTIONS

May an Employee make rollover contributions to the Plan pursuant to Section 3.03 of the Plan (select one)?

OPTION 1: [X] YES.

OPTION 2: [ ] Yes, unless such Employee is part of an excluded class of Employees.

OPTION 3: [ ] Yes, but only after becoming a Participant.

OPTION 4: [ ] No.

NOTE: If no option is selected, Option 1 shall be deemed to be selected.

2. TRANSFER CONTRIBUTIONS

May an Employee make transfer contributions to the Plan pursuant to Section 3.04 of the Plan (select one)?

OPTION 1: [X] YES.

OPTION 2: [ ] Yes, unless such Employee is part of an excluded class of Employees.

OPTION 3: [ ] Yes, but only after becoming a Participant.

OPTION 4: [ ] Yes, but only if the assets are exempt from the Qualified Joint and Survivor Annuity rules as described in Section 5.13 of the Plan (without regards to Section 5.13(E) of the Plan) thereof.

OPTION 5: [ ] No.

NOTE: If no option is selected, Option 1 shall be deemed to be selected.

3. NONDEDUCTIBLE EMPLOYEE CONTRIBUTIONS

May an Employee make Nondeductible Employee Contributions pursuant to Section 3.08 of the Plan (select one)?

OPTION 1: [ ] Yes. If "Yes," check here if such contributions will be mandatory [ ]

OPTION 2: [X] No.

NOTE: If no option is selected. Option 2 shall be deemed to be selected.

Nondeductible Employee Contributions may commence on _____

4. PARTICIPANTS ENTITLED TO RECEIVE MINIMUM ALLOCATION

Any minimum allocation required pursuant to Section 3.01(E) of the Plan shall be allocated to the Individual Accounts of (select one):

OPTION 1: [X] Participants who are non-Key Employees.

OPTION 2: [ ] All Participants.

NOTE: If no option is selected, Option 1 shall be deemed to be selected.

5. TOP-HEAVY RATIO

For purposes of establishing the Present Value of benefits under a defined benefit plan to compute the top-heavy ratio as described in Section 7.19(B) of the Plan, any benefit shall be discounted only for mortality and interest based on the following (select one):

OPTION 1: [X] Not applicable because the Employer has not maintained a defined benefit plan.

OPTION 2: [ ] The interest rate and mortality table specified for this purpose in the defined benefit plan.

OPTION 3: [ ] Interest rate of _____ percent and the following mortality table (specify)_____.

6. MINIMUM ALLOCATION OR BENEFIT

For any Plan Year with respect to which this Plan is a Top-Heavy Plan, any minimum allocation required pursuant to Section 3.01(E) of the Plan shall be made (select one):

OPTION 1: [X] To this Plan.

OPTION 2: [ ] To the following plan maintained by the Employer (specify name and plan sequence number of plan)
_____

OPTION 3: [ ] In accordance with the method described on an attachment to this Adoption Agreement. (Attach language describing the method that will be used to satisfy Section 416 of the Code. Such method must preclude Employer discretion.)

NOTE: If no option is selected, Option 1 shall be deemed to be selected.

PART H. ADP AND ACP TESTING ALTERNATIVES

CURRENT YEAR TESTING METHOD

The testing method used for purposes of the ADP and ACP tests under this Plan shall be (select one):

OPTION 1: [ ] Prior Year Testing Method.

INITIAL PLAN YEAR ADP

If this is not a successor Plan, then, for the first Plan Year this Plan permits any Participant to make Elective Deferrals, the ADP for Participants who are non-Highly Compensated Employees shall be (select one):

SUBOPTION (a): [ ] 3%.

SUBOPTION (b): [ ] Such first Plan Year's ADP.

NOTE: If no suboption is selected, Suboption (a) shall be deemed to be selected.

INITIAL PLAN YEAR ACP

If this is not a successor Plan, then, for the first Plan Year this Plan permits any Participant to make Nondeductible Employee Contributions, provides for Matching Contributions or both, the ACP for Participants who are non-Highly Compensated Employees shall be (select one):

SUBOPTION (a): [ ] 3 %.

SUBOPTION (b): [ ] Such first Plan Year's ACP.

NOTE: If no suboption is selected, Suboption (a) shall be deemed to be selected.

OPTION 2: [X] Current Year Testing Method.

NOTE: If no option is selected, Option 1 shall be deemed to be selected. If Option 2 is selected, the current year testing method must continue to be used unless (1) the Plan has been using the current year testing method for the preceding five Plan Years, or, if fewer, the number of Plan Years the Plan has been in existence; or (2) the Plan otherwise meets one of the conditions specified in Notice 98-1 (or additional guidance issued by the Internal Revenue Service (IRS)) for changing from the current year testing method.

SECTION FOUR: VESTING AND FORFEITURES
COMPLETE PARTS A THROUGH G

PART A. VESTING SCHEDULE FOR EMPLOYER PROFIT SHARING CONTRIBUTIONS AND MATCHING CONTRIBUTIONS

A Participant shall become Vested in his or her Individual Account derived from Profit Sharing Contributions and Matching Contributions, if applicable, made pursuant to Section Three of the Adoption Agreement as follows. (select 1 vesting schedule for Employer Profit Sharing Contributions and 1 vesting schedule for Matching Contributions, if applicable):

1. CURRENT VESTING SCHEDULE

YEARS OF VESTING SERVICE	VESTED PERCENTAGE							
Profit Sharing	Option 1 [ ]	Option 2 [X]	Option 3 [ ]	Option 4 [ ]	Option 5 [ ]	(Complete if Chosen)		
Matching	Option 1 [ ]	Option 2 [ ]	Option 3 [ ]	Option 4 [ ]			Option 5 [X]	(Complete if Chosen)
Less than One	0%	0%	100%	0%	_____		0%	
1	0%	0%	100%	0%	_____		25%	
2	0%	20%	100%	0%	_____		50%	
3	0%	40%	100%	20%	_____	(not less than 20%)	75%	(not less than 20%)
4	100%	60%	100%	40%	_____	(not less than 40%)	100%	(not less than 40%)
5	100%	80%	100%	60%	_____	(not less than 60%)	_____	(not less than 60%)
6	100%	100%	100%	80%	_____	(not less than 80%)	_____	(not less than 80%)
7	100%	100%	100%	100%	_____	(not less than 100%)	_____	(not less than 100%)

NOTE: If no option is selected, Option 3 will be deemed to be selected for both Employer Profit Sharting Contributions and Mtching Contributions.

2. PRIOR VESTING SCHEDULE (Complete this Part A, item 2 only if the Plan has been amended to include a less favorable vesting schedule.)

YEARS OF VESTING SERVICE	VESTED PERCENTAGE							
it Sharing Matching	Option 1 [ ] Option 1 [ ]	Option 2 [ ] Option 2 [ ]	Option 3 [ ] Option 3 [ ]	Option 4 [ ] Option 4 [ ]	Option 5 [ ] _____ %	(Complete if Chosen)	Option 5 [ ] _____	(Complete if Chosen)
Less than One	0%	0%	100%	0%				
1	0%	0%	100%	0%				
2	0%	20%	100%	0%				
3	0%	40%	100%	20%		(not less than 20%)		(not less than 20%)
4	0%	60%	100%	40%		(not less than 40%)		(not less than 40%)
5	100%	80%	100%	60%		(not less than 60%)		(not less than 60%)
6	100%	100%	100%	80%		(not less than 80%)		(not less than 80%)
7	100%	100%	100%	100%		(not less than 100%)		(not less than 100%)

PART B. TOP-HEAVY VESTING SCHEDULE

Pursuant to Section 4.01(B) of the Plan, the vesting schedule that will apply when this Plan is a Top-Heavy Plan (unless the Plan's regular vesting schedule provides for more rapid vesting) shall be (select one):

OPTION 1: [X] 6 Year Graded.

OPTION 2: [ ] 3 Year Cliff.

NOTE: If no option is selected, Option 1 shall be deemed to be selected for those contributions identified in Part A above that are subject to a graded vesting schedule and Option 2 shall be deemed to be selected for those contributions identified in Part A above that are subject to a cliff vesting schedule.

PART C. HOURS REQUIRED FOR VESTING PURPOSES

1. 1000 Hours of Service (no more than 1,000) shall be required to constitute a Year of Vesting Service.

2. 500 Hours of Service (no more than 500 but less than the number specified in this Section Four, Part C, item 1, above) must be exceeded to avoid a Break in Vesting Service.

3. For purposes of determining Years of Vesting Service, an Employee shall be given credit for Hours of Service with the following predecessor employer(s) (complete if applicable).
_____

PART D. EXCLUSION OF CERTAIN YEARS OF VESTING SERVICE

All of an Employee's Years of Vesting Service with the Employer are counted to determine the Vested percentage in the Participant's Individual Account except (select any that apply):

[ ] Years of Vesting Service before the Employee reaches age 18.

[ ] Years of Vesting Service before the Employer maintained this Plan or a predecessor plan.

PART E. ALLOCATION OF FORFEITURES OF EMPLOYER PROFIT SHARING CONTRIBUTIONS

Forfeitures shall be (select one):

OPTION 1: [X] Allocated to the Individual Accounts of the Participants specified below in the manner described in Section 3.01(B) (for Employer Profit Sharing Contributions).

The Participants entitled to receive allocations of such Forfeitures shall be (select one):

SUBOPTION (a): [X] Qualifying Participants.

SUBOPTION (b): [ ] All Participants.

NOTE: If no suboption is selected, Suboption (a) shall be deemed to be selected.

OPTION 2: [ ] Applied to reduce Employer Contributions.

NOTE: If no option is selected, Option 2 shall be deemed to be selected.Pursuant to Section 3.01(C) of the Plan and notwithstanding the election made above, the Employer may first apply forfeitures to either the payment of the Plan's administrative expenses in accordance with Section 7.04 of the Plan or the restoration of Participant's Individual

Accounts pursuant to Section 4.01(C)(3) of the Plan.

PART F. ALLOCATION OF FORFEITURES OF MATCHING CONTRIBUTIONS

Forfeitures of Matching Contributions shall be (select one):

OPTION 1: [X] Allocated, after all other Forfeitures under the Plan, to each Participant's Individual Account in the ratio which each Participant's Compensation for the Plan Year bears to the total Compensation of all Participants for such Plan Year.

The Participants entitled to receive allocations of such Forfeitures shall be (select one):

SUBOPTION (a): [ ] Qualifying Contributing Participants.

SUBOPTION (b): [X] Qualifying Participants.

SUBOPTION (c): [ ] All Participants.

NOTE: If no suboption is selected, Suboption (a) shall be deemed to be selected.

OPTION 2: [ ] Applied to reduce Employer Contributions.

NOTE: If no option is selected, Option 2 shall be deemed to be selected. Pursuant to Section 3.01(C) of the Plan and notwithstanding the election made above, the Employer may first apply forfeitures to either the payment of the Plan's administrative expenses in accordance with Section 7.04 of the Plan or the restoration of Participant's Individual Accounts pursuant to Section 4.01 (C)(3) of the Plan.

PART G. ALLOCATION OF FORFEITURES OF EXCESS AGGREGATE CONTRIBUTIONS

Forfeitures of Excess Aggregate Contributions shall be (select one):

OPTION 1: [ ] Allocated, after all other Forfeitures under the Plan, to each Qualifying Contributing Participant's Matching Contribution account in the ratio which each Qualifying Contributing Participant's Compensation for the Plan Year bears to the total Compensation of all Qualifying Contributing Participants for such Plan Year. Such Forfeitures will not be allocated to the account of any Highly Compensated Employee.

OPTION 2: [X] Applied to reduce Employer Contributions.

NOTE: If no option is selected. Option 2 shall be deemed to be selected.

SECTION FIVE: DISTRIBUTIONS AND LOANS
COMPLETE PARTS A THROUGH C

PART A. DISTRIBUTABLE EVENTS (Answer each of the following items.)

1. TERMINATION OF EMPLOYMENT BEFORE NORMAL RETIREMENT AGE

May a Participant who has not reached Normal Retirement Age request a distribution from the Plan upon Termination of Employment (select one)?

OPTION 1: [X] YES.

OPTION 2: [ ] NO.

2. DISABILITY

May a Participant who has incurred a Disability request a distribution from the Plan (select one)?

OPTION 1: [X] YES.

OPTION 2: [ ] NO.

3. ATTAINMENT OF NORMAL RETIREMENT AGE

May a Participant who has attained Normal Retirement Age but has not incurred a Termination of Employment request a distribution from the Plan (select one)?

OPTION 1: [X] Yes.

OPTION 2: [ ] No.

4. ATTAINMENT OF AGE 59 1/2

May a Participant who has attained age 59 1/2 request a distribution from the Plan of that portion of the Participant's Individual Account attributable to the following types of contributions while still employed by the Employer (select one)?

Employer Profit Sharing Contributions and Matching Contributions

OPTION 1: [X] YES.

OPTION 2: [ ] Yes, but only with respect to a Participant who is 100 percent Vested in his or her Individual Account attributable to the type of contribution that will be withdrawn.

OPTION 3: [ ] NO.

Elective Deferrals

OPTION 1: [X] YES.

OPTION 2: [ ] NO.

5. IN-SERVICE WITHDRAWALS OF EMPLOYER PROFIT SHARING CONTRIBUTIONS AND MATCHING CONTRIBUTIONS

May a Participant request a distribution from the Plan of that portion of the Participant's Individual Account attributable to Employer Profit Sharing Contributions and Matching Contributions (if applicable) pursuant to Section 5.01(A)(4) of the Plan (select one)?

OPTION 1: [ ] YES.

OPTION 2: [ ] Yes, but only with respect to a Participant who is 100 percent Vested in his or her Individual Account attributable to the type of contribution that will be withdrawn.

OPTION 3: [ ] Yes, but only with respect to a Participant who has participated in the Plan for _____ or more years and attained age_____.

OPTION 4: [ ] Yes, but only with respect to a Participant who is 100 percent Vested and has participated in the Plan for _____ or more years and attained age_____.

OPTION 5: [X] NO.

If Options 1 through Option 4 are selected, will such In-Service withdrawals be permitted only on account of hardship pursuant to Section 5.01(A)(5)of the Plan (select one)? [ ] Yes [ ] No

If "Yes" is selected, the definition of hardship [ ] will [ ] will not be limited to the safe harbor definition provided in Section 5.01(A)(6)(b) of the Plan.

6. WITHDRAWALS OF ROLLOVER CONTRIBUTIONS

May an Employee request a distribution of his or her rollover contributions at any time?

OPTION 1: [ ] YES.

OPTION 2: [X] NO.

7. WITHDRAWALS OF TRANSFER CONTRIBUTIONS

May an Employee request a distribution of his or her transfer contributions at any time?

OPTION 1: [ ] Yes.

OPTION 2: [X] No.

8. HARDSHIP WITHDRAWALS OF ELECTIVE DEFERRALS

May a Participant request a distribution of his or her Elective Deferrals on account of hardship pursuant to Section 5.01(A)(6) of the Plan?

OPTION 1: [ ] Yes.

OPTION 2: [X] No.

9. LOANS

May a Participant request a loan pursuant to Section 5.19 of the Plan?

OPTION 1: [X] Yes.

OPTION 2: [ ] No.

NOTE: If no option is selected for items 1 through 8, Option I shall be deemed to be selected for such items. If no option is selected for item 9, Option 2 shall be deemed to be selected.

PART B. 1. FORM OF DISTRIBUTION (Answer each of the following items)

1. LUMP SUM

May a Participant request a distribution of the Vested portion of his or her Individual Account in a lump sum, subject to Section 5.02(C) of the Plan (select one)?

OPTION 1: [X] Yes.

OPTION 2: [ ] No.

2. INSTALLMENT PAYMENTS

May a Participant request a distribution of the Vested portion of his or her Individual Account over a period not to exceed the life expectancy of the Participant or the joint and last survivor life, expectancy of the Participant and his or her designated Beneficiary, subject to Section 5.02(C) of the Plan (select one)?

OPTION 1: [X] Yes.

OPTION 2: [ ] No.

3. ANNUITY CONTRACTS

May a Participant apply the Vested portion of his or her Individual Account toward the purchase of an annuity contract, subject to Section 5.02(C) of the Plan (select one)?

OPTION 1: [X] Yes.

OPTION 2: [ ] No.

4. INVOLUNTARY CASHOUTS

An Eligible Rollover Distribution that exceeds $1,000 but does not exceed $5,000 will be paid in the following pursuant to Sections 5.02 and 5.04 of the Plan (select one):

OPTION 1: [X] a single sum.

OPTION 2: [ ] a Direct Rollover to an individual retirement account.

NOTE: Option 1 must be selected for at least one of items one through three in Part B above. If neither Option is selected for items one through three in Part B above, Option 1 shall be deemed to have been selected for such item. If item four is not completed, Option 2 shall be deemed to have been selected for such item. If this Plan is restating a Prior Plan, the forms of distribution under this Plan must generally be at least as favorable as under the Prior Plan.

PART C. RETIREMENT EQUITY ACT SAFE HARBOR

Will the safe harbor provisions of Section 5.13(E) of the Plan apply (select one)?

OPTION 1: [X] Yes.

OPTION 2: [ ] NO.

SURVIVOR ANNUITY PERCENTAGE (Complete only if Option 2 is selected.)

The survivor annuity portion of the Qualified Joint and Survivor Annuity shall be a percentage equal to _____ percent (at least 50 percent but no more than 100 percent) of the amount paid to the Participant prior to his or her death.

NOTE: If no option is selected, Option 1 shall be deemed to be selected.

NOTE: Section 411(d)(6) of the Code prohibits the elimination of protected benefits. In general, protected benefits include the timing of payout options. If the Plan is restating a Prior Plan that permitted a distribution option described above that involves the timing of a distribution, the selections must generally be at least as favorable as under the Prior Plan. Forms of distributions may be eliminated under certain conditions, but generally only after advance notice has been given to Participants as described in the Basic Plan Document.

SECTION SIX: DEFINITIONS
COMPLETE PARTS A THROUGH N

PART A. PLAN YEAR MEANS

OPTION 1: [ ] The 12-consecutive month period which coincides with the Adopting Employer's Fiscal Year.

OPTION 2: [X] The calendar year.

OPTION 3: [ ] Other 12-consecutive month period (specify a 12-consecutive month period selected in a uniform and nondiscriminatory manner.)

NOTE: If no option is selected, Option 1 shall be deemed to be selected.

If the initial Plan Year is less than 12 months (a short Plan Year) specify such Plan Year's beginning and ending dates.

PART B. LIMITATION YEAR Means

OPTION 1: [X] The Plan Year.

OPTION 2: [ ] The calendar year.

OPTION 3: [ ] Other 12-consecutive month period (specify a 12-consecutive month period selected in a uniform and nondiscriminatory manner.)

NOTE: If no option is selected, Option 1 shall be deemed to be selected.

PART C. HOURS OF SERVICE EQUIVALENCIES

Service will be determined on the basis of (select one):

OPTION 1: [X] Actual hours for which an Employee is paid or entitled to payment.

OPTION 2: [ ] Days worked. An Employee will be credited with 10 Hours of Service if under the definition of Hours of Service Section such Employee would be credited with at least one Hour of Service during the day.

OPTION 3: [ ] Weeks worked. An Employee will be credited with 45 Hours of Service if under the definition of Hours of Service Section-such Employee would be credited with at least one Hour of Service during the week.

OPTION 4: [ ] Semi-Monthly payroll periods worked. An Employee will be credited with 95 Hours of Service if under the definition of Hours of Service such Employes would be credited with at least one Hour of Service during the semi-monthly payroll period.

OPTION 5: [ ] Months worked. An Employee will be credited with 190 Hours of Service if under the definition of Hours of Service Section such Employee would be credited with at least one Hour of Service during the month.

NOTE: If no option is selected, Option 1 shall be deemed to be selected. This Section Six, Part C will not apply if the elapsed time method of Section Six, Part D is selected.

PART D. ELAPSED TIME METHOD

In lieu of tracking Hours of Service of Employees, will the elapsed time method described under the definition of Hours of Service be used (select one)?

OPTION 1: [X] NO.

OPTION 2: [ ] YES.

NOTE: If no option is selected, Option 1 shall be deemed to be selected.

PART E. GENERAL DEFINITION OF COMPENSATION

Compensation will mean all of each Participant's (select one):

OPTION 1: [X] W-2 wages.

OPTION 2: [ ] Section 3401(a) wages.

OPTION 3: [ ] 415 safe-harbor compensation.

NOTE: If no option is selected, Option 1 shall be deemed to be selected.

PART F. DETERMINATION PERIOD

Compensation shall be determined over the following applicable period (select one):

OPTION 1: [X] The Plan Year.

OPTION 2: [ ] The calendar year ending with or within the Plan Year.

NOTE: If no option is selected, Option 1 shall be deemed to be selected.

G. ELECTIVE DEFERRALS AND COMPENSATION

Compensation shall include Employer Contributions made pursuant to a salary reduction agreement which are not includible in the gross income of the Employee under Sections 125,132(f)(4), 402(e)(3), 402(h)(l)(B) and 403(b) of the Code (select one):

OPTION 1: [X] YES.

OPTION 2: [ ] NO.

NOTE: If no option is selected. Option 1 shall be deemed to be selected.

PART H. PRE-ENTRY DATE COMPENSATION

Unless a different definition of Compensation is required by either the Code or ERISA, for the Plan Year in which an Employee enters the Plan, the Employee's Compensation which shall be taken into account for purposes of the Plan shall be (select one):

OPTION 1: [X] The Employee's Compensation only from the Entry Date, applicable to the particular type of contribution, on which the Employee became a Participant in the Plan.

OPTION 2: [ ] The Employee's Compensation for the whole of such Plan Year.

NOTE: If no option is selected, Option 1 shall be deemed to be selected.

PART I. NORMAL RETIREMENT AGE

The Normal Retirement Age under the Plan shall be (select and complete one):

OPTION 1: [X] Age 65 (not to exceed 65 or such later age as may be allowed under Section 411(a)(8) of the Code).

OPTION 2: [ ] The later of age____(not to exceed 65 or such later age as may be allowed under Section 411(a)(8) of the Code) or the _____ (not to exceed fifth) anniversary of the first day of the first Plan Year in which the Participant commenced participation in the Plan.

NOTE: If no option is selected, the Normal Retirement Age shall be deemed to be age 591/2.

PART J. EARLY RETIREMENT AGE

The Early Retirement Age under the Plan shall be (select one):

OPTION 1: [X] An Early Retirement Age is not applicable under the Plan.

OPTION 2: [ ] A Participant satisfies the Plan's Early Retirement Age conditions by attaining age___ and completing____ Years of Vesting Service.

NOTE: If no option is selected, Option 1 shall be deemed to be selected.

PART K. VALUATION DATE

The Plan Valuation Date shall be (select one).

OPTION 1: [X] Daily.

OPTION 2: [ ] The last day of the Plan Year and each other date designated by the Plan Administrator which is selected in a uniform and nondiscriminatory manner.

OPTION 3: [ ] The last day of each Plan quarter.

OPTION 4: [ ] The last day of each month.

OPTION 5: [ ] Other (specify one or more dates that are selected in a uniform and nondiscriminatory manner, including the last day of the Plan Year.)_____

NOTE: If no option is selected, Option 2 shall be deemed to be selected.

PART L. HIGHLY COMPENSATED EMPLOYEE

1. TOP PAID GROUP ELECTION

For purposes of determining who is a Highly Compensated Employee under the Plan, the top paid group election shall apply (select one):

OPTION 1: [ ] YES.

OPTION 2: [X] NO.

NOTE: If no option is selected, Option 1 shall be deemed to be selected.

2. CALENDAR YEAR DATA ELECTION

For purposes of determining who is a Highly Compensated Employee (other than a five percent owner) under the Plan, the calendar year data election shall apply (select one):

OPTION 1: [ ] YES.

OPTION 2: [X] NO.

NOTE: If no option is selected, Option 1 shall be deemed to be selected.

PART M. DISABILITY

For purposes of this Plan, Disability shall mean (select one):

OPTION 1: [X] The inability to engage in any substantial, gainful activity by reason of any medically determinable physical or mental impairment that can be expected to result in death or which has lasted or can be expected to last for a continuous period of not less than 12 months.

OPTION 2: [ ] The inability to engage in any substantial, gainful activity in the Employee's trade or profession for which the Employee is best qualified through training or experience.

NOTE: If no option is selected, Option 1 shall be deemed to be selected.

PART N. Eligibility COMPUTATION PERIOD

An Employee's Eligibility Computation Periods subsequent to his or her initial Eligibility Computation Period shall be(select one):

OPTION 1: [ ] The 12 consecutive month periods commencing on the anniversaries of his or her Employment Commencement Date.

OPTION 2: [X] The Plan Year commencing with the Plan Year beginning during his or her initial Eligibility Computation Period.

NOTE: If no option is selected, Option 1 shall be deemed to be selected.

SECTION SEVEN: MISCELLANEOUS
COMPLEX PARTS A AND B

PART A. PARTICIPANT DIRECTION

Will Participants be responsible for directing the investment of their Plan assets pursuant to Section 7.22(B) of the Plan (select one)?

OPTION 1: [X] YES.

OPTION 2: [ ] NO.

PART B. PERMISSIBLE INVESTMENTS

The assets of the Plan shall be invested only in those investments described below (to be completed by the Prototype Sponsor): Mutual Funds

NOTE: If no option is selected for Part A above, Option 1 shall be deemed to be selected.

SECTION EIGHT: TRUSTEE AND CUSTODIAN
COMPLEX PARTS A AND B(AS APPLICABLE)

PART A. CUSTODIAN (This Part A must be completed unless a Trustee is named in Part B, below).

Financial Organization_____
Address_____
Signature_____
Type Name_____Title_____

PART B. TRUSTEE (This Part B must generally be completed unless the Plan covers one or more Self-Employed Individuals or satisfies another exception under Section 403(b) of ERISA. Select one.)

OPTION 1: [ ] Financial Organization as Trustee

OPTION 2: [X] Individual Trustee(s)

The Trustee of this Plan shall be a: [X] Directed Trustee [ ] Discretionary Trustee

Name of Trustee WILLIAM CLARK
Address 47 HULFISH STREET SUITE 310 PRINCETON, NJ 08542-
Telephone Number 609-683-3667
Signature /s/ William Clark Title Chief Business Officer

Name of Trustee_____
Address_____
Telephone_____
Signature_____Title_____

Name of Trustee_____
Address_____
Telephone_____
Signature_____Title_____

Name of Trustee_____
Address_____
Telephone_____
Signature_____Title_____

SECTION NINE: EMPLOYER SIGNATURE
IMPORTANT: PLEASE READ BEFORE SIGNING

PROTOTYPE SPONSOR

Name of Prototype Sponsor Paychex Retirement Services

Address 1175 John Street West Henrietta, NY 14586-9199

Telephone Number 1-800-472-0072

[ ] Check here and provide the applicable information below if someone other than the Adopting Employer will be the Plan Administrator.

Name of Plan Administrator_____
Address_____
City_____State_____Zip_____
Telephone_____

Signature of Plan Administrator_____Date Signed_____

Type Name_____

[ ] Check here if there is an attachment(s) that applies to this Plan (if the box is checked, please describe the attachment(s) below).

_____

I AM AN AUTHORIZED REPRESENTATIVE OF THE ADOPTING EMPLOYER NAMED ABOVE AND I STATE THE FOLLOWING:

1. I ACKNOWLEDGE THAT I HAVE RELIED UPON MY OWN ADVISORS REGARDING THE COMPLETION OF THIS ADOPTION AGREEMENT AND THE LEGAL TAX IMPLICATIONS OF ADOPTING THIS PLAN;

2. I UNDERSTAND THAT MY FAILURE TO PROPERLY COMPLETE THIS ADOPTION AGREEMENT MAY RESULT IN DISQUALIFICATION OF THE PLAN;

3. I UNDERSTAND THAT THE PROTOTYPE SPONSOR WILL INFORM ME OF ANY AMENDMENTS MADE TO THE PLAN AND WILL NOTIFY ME SHOULD IT DISCONTINUE OR ABANDON THE PLAN; AND

4. I HAVE RECEIVED A COPY OF THIS ADOPTION AGREEMENT, THE CORRESPONDING BASIC PLAN DOCUMENT AND, IF APPLICABLE, ANY SEPARATE TRUST AGREEMENT USED IN LIEU OF THE TRUST AGREEMENT CONTAINED IN THE BASIC PLAN DOCUMENT.

Signature of Adopting Employer William Clark Date Signed 7/5/05

Type Name WILLIAM CLARK Title Chief Business Officer

NOTE: The Adopting Employer may rely on an opinion letter issued by the Internal Revenue Service as evidence that the Plan is qualified under Section 401 of the Code except to the extent provided in Revenue Procedure 2000-20, 2000-6 I.R.B. 553 and Announcement 2001-77, 2001-30 I.R.B.. An Employer who has ever maintained or who later adopts any Plan (including a welfare benefit fund, as defined in Section 419(e) of the Code, which provides post-retirement medical benefits allocated to separate accounts for key employees, as defined in Section 4l9A(d)(3) of the Code, or an individual medical account, as defined in Section 415(l)2) of the Code) in addition to this Plan may not rely on the opinion letter issued by the Internal Revenue Service with respect to the requirements of Sections 415 and 416 of the Code. If the Employer who adopts or maintains multiple plans wishes to obtain reliance with respect to the requirements of Sections 415 and 416 of the Code, application for a determination letter must be made to Employee Plans Determinations of the Internal Revenue Service. The Employer may not rely on the opinion letter in certain other circumstances, which are specified in the opinion letter issued with respect to the Plan or in Revenue Procedure 2000-20 and Annoucenment 2001-77. This Adoption Agreement may be used only in conjunction with Basic Plan Document #01. The signature of the Adopting Employer in this Section Nine shall apply to Section 10 of this Adoption Agreement if the Employer is restating its Plan to comply with Revenue Procedure 2000-20.

EXHIBIT 10.11

INDEMNIFICATION AGREEMENT dated _____ , between VANDA PHARMACEUTICALS INC., a Delaware corporation (the "Company"), and _____ (the "Indemnitee").

WHEREAS, the Company has adopted provisions in its Certificate of Incorporation and Bylaws providing for indemnification of its officers and directors to the fullest extent permitted by the DGCL, and the Company wishes to clarify and enhance the rights and obligations of the Company and the Indemnitee with respect to indemnification;

NOW, THEREFORE, in consideration of the Indemnitee's service or continued service as a director or officer of the Company, the parties hereto agree as follows:

1. Service by Indemnitee. The Indemnitee agrees to serve or continue to serve as a director or officer of the Company so long as the Indemnitee is duly elected and qualified or appointed and until such time as the Indemnitee resigns or fails to stand for reelection or is removed from his position. The Indemnitee may at any time and for any reason resign or be removed from such position in the sole discretion of the Company (subject to any other contractual obligation or any obligation or restriction imposed by the Certificate of Incorporation or Bylaws or otherwise by operation of law), in which event the Company shall have no obligation hereunder to continue the Indemnitee in any such position.

2. Indemnification. The Company shall indemnify the Indemnitee as provided in this Agreement and to the fullest extent permitted by the DGCL in effect on the date hereof and as amended from time to time (but, in the case of any such amendment, only to the extent that such amendment permits the Company to provide broader indemnification rights than such law permitted the Company to provide prior to such amendment). Without limiting the scope of the indemnification provided by this Section 2, the right to indemnification of the Indemnitee provided hereunder shall include, but shall not be limited to, those rights hereinafter set forth; provided, however, that no indemnification shall be paid to the Indemnitee:

(a) to the extent prohibited by the DGCL, the Certificate of Incorporation or the Bylaws;

(b) to the extent payment with respect to any indemnifiable matter is actually made to the Indemnitee under a valid and collectible insurance policy or under a valid and enforceable indemnity clause, bylaw or other agreement of the Company or any other Person on whose board the Indemnitee serves at the request of the Company; or

(c) in connection with an action, suit or proceeding, or part thereof (including claims and counterclaims) initiated by the Indemnitee, except a judicial proceeding or arbitration pursuant to Section 10 to enforce the rights under this Agreement, unless the action, suit or proceeding (or part thereof) was authorized by the Board.

3. Indemnification in Proceedings other than Proceedings by or in the Right of the Company. Subject to Section 2, the Indemnitee shall be entitled to the indemnification rights provided in this Section 3 if the Indemnitee was, is, or is threatened to be made, a party to or a

participant in any Proceeding (other than a Proceeding by or in the right of the Company) by reason of the Indemnitee's Corporate Status, or by reason of anything done or not done by the Indemnitee in any such capacity. Pursuant to this Section 3, the Indemnitee shall be indemnified against all costs, judgments, penalties, fines, liabilities, amounts paid in settlement by or on behalf of the Indemnitee, and Expenses (including all interest, assessments and other charges paid or payable in connection with or in respect of such Expenses) actually and reasonably incurred by or on behalf of the Indemnitee in connection with such Proceeding or any claim, issue or matter therein, if the Indemnitee acted in good faith and in a manner the Indemnitee reasonably believed to be in or not opposed to the best interests of the Company, and with respect to any criminal Proceeding, had no reasonable cause to believe the Indemnitee's conduct was unlawful.

4. Indemnification in Proceedings by or in the Right of the Company. Subject to Section 2, the Indemnitee shall be entitled to the indemnification rights provided in this Section 4 if the Indemnitee was, is, or is threatened to be made, a party to or participant in any Proceeding brought by or in the right of the Company to procure a judgment in its favor by reason of the Indemnitee's Corporate Status, or by reason of anything done or not done by the Indemnitee in any such capacity. Pursuant to this Section 4, the Indemnitee shall be indemnified against all costs, judgments, penalties, fines, liabilities, amounts paid in settlement by or on behalf of the Indemnitee, and Expenses (including all interest, assessments and other charges paid or payable in connection with or in respect of such Expenses) actually and reasonably incurred by or on behalf of the Indemnitee in connection with such Proceeding or any claim, issue or matter therein, if the Indemnitee acted in good faith and in a manner the Indemnitee reasonably believed to be in or not opposed to the best interests of the Company; provided, however, that no such indemnification shall be made in respect of any claim, issue or matter as to which applicable law expressly prohibits such indemnification by reason of any adjudication of liability of the Indemnitee to the Company, unless and only to the extent that the Court of Chancery of the State of Delaware or the court in which such action or suit was brought shall determine upon application that, despite the adjudication of liability but in view of all the circumstances of the case, the Indemnitee is entitled to indemnification for such costs, judgments, penalties, fines, liabilities and Expenses as such court shall deem proper.

5. Indemnification for Costs, Charges and Expenses of Successful Party. Notwithstanding the limitations of Sections 3 and 4, to the extent that the Indemnitee is successful, on the merits or otherwise, in whole or in part, in defense of any Proceeding or in defense of any claim, issue or matter therein, including, without limitation, the dismissal of any action without prejudice, or if it is ultimately determined that the Indemnitee is otherwise entitled to be indemnified against Expenses, the Indemnitee shall be indemnified against all Expenses actually and reasonably incurred by the Indemnitee in connection therewith.

6. Partial Indemnification. If the Indemnitee is entitled under any provision of this Agreement to indemnification by the Company for some or a portion of the costs, judgments, penalties, fines, liabilities or Expenses actually and reasonably incurred in connection with any Proceeding, but not, however, for the total amount thereof, the Company shall nevertheless indemnify the Indemnitee for the portion of such costs, judgments, penalties, fines, liabilities and Expenses actually and reasonably incurred to which the Indemnitee is entitled.

7. Indemnification for Expenses of a Witness and Additional Expenses. Notwithstanding any other provision of this Agreement, to the maximum extent permitted by applicable law, the Indemnitee shall be entitled to indemnification against all Expenses actually and reasonably incurred or suffered by the Indemnitee or on the Indemnitee's behalf if the Indemnitee appears as a witness or otherwise incurs legal expenses as a result of or related to the Indemnitee's service as a director or officer of the Company, in any threatened, pending or completed legal, administrative, investigative or other proceeding or matter to which the Indemnitee neither is, nor is threatened to be made, a party.

8. Determination of Entitlement to Indemnification. Upon written request by the Indemnitee for indemnification pursuant to Sections 3, 4, 5, 6 or 7, the entitlement of the Indemnitee to indemnification, to the extent not expressly provided for pursuant to the terms of this Agreement, shall be determined by the following person or persons, who shall be empowered to make such determination: (a) if a Change of Control shall have occurred, by Independent Counsel in a written opinion to the Board, a copy of which shall be delivered to the Indemnitee; and (b) if a Change of Control shall not have occurred, (i) by the Board by a majority vote of Disinterested Directors, whether or not such majority constitutes a quorum; (ii) by a committee of Disinterested Directors designated by a majority vote of such directors, whether or not such majority constitutes a quorum; (iii) if there are no Disinterested Directors, or if the Disinterested Directors so direct, by Independent Counsel in a written opinion to the Board, a copy of which shall be delivered to the Indemnitee; or (iv) the stockholders of the Company. Such Independent Counsel shall be selected by the Board and approved by the Indemnitee. Upon any failure of the Board so to select such Independent Counsel or upon the failure of the Indemnitee so to approve, such Independent Counsel shall be selected upon application to a court of competent jurisdiction. Such determination of entitlement to indemnification shall be made not later than 30 days after receipt by the Company of a written request for indemnification. Such request shall include documentation or information that is necessary for such determination and which is reasonably available to the Indemnitee. Any Expenses incurred by the Indemnitee in connection with a request for indemnification or payment of Expenses hereunder, under any other agreement, any provision of the Certificate of Incorporation, Bylaws or any directors' and officers' liability insurance of the Company, shall be borne by the Company. The Company shall indemnify the Indemnitee for any such Expense and agrees to hold the Indemnitee harmless therefrom irrespective of the outcome of the determination of the Indemnitee's entitlement to indemnification. If the person or persons making such determination shall determine that the Indemnitee is entitled to indemnification as to part (but not all) of the application for indemnification, such person or persons shall reasonably prorate such partial indemnification among the claims, issues or matters at issue at the time of the determination. If it is determined that the Indemnitee is entitled to indemnification, payment to the Indemnitee shall be made within seven days after such determination.

9. Presumptions and Effect of Certain Proceedings. The Secretary of the Company shall, promptly upon receipt of the Indemnitee's request for indemnification, advise in writing the Board or such other person or persons empowered to make the determination as provided in Section 8 that the Indemnitee has made such request for indemnification. Upon making such request for indemnification, the Indemnitee shall be presumed to be entitled to indemnification hereunder and the Company shall have the burden of proof in making any determination contrary

to such presumption. If the person or persons so empowered to make such determination shall have failed to make the requested determination with respect to indemnification within 30 days after receipt by the Company of such request, a requisite determination of entitlement to indemnification shall be deemed to have been made and the Indemnitee shall be absolutely entitled to such indemnification, absent actual and material fraud in the request for indemnification. The termination of any Proceeding described in Sections 3 or 4 by judgment, order, settlement or conviction, or upon a plea of nolo contendere or its equivalent, shall not, of itself, (a) create a presumption that the Indemnitee did not act in good faith and in a manner that the Indemnitee reasonably believed to be in or not opposed to the best interests of the Company, or, with respect to any criminal Proceeding, that the Indemnitee had reasonable cause to believe that the Indemnitee's conduct was unlawful; or (b) otherwise adversely affect the rights of the Indemnitee to indemnification except as may be provided herein.

10. Remedies of the Indemnitee in Cases of Determination not to Indemnify or to pay Expenses. In the event that a determination is made that the Indemnitee is not entitled to indemnification hereunder or if payment has not been timely made following a determination of entitlement to indemnification pursuant to Sections 8 and 9, or if Expenses are not paid pursuant to Section 15, the Indemnitee shall be entitled to final adjudication in a court of competent jurisdiction of entitlement to such indemnification or payment. Alternatively, the Indemnitee, at the Indemnitee's option, may seek an award in an arbitration to be conducted by a single arbitrator pursuant to the rules of the American Arbitration Association, such award to be made within 60 days following the filing of the demand for arbitration. The Company shall not oppose the Indemnitee's right to seek any such adjudication or award in arbitration or any other claim. The determination in any such judicial proceeding or arbitration shall be made de novo and the Indemnitee shall not be prejudiced by reason of a determination (if so made) pursuant to Section 8 or 9 that the Indemnitee is not entitled to indemnification. If a determination is made or deemed to have been made pursuant to the terms of Section 8 or 9 that the Indemnitee is entitled to indemnification, the Company shall be bound by such determination and is precluded from asserting that such determination has not been made or that the procedure by which such determination was made is not valid, binding and enforceable. The Company further agrees to stipulate in any such court or before any such arbitrator that the Company is bound by all the provisions of this Agreement and is precluded from making any assertions to the contrary. If the court or arbitrator shall determine that the Indemnitee is entitled to any indemnification or payment of Expenses hereunder, the Company shall pay all Expenses actually and reasonably incurred by or on behalf of the Indemnitee in connection with or in relation to such adjudication or award in arbitration (including, but not limited to, any appellate Proceedings).

11 . Non-Exclusivity. Indemnification and payment of Expenses provided by this Agreement shall not be deemed exclusive of any other rights to which the Indemnitee may now or in the future be entitled under any provision of the Bylaws of the Company or other organizational documents of the Company, vote of stockholders or resolution of directors, provision of law, agreement or otherwise.

12. Expenses to Enforce Agreement. In the event that the Indemnitee is subject to or intervenes in any Proceeding in which the validity or enforceability of this Agreement is at issue or seeks an adjudication or award in arbitration to enforce the Indemnitee's rights under, or to recover damages for breach of, this Agreement, the Indemnitee, if the Indemnitee prevails in

whole or in part in such action, shall be entitled to recover from the Company and shall be indemnified by the Company against any actual Expenses incurred by the Indemnitee.

13. Continuation of Indemnity. All agreements and obligations of the Company contained herein shall continue during the period the Indemnitee is a director, officer, employee, fiduciary or agent of the Company or is serving at the request of the Company as a director, officer, employee, fiduciary or agent of any other entity (including, but not limited to, another corporation, partnership, limited liability company, joint venture, trust, employee benefit plan or other enterprise) and shall continue thereafter with respect to any possible claims based on the fact that the Indemnitee was a director, officer, employee, fiduciary or agent of the Company or was serving at the request of the Company as a director, officer, employee, fiduciary or agent of any other entity (including, but not limited to, another corporation, partnership, limited liability company, joint venture, trust, employee benefit plan or other enterprise). This Agreement shall be binding upon all successors and assigns of the Company (including any transferee of all or substantially all its assets and any successor by merger or operation of law) and shall inure to the benefit of the heirs, personal representatives and estate of the Indemnitee.

14. Notification and Defense of Claim. Promptly after receipt by the Indemnitee of notice of any Proceeding, the Indemnitee will, if a claim in respect thereof is to be made against the Company under this Agreement, notify the Company in writing of the commencement thereof; but the omission so to notify the Company will not relieve it from any liability that it may have to the Indemnitee. Notwithstanding any other provision of this Agreement, with respect to any such Proceeding of which the Indemnitee notifies the Company:

(a) the Company shall be entitled to participate therein at its own expense; and

(b) except as otherwise provided in this Section 14(b), to the extent that it may wish, the Company, jointly with any other indemnifying party similarly notified, shall be entitled to assume the defense thereof, with counsel satisfactory to the Indemnitee. After notice from the Company to the Indemnitee of its election so to assume the defense thereof, the Company shall not be liable to the Indemnitee under this Agreement for any expenses of counsel subsequently incurred by the Indemnitee in connection with the defense thereof except as otherwise provided below. The Indemnitee shall have the right to employ the Indemnitee's own counsel in such Proceeding, but the fees and expenses of such counsel incurred after notice from the Company of its assumption of the defense thereof shall be at the expense of the Indemnitee unless, (i) the employment of counsel by the Indemnitee has been authorized by the Company, (ii) the Indemnitee shall have reasonably concluded that there may be a conflict of interest between the Company and the Indemnitee in the conduct of the defense of such action, or (iii) the Company shall not within 15 days of receipt of notice from the Indemnitee in fact have employed counsel to assume the defense of the action, in each of which cases the fees and expenses of the Indemnitee's counsel shall be at the expense of the Company. The Company shall not be entitled to assume the defense of any Proceeding brought by or on behalf of the Company or as to which the Indemnitee shall have made the conclusion provided for in (ii) above; and

(c) if the Company has assumed the defense of a Proceeding, the Company shall not be liable to indemnify the Indemnitee under this Agreement for any amounts paid in settlement of any Proceeding effected without the Company's prior written consent. The Company shall not settle any Proceeding in any manner that would impose any penalty or limitation on or disclosure obligation with respect to the Indemnitee without the Indemnitee's prior written consent. Neither the Company nor the Indemnitee will unreasonably withhold its consent to any proposed settlement.

15. Payment of Expenses. All Expenses incurred by the Indemnitee in advance of the final disposition of any Proceeding shall be paid by the Company at the request of the Indemnitee, each such payment to be made within seven days after the receipt by the Company of a statement or statements from the Indemnitee requesting such payment or payments from time to time, whether prior to or after final disposition of such Proceeding. The Indemnitee's entitlement to such Expenses shall include those incurred in connection with any Proceeding by the Indemnitee seeking a judgment in court or an adjudication or award in arbitration pursuant to this Agreement (including the enforcement of this provision). Such statement or statements shall reasonably evidence the expenses and costs incurred by the Indemnitee in connection therewith and shall include or be accompanied by an undertaking, in substantially the form attached as Exhibit A, by or on behalf of the Indemnitee to reimburse such amount if it is finally determined, after all appeals by a court of competent jurisdiction, that the Indemnitee is not entitled to be indemnified against such Expenses by the Company as provided by this Agreement or otherwise. The payment of Expenses shall be made without regard to the Indemnitee's ability to repay the Expenses and without regard to the Indemnitee's ultimate entitlement to indemnification under the other provisions of this Agreement. The payment of Expenses shall be unsecured and interest-free.

16. Severability: Prior Indemnification Agreements. If any provision or provisions of this Agreement shall be held to be invalid, illegal or unenforceable for any reason whatsoever (a) the validity, legality and enforceability of the remaining provisions of this Agreement (including without limitation, all portions of any paragraphs of this Agreement containing any such provision held to be invalid, illegal or unenforceable, that are not by themselves invalid, illegal or unenforceable) shall not in any way be affected or impaired thereby, and (b) to the fullest extent possible, the provisions of this Agreement (including, without limitation, all portions of any paragraph of this Agreement containing any such provision held to be invalid, illegal or unenforceable, that are not themselves invalid, illegal or unenforceable) shall be construed so as to give effect to the intent of the parties that the Company provide protection to the Indemnitee to the fullest enforceable extent. This Agreement shall supersede and replace any prior indemnification agreements entered into by and between the Company and the Indemnitee and any such prior agreements shall be terminated upon execution of this Agreement.

17. Headings; References: Pronouns. The headings of the sections of this Agreement are inserted for convenience only and shall not be deemed to constitute part of this Agreement or to affect the construction thereof. References herein to section numbers are to sections of this Agreement. All pronouns and any variations thereof shall be deemed to refer to the masculine, feminine, neuter, singular or plural as appropriate.

18. Definitions. For purposes of this Agreement:

"Beneficial Owner" shall have the meaning set forth in Rule 13d-3 under the Securities Exchange Act of 1934.

"Board" means the Board of Directors of the Company.

"Bylaws" means the Bylaws of the Company.

"Certificate of Incorporation" means Certificate of Incorporation of the Company.

"Change in Control" means the occurrence of any one of the following:

(a) any Person, including any "group", as defined in Section 13(d)(3) of the Securities Exchange Act of 1934, (other than any shareholders at the 2004 Closing) is or becomes the Beneficial Owner, directly or indirectly, of securities of the Company representing a majority of the combined voting power of the Company's then outstanding securities, excluding any Person who becomes such a Beneficial Owner in connection with a Qualifying Business Combination described in paragraph (c) below or who becomes such a Beneficial Owner as a result of a change in ownership percentage resulting solely from an acquisition of securities by the Company; or

(b) the following individuals cease for any reason to constitute a majority of the number of directors then serving on the Board: individuals who, as of the 2004 Closing, constitute the Board and any new director whose appointment or election by the Board or nomination for election by the Company's shareholders was approved or recommended by a vote of at least 66-2/3% of the directors then still in office who either were directors at the 2004 Closing or whose appointment, election or nomination for election was previously so approved or recommended; or

(c) there is consummated a reorganization, merger or consolidation of the Company with, or sale or other disposition of at least 80% of the assets of the Company in one or a series of related transactions to, any other Person (a "Business Combination"), other than a Business Combination that would result in the voting securities of the Company outstanding immediately prior to such Business Combination continuing to represent (either by remaining outstanding or by being converted into voting securities of the surviving entity or any parent thereof) more than 50% of the combined voting power of the securities of the Company or such surviving entity or any parent thereof outstanding immediately after such Business Combination (a "Qualifying Business Combination"); or

(d) the shareholders of the Company approve a plan of complete liquidation or dissolution of the Company or there is consummated an agreement for the sale or disposition by the Company of all or substantially all the Company's assets, other than a sale or disposition by the Company of all or substantially all the Company's assets to an entity, more than 50% of the combined voting power of the outstanding securities of which is owned by shareholders of the Company in substantially the same proportions as their ownership of the Company immediately prior to such sale.

"Corporate Status" means the status of a person who is or was a director, officer, employee, fiduciary or agent of the Company or of any other entity including, but not limited to, another corporation, partnership, limited liability company, joint venture, trust, employee benefit plan or other enterprise that such person is or was serving at the request of the Company.

"DGCL" means the Delaware General Corporation Law.

"Disinterested Director" means a director of the Company who is not or was not a party to the Proceeding in respect of which indemnification is being sought by the Indemnitee.

"Expenses" includes, without limitation, expenses incurred in connection with the defense or settlement of any and all investigations, judicial or administrative proceedings or appeals, court costs, transcript costs, attorneys' fees, witness fees and expenses, fees and expenses of accountants and other advisors, expert fees and expenses, duplication costs, printing and binding costs, telephone charges, postage, delivery service fees, retainers and disbursements and advances thereon, the premium, security for, and other costs relating to any bond (including cost bonds, appraisal bonds or their equivalents), and any expenses of establishing a right to indemnification under Sections 8, 10 and 12 but shall not include the amount of judgments, fines or penalties actually levied against the Indemnitee.

"Independent Counsel" means a law firm or a member of a law firm that is experienced in matters of corporation law and neither currently is nor in the past three years has been retained to represent: (a) the Company (or any majority stockholder thereof) or the Indemnitee or any affiliate of either thereof in any matter material to either such party, or (b) any other party to the Proceeding giving rise to a claim for indemnification hereunder. Notwithstanding the foregoing, the term "Independent Counsel" shall not include any person who, under the applicable standards of professional conduct then prevailing, would have a conflict of interest in representing either the Company or the Indemnitee in an action to determine the Indemnitee's right to indemnification under this Agreement. The Company agrees to pay the reasonable fees of the Independent Counsel referred to above and to fully indemnify such counsel against any and all Expenses, claims, liabilities and damages arising out of or in relation to this Agreement or its engagement pursuant hereto.

"Person" means an individual, a partnership, a joint venture, a corporation, an association, a trust, an estate or other entity or organization, including a government or any department or agency thereof.

"Proceeding" includes any threatened, pending or completed investigation, action, suit, arbitration, alternate dispute resolution, mechanism, inquiry, administrative hearing or any other proceeding, whether brought by or in the right of the Company or otherwise, against the Indemnitee, for which indemnification is not prohibited under Sections 2(a), (b), (c) and (d) and whether of a civil, criminal, administrative or investigative nature, including, but not limited to, actions, suits or proceedings in which the Indemnitee may be or may have been involved as a party or otherwise, by reason of the fact that the Indemnitee is or was a director, officer, employee, fiduciary or agent of the Company, or is or was serving, at the request of the Company, as a director, officer, employee, fiduciary or agent of any other entity, including, but not limited to, another corporation, partnership, limited liability company, joint venture, trust,

employee benefit plan or other enterprise, or by reason of anything done or not done by the Indemnitee in any such capacity, whether or not the Indemnitee is acting or serving in such capacity at the time any liability or expense is incurred for which indemnification, reimbursement or advancement of expenses can be provided under this Agreement.

"2004 Closing" means September 28, 2004.

19. Miscellaneous. (a) This Agreement shall be governed by, and construed in accordance with, the laws of the State of Delaware.

(b) This Agreement may be executed in one or more counterparts, each of which shall for all purposes be deemed to be an original but all of which together shall constitute one and the same agreement. Only one such counterpart signed by the party against whom enforceability is sought need be produced as evidence of the existence of this Agreement.

(c) This Agreement shall not be deemed an employment contract between the Company and the Indemnitee who is an officer of the Company.

(d) Upon a payment to the Indemnitee under this Agreement, the Company shall be subrogated to the extent of such payment to all the rights of the Indemnitee to recover against any Person for such liability, and the Indemnitee shall execute all documents and instruments required and shall take such other actions as may be necessary to secure such rights, including the execution of such documents as may be necessary for the Company to bring suit to enforce such rights.

(e) No supplement, modification or amendment of this Agreement shall be binding unless executed in writing by both parties hereto. No waiver of any of the provisions of this Agreement shall be deemed or shall constitute a waiver of any other provisions hereof (whether or not similar) nor shall such waiver constitute a continuing waiver.

(f) The Company shall not be liable under this Agreement to make any payment which is prohibited by applicable law, including, without limitation, any liability of the Indemnitee to the Company under Section 16(b) of the Securities Exchange Act of 1934.

IN WITNESS WHEREOF, the parties hereto have executed this Agreement on and as of the day and year first above written.

VANDA PHARMACEUTICALS INC.

By:/s/ M. H. Polymeropoulos

Name: M. H. Polymeropoulos
Title: CEO

INDEMNITEE

Name:
Title:

VANDA PHARMACEUTICALS INC.
EMPLOYMENT AGREEMENT

This Employment Agreement (this "Agreement") is entered into as of February 10, 2005 by and between Mihael H. Polymeropoulos (the "Employee") and Vanda Pharmaceuticals Inc., a Delaware corporation (the "Company").

1. DUTIES AND SCOPE OF EMPLOYMENT.

(a) POSITION. For the term of his employment under this Agreement ("Employment"), the Company agrees to employ the Employee in the position of Chief Executive Officer. The Employee shall be subject to the supervision of, and shall have such authority as is delegated to him by, the board of directors of the Company (the "Board"), consistent with his position as Chief Executive Officer. The Employee hereby accepts such employment and agrees to undertake the duties and responsibilities normally inherent in such position and such other duties and responsibilities as the Board shall from time to time reasonably assign to him consistent with his position as Chief Executive Officer.

(b) OBLIGATIONS TO THE COMPANY. During the term of his Employment, the Employee shall devote his full business efforts and time to the Company, During the term of his Employment, without the prior written approval of the Board, the Employee shall not render services in any capacity to any other person or entity and shall not act as a sole proprietor or partner of any other person or entity or as a shareholder owning more than five percent of the stock of any other corporation. The Employee shall comply with the Company's policies and rules, as they may be in effect from time to time during the term of his Employment.

(c) NO CONFLICTING OBLIGATIONS. The Employee represents and warrants to the Company that he is under no obligations or commitments, whether contractual or otherwise, that are inconsistent with his obligations under this Agreement. The Employee represents and warrants that he will not use or disclose, in connection with his employment by the Company, any trade secrets or other proprietary information or intellectual property in which the Employee or any other person has any right, title or interest and that his employment by the Company as contemplated by this Agreement will not infringe or violate the rights of any other person or entity. The Employee represents and warrants to the Company that he has returned all property and confidential information belonging to any prior employers.

2. CASH AND INCENTIVE COMPENSATION.

(a) SALARY. The Company shall pay the Employee as compensation for his services a base salary at a gross annual rate of not less than $362,250. Such salary shall be payable in accordance with the Company's standard payroll procedures. (The annual compensation specified in this Subsection (a), together with any increases in such compensation that the Company may grant from time to time, is referred to in this Agreement as "Base Compensation.")

(b) INCENTIVE BONUSES. The Employee shall be eligible to be considered for an annual incentive bonus with a target amount equal to 40% of his Base

Compensation (the "Annual Target Bonus"). Such bonus (if any) shall be awarded based on objective or subjective criteria established in advance by the Board. The determinations of the Board with respect to such bonus shall be final and binding.

(c) STOCK OPTIONS. Subject to the approval of the Board, the Company shall grant the Employee an incentive stock option covering 918,400 shares of the Company's Common Stock. Such option shall be granted as soon as reasonably practicable after the date of this Agreement The per-share exercise price of such option shall be equal to the fair market value of one share of the Company's Common Stock on the date of grant The term of such option shall be 10 years, subject to earlier expiration in the event of the termination of the Employee's Employment. The Employee shall vest in 25% of the option shares after the first 12 months of continuous service and shall vest in the remaining option shares in equal monthly installments over the next three years of continuous service. The option shall accelerate and become vested with respect to 100% of the option shares if, after a Change in Control, (i) the Employee's Employment is terminated by the Company for reasons other than Cause or (ii) the Employee's Employment is terminated by the Employee for Good Reason. The grant of such option shall be subject to the other terms and conditions set forth in the Company's stock plan governing the option, and the Company's standard form of stock option agreement.

For purposes of the foregoing:

"Change in Control" shall mean (i) the consummation of a merger or consolidation of the Company with or into another entity, if persons who were not stockholders of the Company immediately prior to such merger or consolidation own immediately after such merger or consolidation 50% or more of the voting power of the outstanding securities of each of (A) the continuing or surviving entity and (B) any direct or indirect parent corporation of such continuing or surviving entity; or (ii) the sale, transfer or other disposition of all or substantially all of the Company's assets. A transaction shall not constitute a Change in Control if its sole purpose is to change the state of the Company's incorporation or to create a holding company that will be owned in substantially the same proportions by the persons who held the Company's securities immediately before such transaction.

"Cause" shall mean (i) an unauthorized use or disclosure of the Company's confidential information or trade secrets, which use or disclosure causes material harm to me Company; (ii) a material breach of any agreement between Employee and the Company; (iii) a material failure to comply with the Company's written policies or rules; (iv) conviction of, or plea of "guilty" or "no contest" to, a felony under the laws of the United States or any state thereof; (v) gross negligence or willful misconduct which causes material harm to the Company; or (vi) a continued failure to perform assigned duties after receiving written notification of such failure from the Board.

"Good Reason" shall mean any of the following events, if such event occurs without the Employee's consent: (i) the Employee's receipt of notice that his principal workplace will be relocated more than 30 miles; (ii) a reduction in the Employee's base salary by more than 10%, unless pursuant to a Company-wide reduction affecting all employees proportionately; or (iii) a change in Employee's position with the Company that materially reduces his level of authority or responsibility (including without limitation failure to nominate him as a director of the Company).

3. VACATION AND EMPLOYEE BENEFITS. During the term of his Employment, the Employee shall be eligible for 25 paid vacation days each year in accordance with the Company's standard policy for similarly situated employees, as it may be amended from time to time. During the term of his Employment, the Employee shall be eligible to participate in any employee benefit plans maintained by the Company for similarly situated employees, subject in each case to the generally applicable terms and conditions of the plan in question and to the determinations of any person or committee administering such plan.

4. BUSINESS EXPENSES. During the term of his Employment, the Employee shall be authorized to incur necessary and reasonable travel, entertainment and other business expenses in connection with bis duties hereunder. The Company shall reimburse the Employee for such expenses upon presentation of an itemized account and appropriate supporting documentation, all in accordance with the Company's generally applicable policies.

5. TERM OF EMPLOYMENT

(a) BASIC RULE. The Company agrees to continue the Employee's Employment, and the Employee agrees to remain in Employment with the Company, from the date of this Agreement until the date when the Employee's Employment terminates pursuant to Subsection (b) or (c) below. The Employee's Employment with the Company shall be "at will," meaning that either the Employee or the Company may terminate the Employee's Employment at any time, with or without cause. Any contrary representations which may have been made to the Employee shall be superseded by this Agreement This Agreement shall constitute the full and complete agreement between the Employee and the Company on the "at will" nature of the Employee's Employment, which may only be changed in an express written agreement signed by the Employee and a duly authorized officer of the Company.

(b) TERMINATION. The Company may terminate the Employee's Employment at any time and for any reason (or no reason), and with or without cause, by giving the Employee notice in writing. The Employee may terminate his Employment by giving the Company 14 days' advance notice in writing. The Employee's Employment shall terminate automatically in the event of his death.

(c) PERMANENT DISABILITY. The Company may terminate the Employee's Employment due to Permanent Disability by giving the Employee 30 days' advance notice in writing. For all purposes under this Agreement, "Permanent Disability" shall mean that the Employee, at the time notice is given, has failed to perform his duties under this Agreement for a period of not less than 90 consecutive days as the result of his incapacity due to physical or mental injury, disability or illness. In the event that the Employee satisfactorily resumes the performance of substantially all of Ms duties hereunder before the termination of bis Employment under this Subsection (c) becomes effective, the notice of termination shall automatically be deemed to have been revoked.

(d) RIGHTS UPON TERMINATION. Except as expressly provided in Section 6, upon the termination of the Employee's Employment pursuant to this Section 5, the Employee shall only be entitled to the compensation, benefits and reimbursements described in Sections 2, 3 and 4 for the period preceding the effective date of the termination. The payments under this Agreement shall fully discharge all responsibilities of the Company to the Employee.

(e) TERMINATION OF AGREEMENT. This Agreement shall terminate when all obligations of the parties hereunder have been satisfied. The termination of this Agreement shall not limit or otherwise affect any of the Employee's obligations under Section 7.

6. TERMINATION BENEFITS.

(a) GENERAL RELEASE. Any other provision of this Agreement notwithstanding, Subsections (b) and (c) below shall not apply unless the Employee (i) has executed a general release (in a form prescribed by the Company) of all known and unknown claims that he may then have against the Company or persons affiliated with the Company and (ii) has agreed not to prosecute any legal action or other proceeding based upon any of such claims,

(b) SEVERANCE PAY. If, during the term of this Agreement, the Company terminates the Employee's Employment for any reason other than Cause or Permanent Disability, or the Employee terminates his Employment for Good Reason, then the Company shall pay the Employee;

(i) BASE COMPENSATION. His Base Compensation for a period of 12 months following the termination of his Employment (the "Continuation Period"). Such Base Compensation shall be paid at the rate in effect at the time of the termination of Employment and in accordance with the Company's standard payroll procedures.

(ii) BONUS COMPENSATION. A bonus (the "Severance Bonus") in an amount determined as follows:

(A) If the Employee's Employment is terminated prior to the first anniversary of the date of this Agreement, the Severance Bonus shall be equal to a pro-rata portion of the anticipated first-year Annual Target Bonus as determined by the Board in good faith.

(B) If the Employee's Employment is terminated on or following the first anniversary of the date of this Agreement and prior to the third anniversary of the date of this Agreement, the Severance Bonus shall be equal to the greater of (I) the most recent Annual Target Bonus and (II) the average of Annual Target Bonuses awarded for the prior years.

(C) If the Employee's Employment is terminated on or following the third anniversary of the date of this Agreement, the Severance Bonus shall be equal to the greater of (I) the most recent Annual Target Bonus) and (II) the average of Annual Target Bonuses awarded for the prior three years.

Such Severance Bonus shall be payable in accordance with the Company's standard payroll procedures.

(c) HEALTH INSURANCE. If Subsection (b) above applies, and if the Employee elects to continue his health insurance coverage under the Consolidated Omnibus Budget Reconciliation Act ("COBRA") following the termination of his Employment, then the Company shall pay the Employee's monthly premium under COBRA until the earliest of (i) the

close of the Continuation Period, (ii) the expiration of the Employee's continuation coverage under COBRA and (iii) the date when the Employee is offered substantially equivalent health insurance coverage in connection with new employment or self-employment.

7. NON-SOLICITATION, NON-DISCLOSURE AND NON-COMPETITION, The Employee has entered into a Proprietary Information and Inventions Agreement with the Company, which agreement is incorporated herein by reference.

8. SUCCESSORS.

(a) COMPANY'S SUCCESSORS. This Agreement shall be binding upon any successor (whether direct or indirect and whether by purchase, lease, merger, consolidation, liquidation or otherwise) to all or substantially all of the Company's business and/or assets. For all purposes under this Agreement, the term "Company" shall include any successor to the Company's business and/or assets which becomes bound by this Agreement.

(b) EMPLOYEE'S SUCCESSORS. This Agreement and all rights of the Employee hereunder shall inure to the benefit of, and be enforceable by, the Employee's personal or legal representatives, executors, administrators, successors, heirs, distributees, devisees and legatees.

9. MISCELLANEOUS PROVISIONS.

(a) NOTICE. Notices and all other communications contemplated by this Agreement shall be in writing and shall be deemed to have been duty given when personally delivered or when mailed by overnight courier, U.S. registered or certified mail, return receipt requested and postage prepaid. In the case of the Employee, mailed notices shall be addressed to him at the home address which he most recently communicated to the Company in writing. In the case of the Company, mailed notices shall be addressed to its corporate headquarters, and all notices shall be directed to the attention of its Secretary.

(b) MODIFICATIONS AND WAIVERS. No provision of this Agreement shall be modified, waived or discharged unless the modification, waiver or discharge is agreed to in writing and signed by the Employee and by an authorized officer of the Company (other than the Employee). No waiver by either party of any breach of, or of compliance with, any condition or provision of this Agreement by the other party shall be considered a waiver of any other condition or provision or of the same condition or provision at another time.

(c) WHOLE AGREEMENT. No other agreements, representations or understandings (whether oral or written and whether express or implied) which are not expressly set forth in this Agreement have been made or entered into by either party with respect to the subject matter hereof. This Agreement and the Proprietary Information and Inventions Agreement contain the entire understanding of the parties with respect to the subject matter hereof.

(d) WITHHOLDING TAXES. All payments made under this Agreement shall be subject to reduction to reflect taxes or other charges required to be withheld by law.

(e) CHOICE OF LAW. The validity, interpretation, construction and performance of this Agreement shall be governed by the laws of the State of Maryland (except their provisions governing the choice of law).

(f) SEVERABILITY. The invalidity or unenforceability of any provision or provisions of this Agreement shall not affect the validity or enforceability of any other provision hereof, which shall remain in full force and effect.

(g) ARBITRATION. Any controversy or claim arising out of or relating to this Agreement or the breach thereof, or the Employee's Employment or the termination thereof, shall be settled in the State of Maryland, by arbitration in accordance with the National Rules for the Resolution of Employment Disputes of the American Arbitration Association. The decision of the arbitrator shall be final and binding on the parties, and judgment on the award rendered by the arbitrator may be entered in any court having jurisdiction thereof. The parties hereby agree that the arbitrator shall be empowered to enter an equitable decree mandating specific enforcement of the terms of this Agreement The Company and the Employee shall share equally all fees and expenses of the arbitrator. The Employee hereby consents to personal jurisdiction of the state and federal courts located in the State of Maryland for any action or proceeding arising from or relating to this Agreement or relating to any arbitration in which the parties are participants.

(h) NO ASSIGNMENT. This Agreement and all rights and obligations of the Employee hereunder are personal to the Employee and may not be transferred or assigned by the Employee at any time. The Company may assign its rights under this Agreement to any entity that assumes the Company's obligations hereunder in connection with any sale or transfer of all or a substantial portion of the Company's assets to such entity.

(i) COUNTERPARTS. This Agreement may be executed in two or more counterparts, each of which shall be deemed an original, but all of which together shall constitute one and the same instrument.

[REMAINDER OF PAGE LEFT BLANK INTENTIONALLY]

IN WITNESS WHEREOF, each of the parties has executed this Agreement, in the case of the Company by its duly authorized officer, as of the date first written above.

/s/ Mihael H. Polymeropoulos

Mihael H. Polymeropoulos

VANDA PHARMACEUTICALS INC.

By: /s/ A. Karabelas

Title: Chairman

EXHIBIT 10.13

VANDA PHARMACEUTICALS INC.
EMPLOYMENT AGREEMENT

This Employment Agreement (this "Agreement") is entered into as of February 10, 2005 by and between William D. Clark (the "Employee") and Vanda Pharmaceuticals Inc., a Delaware corporation (the "Company").

1. DUTIES AND SCOPE OF EMPLOYMENT.

(a) POSITION. For the term of his employment under this Agreement ("Employment"), the Company agrees to employ the Employee in the position of Chief Business Officer. The Employee shall be subject to the supervision of, and shall have such authority as is delegated to him by, the board of directors of the Company (the "Board"), consistent with his position as Chief Business Officer. The Employee hereby accepts such employment and agrees to undertake the duties and responsibilities normally inherent in such position and such other duties and responsibilities as the Board shall from time to time reasonably assign to him consistent with his position as Chief Business Officer.

(b) OBLIGATIONS TO THE COMPANY. During the term of his Employment, the Employee shall devote his full business efforts and time to the Company. During the term of his Employment, without the prior written approval of the Board, the Employee shall not render services in any capacity to any other person or entity and shall not act as a sole proprietor or partner of any other person or entity or as a shareholder owning more than five percent of the stock of any other corporation. The Employee shall comply with the Company's policies and rules, as they may be in effect from time to time during the term of his Employment.

(c) NO CONFLICTING OBLIGATIONS. The Employee represents and warrants to the Company that he is under no obligations or commitments, whether contractual or otherwise, that are inconsistent with his obligations under this Agreement. The Employee represents and warrants that he will not use or disclose, in connection with his employment by the Company, any trade secrets or other proprietary information or intellectual property in which the Employee or any other person has any right, title or interest and that his employment by the Company as contemplated by this Agreement will not infringe or violate the rights of any other person or entity. The Employee represents and warrants to the Company that he has returned all property and confidential information belonging to any prior employers.

2. CASH AND INCENTIVE COMPENSATION.

(a) SALARY. The Company shall pay the Employee as compensation for his services a base salary at a gross annual rate of not less than $227,625. Such salary shall be payable in accordance with the Company's standard payroll procedures. (The annual compensation specified in this Subsection (a), together with any increases in such compensation that the Company may grant from time to time, is referred to in this Agreement as "Base Compensation.")

(b) INCENTIVE BONUSES. The Employee shall be eligible to be considered for an annual incentive bonus with a target amount equal to 25% of his Base

Compensation (the "Annual Target Bonus"). Such bonus (if any) shall be awarded based on objective or subjective criteria established in advance by the Board. The determinations of the Board with respect to such bonus shall be final and binding.

(c) STOCK OPTIONS. Subject to the approval of the Board, the Company shall grant the Employee an incentive stock option covering 463,400 shares of the Company's Common Stock. Such option shall be granted as soon as reasonably practicable after the date of this Agreement. The per-share exercise price of such option shall be equal to the fair market value of one share of the Company's Common Stock on the date of grant. The term of such option shall be 10 years, subject to earlier expiration in the event of the termination of the Employee's Employment. The Employee shall vest in 25% of the option shares after the first 12 months of continuous service and shall vest in the remaining option shares in equal monthly installments over the next three years of continuous service. The vested and exercisable portion of the option shall be determined by adding 24 months to the Employee's actual period of service if, after a Change in Control, (i) the Employee's Employment is terminated by the Company for reasons other than Cause or (ii) the Employee's Employment is terminated by the Employee for Good Reason. The grant of such option shall be subject to the other terms and conditions set forth in the Company's stock plan governing the option, and the Company's standard form of stock option agreement.

For purposes of the foregoing:

"Change in Control" shall mean (i) the consummation of a merger or consolidation of the Company with or into another entity, if persons who were not stockholders of the Company immediately prior to such merger or consolidation own immediately after such merger or consolidation 50% or more of the voting power of the outstanding securities of each of (A) the continuing or surviving entity and (B) any direct or indirect parent corporation of such continuing or surviving entity; or (ii) the sale, transfer or other disposition of all or substantially all of the Company's assets. A transaction shall not constitute a Change in Control if its sole purpose is to change the state of the Company's incorporation or to create a holding company that will be owned in substantially the same proportions by the persons who held the Company's securities immediately before such transaction.

"Cause" shall mean (i) an unauthorized use or disclosure of the Company's confidential information or trade secrets, which use or disclosure causes material harm to the Company; (ii) a material breach of any agreement between Employee and the Company; (iii) a material failure to comply with the Company's written policies or rules; (iv) conviction of, or plea of "guilty" or "no contest" to, a felony under the laws of the United States or any state thereof; (v) gross negligence or willful misconduct which causes material harm to the Company; or (vi) a continued failure to perform assigned duties after receiving written notification of such failure from the Board.

"Good Reason" shall mean any of the following events, if such event occurs without the Employee's consent: (i) the Employee's receipt of notice that his principal workplace will be relocated more than 30 miles; (ii) a reduction in the Employee's base salary by more than 10%, unless pursuant to a Company-wide reduction affecting all employees proportionately; or (iii) a change in Employee's position with the Company that materially reduces his level of authority or responsibility (including without limitation failure to nominate him as a director of the Company).

3. VACATION AND EMPLOYEE BENEFITS. During the term of his Employment, the Employee shall be eligible for 25 paid vacation days each year in accordance with the Company's standard policy for similarly situated employees, as it may be amended from time to time. During the term of his Employment, the Employee shall be eligible to participate in any employee benefit plans maintained by the Company for similarly situated employees, subject in each case to the generally applicable terms and conditions of the plan in question and to the determinations of any person or committee administering such plan.

4. BUSINESS EXPENSES. During the term of his Employment, the Employee shall be authorized to incur necessary and reasonable travel, entertainment and other business expenses in connection with his duties hereunder. The Company shall reimburse the Employee for such expenses upon presentation of an itemized account and appropriate supporting documentation, all in accordance with the Company's generally applicable policies.

5. TERM OF EMPLOYMENT.

(a) BASIC RULE. The Company agrees to continue the Employee's Employment, and the Employee agrees to remain in Employment with the Company, from the date of this Agreement until the date when the Employee's Employment terminates pursuant to Subsection (b) or (c) below. The Employee's Employment with the Company shall be "at will," meaning that either the Employee or the Company may terminate the Employee's Employment at any time, with or without cause. Any contrary representations which may have been made to the Employee shall be superseded by this Agreement. This Agreement shall constitute the full and complete agreement between the Employee and the Company on the "at will" nature of the Employee's Employment, which may only be changed in an express written agreement signed by the Employee and a duly authorized officer of the Company.

(b) TERMINATION. The Company may terminate the Employee's Employment at any time and for any reason (or no reason), and with or without cause, by giving the Employee notice in writing. The Employee may terminate his Employment by giving the Company 14 days' advance notice in writing. The Employee's Employment shall terminate automatically in the event of his death.

(c) PERMANENT DISABILITY. The Company may terminate the Employee's Employment due to Permanent Disability by giving the Employee 30 days' advance notice in writing. For all purposes under this Agreement, "Permanent Disability" shall mean that the Employee, at the time notice is given, has failed to perform his duties under this Agreement for a period of not less than 90 consecutive days as the result of his incapacity due to physical or mental injury, disability or illness. In the event that the Employee satisfactorily resumes the performance of substantially all of his duties hereunder before the termination of his Employment under this Subsection (c) becomes effective, the notice of termination shall automatically be deemed to have been revoked.

(d) RIGHTS UPON TERMINATION. Except as expressly provided in Section 6, upon the termination of the Employee's Employment pursuant to this Section 5, the Employee shall only be entitled to the compensation, benefits and reimbursements described in Sections 2, 3 and 4 for the period preceding the effective date of the termination. The payments under this Agreement shall fully discharge all responsibilities of the Company to the Employee.

(e) TERMINATION OF AGREEMENT. This Agreement shall terminate when all obligations of the parties hereunder have been satisfied. The termination of this Agreement shall not limit or otherwise affect any of the Employee's obligations under Section 7.

6. TERMINATION BENEFITS.

(a) GENERAL RELEASE. Any other provision of this Agreement notwithstanding, Subsections (b) and (c) below shall not apply unless the Employee (i) has executed a general release (in a form prescribed by the Company) of all known and unknown claims that he may then have against the Company or persons affiliated with the Company and (ii) has agreed not to prosecute any legal action or other proceeding based upon any of such claims.

(b) SEVERANCE PAY. If, during the term of this Agreement, the Company terminates the Employee's Employment for any reason other than Cause or Permanent Disability, or the Employee terminates his Employment for Good Reason, then the Company shall pay the Employee:

(i) BASE COMPENSATION. His Base Compensation for a period of 12 months following the termination of his Employment (the "Continuation Period"). Such Base Compensation shall be paid at the rate in effect at the time of the termination of Employment and in accordance with the Company's standard payroll procedures.

(ii) BONUS COMPENSATION. A bonus (the "Severance Bonus") in an amount determined as follows:

(A) If the Employee's Employment is terminated prior to the first anniversary of the date of this Agreement, the Severance Bonus shall be equal to a pro-rata portion of the anticipated first-year Annual Target Bonus as determined by the Board in good faith.

(B) If the Employee's Employment is terminated on or following the first anniversary of the date of this Agreement and prior to the third anniversary of the date of this Agreement, the Severance Bonus shall be equal to the greater of (I) the most recent Annual Target Bonus and (II) the average of Annual Target Bonuses awarded for the prior years.

(C) If the Employee's Employment is terminated on or following the third anniversary of the date of this Agreement, the Severance Bonus shall be equal to the greater of (I) the most recent Annual Target Bonus) and (II) the average of Annual Target Bonuses awarded for the prior three years.

Such Severance Bonus shall be payable in accordance with the Company's standard payroll procedures.

(c) HEALTH INSURANCE. If Subsection (b) above applies, and if the Employee elects to continue his health insurance coverage under the Consolidated Omnibus Budget Reconciliation Act ("COBRA") following the termination of his Employment, then the Company shall pay the Employee's monthly premium under COBRA until the earliest of (i) the close of the Continuation Period, (ii) the expiration of the Employee's continuation coverage

under COBRA and (iii) the date when the Employee is offered substantially equivalent health insurance coverage in connection with new employment or self-employment.

7. NON-SOLICITATION, NON-DISCLOSURE AND NON-COMPETITION. The Employee has entered into a Proprietary Information and Inventions Agreement with the Company, which agreement is incorporated herein by reference.

8. SUCCESSORS.

(a) COMPANY'S SUCCESSORS. This Agreement shall be binding upon any successor (whether direct or indirect and whether by purchase, lease, merger, consolidation, liquidation or otherwise) to all or substantially all of the Company's business and/or assets. For all purposes under this Agreement, the term "Company" shall include any successor to the Company's business and/or assets which becomes bound by this Agreement.

(b) EMPLOYEE'S SUCCESSORS. This Agreement and all rights of the Employee hereunder shall inure to the benefit of, and be enforceable by, the Employee's personal or legal representatives, executors, administrators, successors, heirs, distributees, devisees and legatees.

9. MISCELLANEOUS PROVISIONS.

(a) NOTICE. Notices and all other communications contemplated by this Agreement shall be in writing and shall be deemed to have been duly given when personally delivered or when mailed by overnight courier, U.S. registered or certified mail, return receipt requested and postage prepaid. In the case of the Employee, mailed notices shall be addressed to him at the home address which he most recently communicated to the Company in writing. In the case of the Company, mailed notices shall be addressed to its corporate headquarters, and all notices shall be directed to the attention of its Secretary.

(b) MODIFICATIONS AND WAIVERS. No provision of this Agreement shall be modified, waived or discharged unless the modification, waiver or discharge is agreed to in writing and signed by the Employee and by an authorized officer of the Company (other than the Employee). No waiver by either party of any breach of, or of compliance with, any condition or provision of this Agreement by the other party shall be considered a waiver of any other condition or provision or of the same condition or provision at another time.

(c) WHOLE AGREEMENT. No other agreements, representations or understandings (whether oral or written and whether express or implied) which are not expressly set forth in this Agreement have been made or entered into by either party with respect to the subject matter hereof. This Agreement and the Proprietary Information and Inventions Agreement contain the entire understanding of the parties with respect to the subject matter hereof.

(d) WITHHOLDING TAXES. All payments made under this Agreement shall be subject to reduction to reflect taxes or other charges required to be withheld by law.

(e) CHOICE OF LAW. The validity, interpretation, construction and performance of this Agreement shall be governed by the laws of the State of Maryland (except their provisions governing the choice of law).

(f) SEVERABILITY. The invalidity or unenforceability of any provision or provisions of this Agreement shall not affect the validity or enforceability of any other provision hereof, which shall remain in full force and effect.

(g) ARBITRATION. Any controversy or claim arising out of or relating to this Agreement or the breach thereof, or the Employee's Employment or the termination thereof, shall be settled in the State of Maryland, by arbitration in accordance with the National Rules for the Resolution of Employment Disputes of the American Arbitration Association. The decision of the arbitrator shall be final and binding on the parties, and judgment on the award rendered by the arbitrator may be entered in any court having jurisdiction thereof. The parties hereby agree that the arbitrator shall be empowered to enter an equitable decree mandating specific enforcement of the terms of this Agreement. The Company and the Employee shall share equally all fees and expenses of the arbitrator. The Employee hereby consents to personal jurisdiction of the state and federal courts located in the State of Maryland for any action or proceeding arising from or relating to this Agreement or relating to any arbitration in which the parties are participants.

(h) NO ASSIGNMENT. This Agreement and all rights and obligations of the Employee hereunder are personal to the Employee and may not be transferred or assigned by the Employee at any tune. The Company may assign its rights under this Agreement to any entity that assumes the Company's obligations hereunder in connection with any sale or transfer of all or a substantial portion of the Company's assets to such entity.

(i) COUNTERPARTS. This Agreement may be executed in two or more counterparts, each of which shall be deemed an original, but all of which together shall constitute one and the same instrument.

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IN WITNESS WHEREOF, each of the parties has executed this Agreement, in the case of the Company by its duly authorized officer, as of the date first written above.

/s/ William D. Clark

William D. Clark

VANDA PHARMACEUTICALS INC.

By:/s/ Mihael H. Polymeropoulos

Title: CEO

EXHIBIT 10.14

VANDA PHARMACEUTICALS INC.

EMPLOYMENT AGREEMENT

This Employment Agreement (this "Agreement") is entered into as of October 18, 2005 by and between Steve Shallcross (the "Employee") and Vanda Pharmaceuticals Inc., a Delaware corporation (the "Company").

1. DUTIES AND SCOPE OF EMPLOYMENT.

(a) POSITION. For the term of his employment under this Agreement ("Employment"), the Company agrees to employ the Employee in the position of Senior Vice President and Chief Financial Officer. The Employee shall be subject to the supervision of, and shall have such authority as is delegated to him by, the CEO and the board of directors of the Company (the "Board"), consistent with his position as Senior Vice President and Chief Financial Officer. The Employee hereby accepts such employment and agrees to undertake the duties and responsibilities normally inherent in such position and such other duties and responsibilities as the Board shall from time to time reasonably assign to him consistent with his position as Senior Vice President and Chief Financial Officer.

(b) OBLIGATIONS TO THE COMPANY. During the term of his Employment, the Employee shall devote his full business efforts and time to the Company. During the term of his Employment, without the prior written approval of the Board, the Employee shall not render services in any capacity to any other person or entity and shall not act as a sole proprietor or partner of any other person or entity or as a shareholder owning more than five percent of the stock of any other corporation. The Employee shall comply with the Company's policies and rules, as they may be in effect from time to time during the term of his Employment.

(c) NO CONFLICTING OBLIGATIONS. The Employee represents and warrants to the Company that he is under no obligations or commitments, whether contractual or otherwise, that are inconsistent with his obligations under this Agreement. The Employee represents and warrants that he will not use or disclose, in connection with his employment by the Company, any trade secrets or other proprietary information or intellectual property in which the Employee or any other person has any right, title or interest and that his employment by the Company as contemplated by this Agreement will not infringe or violate the rights of any other person or entity. The Employee represents and warrants to the Company that he has returned all property and confidential information belonging to any prior employers.

2. CASH AND INCENTIVE COMPENSATION.

(a) SALARY. The Company shall pay the Employee as compensation for his services a base salary at a gross annual rate of not less than $250,000. Such salary shall be payable in accordance with the Company's standard payroll procedures. (The annual compensation specified in this Subsection (a), together with any increases in such compensation that the Company may grant from time to time, is referred to in this Agreement as "Base Compensation.")

(b) INCENTIVE BONUSES. The Employee shall be eligible to be considered for an annual incentive bonus with a target amount equal to 25% of his Base Compensation (the "Annual Target Bonus"). Such bonus (if any) shall be awarded based on objective or subjective criteria established in advance by the Board. The determinations of the Board with respect to such bonus shall be final and binding.

(c) STOCK OPTIONS. Subject to the approval of the Board, the Company shall grant the Employee an incentive stock option covering 275,000 shares of the Company's Common Stock. Such option shall be granted as soon as reasonably practicable after the date of this Agreement. The per-share exercise price of such option shall be equal to the fair market value of one share of the Company's Common Stock on the date of grant. The term of such option shall be 10 years, subject to earlier expiration in the event of the termination of the Employee's Employment. The Employee shall vest in 25% of the option shares after the first 12 months of continuous service and shall vest in the remaining option shares in equal monthly installments over the next three years of continuous service. The vested and exercisable portion of the option shall be determined by adding 24 months to the Employee's actual period of service if, after a Change in Control, (i) the Employee's Employment is terminated by the Company for reasons other than Cause or (ii) the Employee's Employment is terminated by the Employee for Good Reason. The grant of such option shall be subject to the other terms and conditions set forth in the Company's stock plan governing the option, and the Company's standard form of stock option agreement.

For purposes of the foregoing:

"Change in Control" shall mean (i) the consummation of a merger or consolidation of the Company with or into another entity, if persons who were not stockholders of the Company immediately prior to such merger or consolidation own immediately after such merger or consolidation 50% or more of the voting power of the outstanding securities of each of (A) the continuing or surviving entity and (B) any direct or indirect parent corporation of such continuing or surviving entity; or (ii) the sale, transfer or other disposition of all or substantially all of the Company's assets. A transaction shall not constitute a Change in Control if its sole purpose is to change the state of the Company's incorporation or to create a holding company that will be owned in substantially the same proportions by the persons who held the Company's securities immediately before such transaction.

"Cause" shall mean (i) an unauthorized use or disclosure of the Company's confidential information or trade secrets, which use or disclosure causes material harm to the Company; (ii) a material breach of any agreement between Employee and the Company; (iii) a material failure to comply with the Company's written policies or rules; (iv) conviction of, or plea of "guilty" or "no contest" to, a felony under the laws of the United States or any state thereof; (v) gross negligence or willful misconduct which causes material harm to the Company; or (vi) a continued failure to perform assigned duties after receiving written notification of such failure from the Board.

"Good Reason" shall mean any of the following events, if such event occurs without the Employee's consent: (i) the Employee's receipt of notice that his principal workplace will be relocated more than 30 miles; (ii) a reduction in the Employee's base salary by more than 10%, unless pursuant to a Company-wide reduction affecting all employees proportionately; or (iii) a change in Employee's position with the Company that materially

reduces his level of authority or responsibility (including without limitation failure to nominate him as a director of the Company).

3. VACATION AND EMPLOYEE BENEFITS. During the term of his Employment, the Employee shall be eligible for 20 paid vacation days each year in accordance with the Company's standard policy for similarly situated employees, as it may be amended from time to time. During the term of his Employment, the Employee shall be eligible to participate in any employee benefit plans maintained by the Company for similarly situated employees, subject in each case to the generally applicable terms and conditions of the plan in question and to the determinations of any person or committee administering such plan.

4. BUSINESS EXPENSES. During the term of his Employment, the Employee shall be authorized to incur necessary and reasonable travel, entertainment and other business expenses in connection with his duties hereunder. The Company shall reimburse the Employee for such expenses upon presentation of an itemized account and appropriate supporting documentation, all in accordance with the Company's generally applicable policies.

5. TERM OF EMPLOYMENT.

(a) BASIC RULE. The Company agrees to continue the Employee's Employment, and the Employee agrees to remain in Employment with the Company, from the date of this Agreement until the date when the Employee's Employment terminates pursuant to Subsection (b) or (c) below. The Employee's Employment with the Company shall be "at will," meaning that either the Employee or the Company may terminate the Employee's Employment at any time, with or without cause. Any contrary representations which may have been made to the Employee shall be superseded by this Agreement. This Agreement shall constitute the full and complete agreement between the Employee and the Company on the "at will" nature of the Employee's Employment, which may only be changed in an express written agreement signed by the Employee and a duly authorized officer of the Company.

(b) TERMINATION. The Company may terminate the Employee's Employment at any time and for any reason (or no reason), and with or without cause, by giving the Employee notice in writing. The Employee may terminate his Employment by giving the Company 14 days' advance notice in writing. The Employee's Employment shall terminate automatically in the event of his death.

(c) PERMANENT DISABILITY. The Company may terminate the Employee's Employment due to Permanent Disability by giving the Employee 30 days' advance notice in writing. For all purposes under this Agreement, "Permanent Disability" shall mean that the Employee, at the time notice is given, has failed to perform his duties under this Agreement for a period of not less than 90 consecutive days as the result of his incapacity due to physical or mental injury, disability or illness. In the event that the Employee satisfactorily resumes the performance of substantially all of his duties hereunder before the termination of his Employment under this Subsection (c) becomes effective, the notice of termination shall automatically be deemed to have been revoked.

(d) RIGHTS UPON TERMINATION. Except as expressly provided in Section 6, upon the termination of the Employee's Employment pursuant to this Section 5, the Employee shall only be entitled to the compensation, benefits and reimbursements described in

Sections 2, 3 and 4 for the period preceding the effective date of the termination. The payments under this Agreement shall fully discharge all responsibilities of the Company to the Employee.

(e) TERMINATION OF AGREEMENT. This Agreement shall terminate when all obligations of the parties hereunder have been satisfied. The termination of this Agreement shall not limit or otherwise affect any of the Employee's obligations under Section 7.

6. TERMINATION BENEFITS.

(a) GENERAL RELEASE. Any other provision of this Agreement notwithstanding, Subsections (b) and (c) below shall not apply unless the Employee (i) has executed a general release (in a form prescribed by the Company) of all known and unknown claims that he may then have against the Company or persons affiliated with the Company and (ii) has agreed not to prosecute any legal action or other proceeding based upon any of such claims.

(b) SEVERANCE PAY. If, during the term of this Agreement, the Company terminates the Employee's Employment for any reason other than Cause or Permanent Disability, or the Employee terminates his Employment for Good Reason, then the Company shall pay the Employee:

(i) BASE COMPENSATION. His Base Compensation for a period of 12 months following the termination of his Employment (the "Continuation Period"). Such Base Compensation shall be paid at the rate in effect at the time of the termination of Employment and in accordance with the Company's standard payroll procedures.

(ii) BONUS COMPENSATION. A bonus (the "Severance Bonus") in an amount determined as follows:

(A) If the Employee's Employment is terminated prior to the first anniversary of the date of this Agreement, the Severance Bonus shall be equal to a pro-rata portion of the anticipated first-year Annual Target Bonus as determined by the Board in good faith.

(B) If the Employee's Employment is terminated on or following the first anniversary of the date of this Agreement and prior to the third anniversary of the date of this Agreement, the Severance Bonus shall be equal to the greater of (I) the most recent Annual Target Bonus and (II) the average of Annual Target Bonuses awarded for the prior years.

(C) If the Employee's Employment is terminated on or following the third anniversary of the date of this Agreement, the Severance Bonus shall be equal to the greater of (I) the most recent Annual Target Bonus) and (II) the average of Annual Target Bonuses awarded for the prior three years.

Such Severance Bonus shall be payable in accordance with the Company's standard payroll procedures.

(c) HEALTH INSURANCE. If Subsection (b) above applies, and if the Employee elects to continue his health insurance coverage under the Consolidated Omnibus

Budget Reconciliation Act ("COBRA") following the termination of his Employment, then the Company shall pay the Employee's monthly premium under COBRA until the earliest of (i) the close of the Continuation Period, (ii) the expiration of the Employee's continuation coverage under COBRA and (iii) the date when the Employee is offered substantially equivalent health insurance coverage in connection with new employment or self-employment.

7. NON-SOLICITATION, NON-DISCLOSURE AND NON-COMPETITION. The Employee has entered into a Proprietary Information and Inventions Agreement with the Company, which agreement is incorporated herein by reference.

8. SUCCESSORS.

(a) COMPANY'S SUCCESSORS. This Agreement shall be binding upon any successor (whether direct or indirect and whether by purchase, lease, merger, consolidation, liquidation or otherwise) to all or substantially all of the Company's business and/or assets. For all purposes under this Agreement, the term "Company" shall include any successor to the Company's business and/or assets which becomes bound by this Agreement.

(b) EMPLOYEE'S SUCCESSORS. This Agreement and all rights of the Employee hereunder shall inure to the benefit of, and be enforceable by, the Employee's personal or legal representatives, executors, administrators, successors, heirs, distributees, devisees and legatees.

9. MISCELLANEOUS PROVISIONS.

(a) NOTICE. Notices and all other communications contemplated by this Agreement shall be in writing and shall be deemed to have been duly given when personally delivered or when mailed by overnight courier, U.S. registered or certified mail, return receipt requested and postage prepaid. In the case of the Employee, mailed notices shall be addressed to him at the home address which he most recently communicated to the Company in writing. In the case of the Company, mailed notices shall be addressed to its corporate headquarters, and all notices shall be directed to the attention of its Secretary.

(b) MODIFICATIONS AND WAIVERS. No provision of this Agreement shall be modified, waived or discharged unless the modification, waiver or discharge is agreed to in writing and signed by the Employee and by an authorized officer of the Company (other than the Employee). No waiver by either party of any breach of, or of compliance with, any condition or provision of this Agreement by the other party shall be considered a waiver of any other condition or provision or of the same condition or provision at another time.

(c) WHOLE AGREEMENT. No other agreements, representations or understandings (whether oral or written and whether express or implied) which are not expressly set forth in this Agreement have been made or entered into by either party with respect to the subject matter hereof. This Agreement and the Proprietary Information and Inventions Agreement contain the entire understanding of the parties with respect to the subject matter hereof.

(d) WITHHOLDING TAXES. All payments made under this Agreement shall be subject to reduction to reflect taxes or other charges required to be withheld by law.

(e) CHOICE OF LAW. The validity, interpretation, construction and performance of this Agreement shall be governed by the laws of the State of Maryland (except their provisions governing the choice of law).

(f) SEVERABILITY. The invalidity or unenforceability of any provision or provisions of this Agreement shall not affect the validity or enforceability of any other provision hereof, which shall remain in full force and effect.

(g) ARBITRATION. Any controversy or claim arising out of or relating to this Agreement or the breach thereof, or the Employee's Employment or the termination thereof, shall be settled in the State of Maryland, by arbitration in accordance with the National Rules for the Resolution of Employment Disputes of the American Arbitration Association. The decision of the arbitrator shall be final and binding on the parties, and judgment on the award rendered by the arbitrator may be entered in any court having jurisdiction thereof. The parties hereby agree that the arbitrator shall be empowered to enter an equitable decree mandating specific enforcement of the terms of this Agreement. The Company and the Employee shall share equally all fees and expenses of the arbitrator. The Employee hereby consents to personal jurisdiction of the state and federal courts located in the State of Maryland for any action or proceeding arising from or relating to this Agreement or relating to any arbitration in which the parties are participants.

(h) No ASSIGNMENT. This Agreement and all rights and obligations of the Employee hereunder are personal to the Employee and may not be transferred or assigned by the Employee at any time. The Company may assign its rights under this Agreement to any entity that assumes the Company's obligations hereunder in connection with any sale or transfer of all or a substantial portion of the Company's assets to such entity.

(i) COUNTERPARTS. This Agreement may be executed in two or more counterparts, each of which shall be deemed an original, but all of which together shall constitute one and the same instrument.

[REMAINDER OF PAGE LEFT BLANK INTENTIONALLY]

IN WITNESS WHEREOF, each of the parties has executed this Agreement, in the case of the Company by its duly authorized officer, as of the date first written above.

/s/ Steve Shallcross

Steve Shallcross

VANDA PHARMACEUTICALS INC.

BY:/s/ Mihael H. Polymeropoulos

Title: CEO

EXHIBIT 10.15

VANDA PHARMACEUTICALS INC.

EMPLOYMENT AGREEMENT

This Employment Agreement (this "Agreement") is entered into as of August 15, 2005 by and between Deepak S. Phadke (the "Employee") and Vanda Pharmaceuticals Inc., a Delaware corporation (the "Company").

1. DUTIES AND SCOPE OF EMPLOYMENT.

(a) POSITION. For the term of his employment under this Agreement ("Employment"), the Company agrees to employ the Employee in the position of VP, Manutacturing. The Employee shall be subject to the supervision of, and shall have such authority as is delegated to him by, the Company's Chief Executive Officer. The Employee hereby accepts such employment and agrees to undertake the duties and responsibilities normally inherent in such position and such other duties and responsibilities as the Board shall from time to time reasonably assign to him.

(b) OBLIGATIONS TO THE COMPANY. During the term of his Employment, the Employee shall devote his full business efforts and time to the Company. During the term of his Employment, without the prior written approval of the Company's board of directors (the "Board"), the Employee shall not render services in any capacity to any other person or entity and shall not act as a sole proprietor or partner of any other person or entity or as a shareholder owning more than five percent of the stock of any other corporation. The Employee shall comply with the Company's policies and rules, as they may be in effect from time to time during the term of his Employment.

(c) NO CONFLICTING OBLIGATIONS. The Employee represents and warrants to the Company that he is under no obligations or commitments, whether contractual or otherwise, that are inconsistent with his obligations under this Agreement. The Employee represents and warrants that he will not use or disclose, in connection with his employment by the Company, any trade secrets or other proprietary information or intellectual property in which the Employee or any other person has any right, title or interest and that his employment by the Company as contemplated by this Agreement will not infringe or violate the rights of any other person or entity. The Employee represents and warrants to the Company that he has returned all property and confidential information belonging to any prior employers.

2. CASH AND INCENTIVE COMPENSATION.

(a) SALARY. The Company shall pay the Employee as compensation for his services a base salary at a gross annual rate of not less than $[170,000]. Such salary shall be payable in accordance with the Company's standard payroll procedures. (The annual compensation specified in this Subsection (a), together with any increases in such compensation that the Company may grant from time to time, is referred to in this Agreement as "Base Compensation.")

(b) INCENTIVE BONUSES. The Employee shall be eligible to be considered for an annual incentive bonus with a target amount equal to [15]% of his Base

Compensation (the "Annual Target Bonus"). Such bonus (if any) shall be awarded based on objective or subjective criteria established in advance by the Board. The determinations of the Board with respect to such bonus shall be final and binding.

(c) STOCK OPTIONS. Subject to the approval of the Board, the Company shall grant the Employee an incentive stock option covering 50,000 shares of the Company's Common Stock. Such option shall be granted as soon as reasonably practicable after the date of this Agreement. The per-share exercise price of such option shall be equal to the fair market value of one share of the Company's Common Stock on the date of grant. The term of such option shall be 10 years, subject to earlier expiration in the event of the termination of the Employee's Employment. The Employee shall vest in 25% of the option shares after the first 12 months of continuous service and shall vest in the remaining option shares in equal monthly installments over the next three years of continuous service. The vested and exercisable portion of the option shall be determined by adding 12 months to the Employee's actual period of service if, after a Change in Control, (i) the Employee's Employment is terminated by the Company for reasons other than Cause or (ii) the Employee's Employment is terminated by the Employee for Good Reason. The grant of such option shall be subject to the other terms and conditions set forth in the Company's stock plan governing the option, and the Company's standard form of stock option agreement.

For purposes of the foregoing:

"Change in Control" shall mean (i) the consummation of a merger or consolidation of the Company with or into another entity, if persons who were not stockholders of the Company immediately prior to such merger or consolidation own immediately after such merger or consolidation 50% or more of the voting power of the outstanding securities of each of (A) the continuing or surviving entity and (B) any direct or indirect parent corporation of such continuing or surviving entity; or (ii) the sale, transfer or other disposition of all or substantially all of the Company's assets. A transaction shall not constitute a Change in Control if its sole purpose is to change the state of the Company's incorporation or to create a holding company that will be owned in substantially the same proportions by the persons who held the Company's securities immediately before such transaction.

"Cause" shall mean (i) an unauthorized use or disclosure of the Company's confidential information or trade secrets, which use or disclosure causes material harm to the Company; (ii) a material breach of any agreement between Employee and the Company; (iii) a material failure to comply with the Company's written policies or rules; (iv) conviction of, or plea of "guilty" or "no contest" to, a felony under the laws of the United States or any state thereof; (v) gross negligence or willful misconduct which causes material harm to the Company; or (vi) a continued failure to perform assigned duties after receiving written notification of such failure from the Board.

"Good Reason" shall mean any of the following events, if such event occurs without the Employee's consent: (i) the Employee's receipt of notice that his principal workplace will be relocated more than 30 miles; or (ii) a reduction in the Employee's base salary by more than 10%, unless pursuant to a Company-wide reduction affecting all employees proportionately.

3. VACATION AND EMPLOYEE BENEFITS. During the term of his Employment, the Employee shall be eligible for 25 paid vacation days each year in accordance with the Company's standard policy for similarly situated employees, as it may be amended from time to time. During the term of his Employment, the Employee shall be eligible to participate in any employee benefit plans maintained by the Company for similarly situated employees, subject in each case to the generally applicable terms and conditions of the plan in question and to the determinations of any person or committee administering such plan.

4. BUSINESS EXPENSES. During the term of his Employment, the Employee shall be authorized to incur necessary and reasonable travel, entertainment and other business expenses in connection with his duties hereunder. The Company shall reimburse the Employee for such expenses upon presentation of an itemized account and appropriate supporting documentation, all in accordance with the Company's generally applicable policies.

5. TERM OF EMPLOYMENT.

(a) BASIC RULE. The Company agrees to continue the Employee's Employment, and the Employee agrees to remain in Employment with the Company, from the date of this Agreement until the date when the Employee's Employment terminates pursuant to Subsection (b) or (c) below. The Employee's Employment with the Company shall be "at will," meaning that either the Employee or the Company may terminate the Employee's Employment at any time, with or without cause. Any contrary representations which may have been made to the Employee shall be superseded by this Agreement. This Agreement shall constitute the full and complete agreement between the Employee and the Company on the "at will" nature of the Employee's Employment, which may only be changed in an express written agreement signed by the Employee and a duly authorized officer of the Company.

(b) TERMINATION. The Company may terminate the Employee's Employment at any time and for any reason (or no reason), and with or without cause, by giving the Employee notice in writing. The Employee may terminate his Employment by giving the Company 14 days' advance notice in writing. The Employee's Employment shall terminate automatically in the event of his death.

(c) PERMANENT DISABILITY. The Company may terminate the Employee's Employment due to Permanent Disability by giving the Employee 30 days' advance notice in writing. For all purposes under this Agreement, "Permanent Disability" shall mean that the Employee, at the time notice is given, has failed to perform his duties under this Agreement for a period of not less than 90 consecutive days as the result of his incapacity due to physical or mental injury, disability or illness. In the event that the Employee satisfactorily resumes the performance of substantially all of his duties hereunder before the termination of his Employment under this Subsection (c) becomes effective, the notice of termination shall automatically be deemed to have been revoked.

(d) RIGHTS UPON TERMINATION. Except as expressly provided in Section 6, upon the termination of the Employee's Employment pursuant to this Section 5, the Employee shall only be entitled to the compensation, benefits and reimbursements described in Sections 2, 3 and 4 for the period preceding the effective date of the termination. The payments under this Agreement shall fully discharge all responsibilities of the Company to the Employee.

(e) TERMINATION OF AGREEMENT. This Agreement shall terminate when all obligations of the parties hereunder have been satisfied. The termination of this Agreement shall not limit or otherwise affect any of the Employee's obligations under Section 7.

6. TERMINATION BENEFITS.

(a) GENERAL RELEASE. Any other provision of this Agreement notwithstanding, Subsections (b) and (c) below shall not apply unless the Employee (i) has executed a general release (in a form prescribed by the Company) of all known and unknown claims that he may then have against the Company or persons affiliated with the Company and (ii) has agreed not to prosecute any legal action or other proceeding based upon any of such claims.

(b) SEVERANCE PAY. If, during the term of this Agreement, the Company terminates the Employee's Employment for any reason other than Cause or Permanent Disability, or the Employee terminates his Employment for Good Reason, then the Company shall pay the Employee:

(i) BASE COMPENSATION. His Base Compensation for a period of six months following the termination of his Employment (the "Continuation Period"). Such Base Compensation shall be paid at the rate in effect at the time of the termination of Employment and in accordance with the Company's standard payroll procedures.

(ii) BONUS COMPENSATION. A bonus (the "Severance Bonus") in an amount equal to a pro-rata portion of the Annual Target Bonus for the year during which the Employee's Employment is terminated. Such Severance Bonus shall be payable in accordance with the Company's standard payroll procedures.

(c) HEALTH INSURANCE. If Subsection (b) above applies, and if the Employee elects to continue his health insurance coverage under the Consolidated Omnibus Budget Reconciliation Act ("COBRA") following the termination of his Employment, then the Company shall pay the Employee's monthly premium under COBRA until the earliest of (i) the close of the Continuation Period, (ii) the expiration of the Employee's continuation coverage under COBRA and (iii) the date when the Employee is offered substantially equivalent health insurance coverage in connection with new employment or self-employment.

7. NON-SOLICITATION, NON-DISCLOSURE AND NON-COMPETITION. the Employee has entered into a Proprietary Information and Inventions Agreement with the Company, which agreement is incorporated herein by reference.

8. SUCCESSORS.

(a) COMPANY'S SUCCESSORS. This Agreement shall be binding upon any successor (whether direct or indirect and whether by purchase, lease, merger, consolidation, liquidation or otherwise) to all or substantially all of the Company's business and/or assets. For all purposes under this Agreement, the term "Company" shall include any successor to the Company's business and/or assets which becomes bound by this Agreement.

(b) EMPLOYEE'S SUCCESSORS. This Agreement and all rights of the Employee hereunder shall inure to the benefit of, and be enforceable by, the Employee's personal

or legal representatives, executors, administrators, successors, heirs, distributees, devisees and legatees.

9. MISCELLANEOUS PROVISIONS.

(a) NOTICE. Notices and all other communications contemplated by this Agreement shall be in writing and shall be deemed to have been duly given when personally delivered or when mailed by overnight courier, U.S. registered or certified mail, return receipt requested and postage prepaid. In the case of the Employee, mailed notices shall be addressed to him at the home address which he most recently communicated to the Company in writing. In the case of the Company, mailed notices shall be addressed to its corporate headquarters, and all notices shall be directed to the attention of its Secretary.

(b) MODIFICATIONS AND WAIVERS. No provision of this Agreement shall be modified, waived or discharged unless the modification, waiver or discharge is agreed to in writing and signed by the Employee and by an authorized officer of the Company (other than the Employee). No waiver by either party of any breach of, or of compliance with, any condition or provision of this Agreement by the other party shall be considered a waiver of any other condition or provision or of the same condition or provision at another time.

(c) WHOLE AGREEMENT. No other agreements, representations or understandings (whether oral or written and whether express or implied) which are not expressly set forth in this Agreement have been made or entered into by either party with respect to the subject matter hereof. This Agreement and the Proprietary Information and Inventions Agreement contain the entire understanding of the parties with respect to the subject matter hereof.

(d) WITHHOLDING TAXES. All payments made under this Agreement shall be subject to reduction to reflect taxes or other charges required to be withheld by law.

(e) CHOICE OF LAW. The validity, interpretation, construction and performance of this Agreement shall be governed by the laws of the State of Maryland (except their provisions governing the choice of law).

(f) SEVERABILITY. The invalidity or unenforceability of any provision or provisions of this Agreement shall not affect the validity or enforceability of any other provision hereof, which shall remain in full force and effect.

(g) ARBITRATION. Any controversy or claim arising out of or relating to this Agreement or the breach thereof, or the Employee's Employment or the termination thereof, shall be settled in the State of Maryland, by arbitration in accordance with the National Rules for the Resolution of Employment Disputes of the American Arbitration Association. The decision of the arbitrator shall be final and binding on the parties, and judgment on the award rendered by the arbitrator may be entered in any court having jurisdiction thereof. The parties hereby agree that the arbitrator shall be empowered to enter an equitable decree mandating specific enforcement of the terms of this Agreement. The Company and the Employee shall share equally all fees and expenses of the arbitrator. The Employee hereby consents to personal jurisdiction of the state and federal courts located in the State of Maryland for any action or proceeding arising

from or relating to this Agreement or relating to any arbitration in which the parties are participants.

(h) NO ASSIGNMENT. This Agreement and all rights and obligations of the Employee hereunder are personal to the Employee and may not be transferred or assigned by the Employee at any time. The Company may assign its rights under this Agreement to any entity that assumes the Company's obligations hereunder in connection with any sale or transfer of all or a substantial portion of the Company's assets to such entity.

(i) COUNTERPARTS. This Agreement may be executed in two or more counterparts, each of which shall be deemed an original, but all of which together shall constitute one and the same instrument.

[REMAINDER OF PAGE LEFT BLANK INTENTIONALLY]

IN WITNESS WHEREOF, each of the parties has executed this Agreement, in the case of the Company by its duly authorized officer, as of the date first written above.

/s/ Deepak S. Phadke

DEEPAK S. PHADKE

VANDA PHARMACEUTICALS INC.

By:/s/ Mihael H. Polymeropoulos

Title: CEO

EXHIBIT 10.16

VANDA PHARMACEUTICALS INC.

EMPLOYMENT AGREEMENT

This Employment Agreement (this "Agreement") is entered into as of May 27, 2005, by and between Thomas L. Copmann (the "Employee") and Vanda Pharmaceuticals Inc., a Delaware corporation (the "Company").

1. DUTIES AND SCOPE OF EMPLOYMENT.

(a) POSITION. For the term of his employment under this Agreement ("Employment"), the Company agrees to employ the Employee in the position of Vice President Regulatory Affairs. The Employee shall be subject to the supervision of, and shall have such authority as is delegated to him by, the Company's Chief Executive Officer. The Employee hereby accepts such employment and agrees to undertake the duties and responsibilities normally inherent in such position and such other duties and responsibilities as the Board shall from time to time reasonably assign to him.

(b) OBLIGATIONS TO THE COMPANY. During the term of his Employment, the Employee shall devote his full business efforts and time to the Company. During the term of his Employment, without the prior written approval of the Company's board of directors (the "Board"), the Employee shall not render services in any capacity to any other person or entity and shall not act as a sole proprietor or partner of any other person or entity or as a shareholder owning more than five percent of the stock of any other corporation. The Employee shall comply with the Company's policies and rules, as they may be in effect from time to time during the term of his Employment.

(c) NO CONFLICTING OBLIGATIONS. The Employee represents and warrants to the Company that he is under no obligations or commitments, whether contractual or otherwise, that are inconsistent with his obligations under this Agreement. The Employee represents and warrants that he will not use or disclose, in connection with his employment by the Company, any trade secrets or other proprietary information or intellectual property in which the Employee or any other person has any right, title or interest and that his employment by the Company as contemplated by this Agreement will not infringe or violate the rights of any other person or entity. The Employee represents and warrants to the Company that he has returned all property and confidential information belonging to any prior employers.

2. CASH AND INCENTIVE COMPENSATION.

(a) SALARY. The Company shall pay the Employee as compensation for his services a base salary at a gross annual rate of not less than $200,000. Such salary shall be payable in accordance with the Company's standard payroll procedures. (The annual compensation specified in this Subsection (a), together with any increases in such compensation that the Company may grant from time to time, is referred to in this Agreement as "Base Compensation.")

(b) INCENTIVE BONUSES. The Employee shall be eligible to be considered for an annual incentive bonus with a target amount equal to 28% of his Base

Compensation (the "Annual Target Bonus"). Such bonus (if any) shall be awarded based on objective or subjective criteria established in advance by the Board. The determinations of the Board with respect to such bonus shall be final and binding.

(c) STOCK OPTIONS. Subject to the approval of the Board, the Company shall grant the Employee an incentive stock option covering 75,000 shares of the Company's Common Stock. Such option shall be granted as soon as reasonably practicable after the date of this Agreement. The per-share exercise price of such option shall be equal to the fair market value of one share of the Company's Common Stock on the date of grant. The term of such option shall be 10 years, subject to earlier expiration in the event of the termination of the Employee's Employment. The Employee shall vest in 25% of the option shares after the first 12 months of continuous service and shall vest in the remaining option shares in equal monthly installments over the next three years of continuous service. The vested and exercisable portion of the option shall be determined by adding 12 months to the Employee's actual period of service if, after a Change in Control, (i) the Employee's Employment is terminated by the Company for reasons other than Cause or (ii) the Employee's Employment is terminated by the Employee for Good Reason. The grant of such option shall be subject to the other terms and conditions set forth in the Company's stock plan governing the option, and the Company's standard form of stock option agreement.

For purposes of the foregoing:

"Change in Control" shall mean (i) the consummation of a merger or consolidation of the Company with or into another entity, if persons who were not stockholders of the Company immediately prior to such merger or consolidation own immediately after such merger or consolidation 50% or more of the voting power of the outstanding securities of each of (A) the continuing or surviving entity and (B) any direct or indirect parent corporation of such continuing or surviving entity; or (ii) the sale, transfer or other disposition of all or substantially all of the Company's assets. A transaction shall not constitute a Change in Control if its sole purpose is to change the state of the Company's incorporation or to create a holding company that will be owned in substantially the same proportions by the persons who held the Company's securities immediately before such transaction.

"Cause" shall mean (i) an unauthorized use or disclosure of the Company's confidential information or trade secrets, which use or disclosure causes material harm to the Company; (ii) a material breach of any agreement between Employee and the Company; (iii) a material failure to comply with the Company's written policies or rules; (iv) conviction of, or plea of "guilty" or "no contest" to, a felony under the laws of the United States or any state thereof; (v) gross negligence or willful misconduct which causes material harm to the Company; or (vi) a continued failure to perform assigned duties after receiving written notification of such failure from the Board.

"Good Reason" shall mean any of the following events, if such event occurs without the Employee's consent: (i) the Employee's receipt of notice that his principal workplace will be relocated more than 30 miles; or (ii) a reduction in the Employee's base salary by more than 10%, unless pursuant to a Company-wide reduction affecting all employees proportionately.

3. VACATION AND EMPLOYEE BENEFITS. During the term of his Employment, the Employee shall be eligible for 25 paid vacation days each year in accordance with the Company's standard policy for similarly situated employees, as it may be amended from time to time. During the term of his Employment, the Employee shall be eligible to participate in any employee benefit plans maintained by the Company for similarly situated employees, subject in each case to the generally applicable terms and conditions of the plan in question and to the determinations of any person or committee administering such plan.

4. BUSINESS EXPENSES. During the term of his Employment, the Employee shall be authorized to incur necessary and reasonable travel, entertainment and other business expenses in connection with his duties hereunder. The Company shall reimburse the Employee for such expenses upon presentation of an itemized account and appropriate supporting documentation, all in accordance with the Company's generally applicable policies.

5. TERM OF EMPLOYMENT.

(a) BASIC RULE. The Company agrees to continue the Employee's Employment, and the Employee agrees to remain in Employment with the Company, from the date of this Agreement until the date when the Employee's Employment terminates pursuant to Subsection (b) or (c) below. The Employee's Employment with the Company shall be "at will," meaning that either the Employee or the Company may terminate the Employee's Employment at any time, with or without cause. Any contrary representations which may have been made to the Employee shall be superseded by this Agreement. This Agreement shall constitute the full and complete agreement between the Employee and the Company on the "at will" nature of the Employee's Employment, which may only be changed in an express written agreement signed by the Employee and a duly authorized officer of the Company.

(b) TERMINATION. The Company may terminate the Employee's Employment at any time and for any reason (or no reason), and with or without cause, by giving the Employee notice in writing. The Employee may terminate his Employment by giving the Company 14 days' advance notice in writing. The Employee's Employment shall terminate automatically in the event of his death.

(c) PERMANENT DISABILITY. The Company may terminate the Employee's Employment due to Permanent Disability by giving the Employee 30 days' advance notice in writing. For all purposes under this Agreement, "Permanent Disability" shall mean that the Employee, at the time notice is given, has failed to perform his duties under this Agreement for a period of not less than 90 consecutive days as the result of his incapacity due to physical or mental injury, disability or illness. In the event that the Employee satisfactorily resumes the performance of substantially all of his duties hereunder before the termination of his Employment under this Subsection (c) becomes effective, the notice of termination shall automatically be deemed to have been revoked.

(d) RIGHTS UPON TERMINATION. Except as expressly provided in Section 6, upon the termination of the Employee's Employment pursuant to this Section 5, the Employee shall only be entitled to the compensation, benefits and reimbursements described in Sections 2, 3 and 4 for the period preceding the effective date of the termination. The payments under this Agreement shall fully discharge all responsibilities of the Company to the Employee.

(e) TERMINATION OF AGREEMENT. This Agreement shall terminate when all obligations of the parties hereunder have been satisfied. The termination of this Agreement shall not limit or otherwise affect any of the Employee's obligations under Section 7.

6. TERMINATION BENEFITS.

(a) GENERAL RELEASE. Any other provision of this Agreement notwithstanding, Subsections (b) and (c) below shall not apply unless the Employee (i) has executed a general release (in a form prescribed by the Company) of all known and unknown claims that he may then have against the Company or persons affiliated with the Company and (ii) has agreed not to prosecute any legal action or other proceeding based upon any of such claims.

(b) SEVERANCE PAY. If, during the term of this Agreement, the Company terminates the Employee's Employment for any reason other than Cause or Permanent Disability, or the Employee terminates his Employment for Good Reason, then the Company shall pay the Employee:

(i) BASE COMPENSATION. His Base Compensation for a period of six months following the termination of his Employment (the "Continuation Period"). Such Base Compensation shall be paid at the rate in effect at the time of the termination of Employment and in accordance with the Company's standard payroll procedures.

(ii) BONUS COMPENSATION. A bonus (the "Severance Bonus") in an amount equal to a pro-rata portion of the Annual Target Bonus for the year during which the Employee's Employment is terminated. Such Severance Bonus shall be payable in accordance with the Company's standard payroll procedures.

(c) HEALTH INSURANCE. If Subsection (b) above applies, and if the Employee elects to continue his health insurance coverage under the Consolidated Omnibus Budget Reconciliation Act ("COBRA") following the termination of his Employment, then the Company shall pay the Employee's monthly premium under COBRA until the earliest of (i) the close of the Continuation Period, (ii) the expiration of the Employee's continuation coverage under COBRA and (iii) the date when the Employee is offered substantially equivalent health insurance coverage in connection with new employment or self-employment.

7. NON-SOLICITATION, NON-DISCLOSURE AND NON-COMPETITION. The Employee has entered into a Proprietary Information and Inventions Agreement with the Company, which agreement is incorporated herein by reference.

8. SUCCESSORS.

(a) COMPANY'S SUCCESSORS. This Agreement shall be binding upon any successor (whether direct or indirect and whether by purchase, lease, merger, consolidation, liquidation or otherwise) to all or substantially all of the Company's business and/or assets. For all purposes under this Agreement, the term "Company" shall include any successor to the Company's business and/or assets which becomes bound by this Agreement.

(b) EMPLOYEE'S SUCCESSORS. This Agreement and all rights of the Employee hereunder shall inure to the benefit of, and be enforceable by, the Employee's personal

or legal representatives, executors, administrators, successors, heirs, distributees, devisees and legatees.

9. MISCELLANEOUS PROVISIONS.

(a) NOTICE. Notices and all other communications contemplated by this Agreement shall be in writing and shall be deemed to have been duly given when personally delivered or when mailed by overnight courier, U.S. registered or certified mail, return receipt requested and postage prepaid. In the case of the Employee, mailed notices shall be addressed to him at the home address which he most recently communicated to the Company in writing. In the case of the Company, mailed notices shall be addressed to its corporate headquarters, and all notices shall be directed to the attention of its Secretary.

(b) MODIFICATIONS AND WAIVERS. No provision of this Agreement shall be modified, waived or discharged unless the modification, waiver or discharge is agreed to in writing and signed by the Employee and by an authorized officer of the Company (other than the Employee). No waiver by either party of any breach of, or of compliance with, any condition or provision of this Agreement by the other party shall be considered a waiver of any other condition or provision or of the same condition or provision at another time.

(c) WHOLE AGREEMENT. No other agreements, representations or understandings (whether oral or written and whether express or implied) which are not expressly set forth in this Agreement have been made or entered into by either party with respect to the subject matter hereof. This Agreement and the Proprietary Information and Inventions Agreement contain the entire understanding of the parties with respect to the subject matter hereof.

(d) WITHHOLDING TAXES. All payments made under this Agreement shall be subject to reduction to reflect taxes or other charges required to be withheld by law.

(e) CHOICE OF LAW. The validity, interpretation, construction and performance of this Agreement shall be governed by the laws of the State of Maryland (except their provisions governing the choice of law).

(f) SEVERABILITY. The invalidity or unenforceability of any provision or provisions of this Agreement shall not affect the validity or enforceability of any other provision hereof, which shall remain in full force and effect.

(g) ARBITRATION. Any controversy or claim arising out of or relating to this Agreement or the breach thereof, or the Employee's Employment or the termination thereof, shall be settled in the State of Maryland, by arbitration in accordance with the National Rules for the Resolution of Employment Disputes of the American Arbitration Association. The decision of the arbitrator shall be final and binding on the parties, and judgment on the award rendered by the arbitrator may be entered in any court having jurisdiction thereof. The parties hereby agree that the arbitrator shall be empowered to enter an equitable decree mandating specific enforcement of the terms of this Agreement. The Company and the Employee shall share equally all fees and expenses of the arbitrator. The Employee hereby consents to personal jurisdiction of the state and federal courts located in the State of Maryland for any action or proceeding arising

from or relating to this Agreement or relating to any arbitration in which the parties are participants.

(h) NO ASSIGNMENT. This Agreement and all rights and obligations of the Employee hereunder are personal to the Employee and may not be transferred or assigned by the Employee at any time. The Company may assign its rights under this Agreement to any entity that assumes the Company's obligations hereunder in connection with any sale or transfer of all or a substantial portion of the Company's assets to such entity.

(i) COUNTERPARTS. This Agreement may be executed in two or more counterparts, each of which shall be deemed an original, but all of which together shall constitute one and the same instrument.

[REMAINDER OF PAGE LEFT BLANK INTENTIONALLY]

IN WITNESS WHEREOF, each of the parties has executed this Agreement, in the case of the Company by its duly authorized officer, as of the date first written above.

/s/ Thomas Copmann

VANDA PHARMACEUTICALS INC.

By /s/ Mihael H. Polymeropoulos

Title: CEO

EXHIBIT 21.1

Vanda has one subsidiary, Vanda Pharmaceuticals Pte. Ltd., organized under the laws of Singapore.

Exhibit 23.2

CONSENT OF INDEPENDENT REGISTERED PUBLIC ACCOUNTING FIRM

We hereby consent to the use in this Registration Statement on Form S-1 of our report dated December 29, 2005 relating to the financial statements, which appear in such Registration Statement. We also consent to the references to us under the headings “Experts” and “Selected Financial Data” in such Registration Statement.

/s/ PricewaterhouseCoopers LLP
McLean, Virginia
December 29, 2005