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

FORM 10-K

☒ **ANNUAL REPORT PURSUANT TO SECTION 13 OR 15(d) OF THE SECURITIES EXCHANGE ACT OF 1934**

For the fiscal year ended December 31, 2002

or

☐ **TRANSITION REPORT PURSUANT TO SECTION 13 OR 15(d) OF THE SECURITIES EXCHANGE ACT OF 1934**

Commission file number 0-29889

RIGEL PHARMACEUTICALS, INC.
(Exact name of registrant as specified in its charter)

Delaware (State or other jurisdiction of incorporation or organization)	**94-3248524** (IRS Employer Identification Number)
1180 Veterans Blvd. **South San Francisco, California** (Address of principal executive offices)	**94080** (Zip Code)

(650) 624-1100
(Registrant's telephone number, including area code)

Securities registered pursuant to Section 12(b) of the Act:
None

Securities registered pursuant to Section 12(g) of the Act:
Common Stock, par value $0.001 per share
(Title of Class)

Indicate by check mark whether the registrant (1) has filed all reports required to be filed by Section 13 or 15(d) of the Securities Exchange Act of 1934 during the preceding 12 months (or for such shorter period that the registrant was required to file such reports), and (2) has been subject to such filing requirements for the past 90 days. Yes ☒ No ☐

Indicate by check mark if disclosure of delinquent filers pursuant to Item 405 of Regulation S-K is not contained herein, and will not be contained, to the best of registrant's knowledge, in definitive proxy or information statements incorporated by reference in Part III of this Form 10-K or any amendment to this Form 10-K. ☒

Indicate by a check mark whether the registrant is an accelerated filer (as defined in Exchange Act Rule 12b-2) Yes☒ No ☐

The approximate aggregate market value of the Common Stock held by non-affiliates of the registrant, based upon the closing price of the Common Stock as reported on the Nasdaq National Market on June 28, 2002, the last business day of the registrants most recently completed second fiscal quarter, was $100,285,535.

As of March 14, 2003, there were 45,976,828 shares of the registrant's Common Stock outstanding.

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PART I

Item 1. Business

Statements made in this document other than statements of historical fact, including statements about Rigel's scientific programs, preclinical studies, product pipeline, corporate partnerships, licenses and intellectual property, are forward-looking statements within the meaning of Section 27A of the Securities Act of 1933 and Section 21E of the Securities Exchange Act of 1934 and are subject to a number of uncertainties that could cause actual results to differ materially from the statements made, including risks associated with the success of research and product development programs, results achieved in future preclinical studies and clinical trials, the regulatory approval process, competitive technologies and products, the scope and validity of patents, proprietary technology and corporate partnerships. Reference is made to discussion about risks associated with product development programs, intellectual property and other risks that may affect our business under "Risk Factors" below. We do not undertake any obligation to update forward-looking statements.

Overview

Rigel's mission is to become a source of novel, small-molecule drugs to meet large, unmet medical needs. Our business model is to develop a portfolio of drug candidates and to take these through Phase II clinical trials, after which we intend to seek partners for completion of clinical trials, regulatory approval and marketing. We have identified three lead product development programs: mast cell inhibition to treat immunologic diseases such as asthma/allergy and autoimmune disorders, antiviral agents to treat hepatitis C, and ubiquitin ligases, a new class of cancer drug targets. We have begun clinical testing of our first product candidate, for the treatment of allergic rhinitis, and plan to begin clinical trials of two additional drug candidates for the treatment of hepatitis C and rheumatoid arthritis within the next twelve months. Our approach to drug discovery is based on advanced, proprietary functional genomics techniques that allow us to identify targets with a demonstrable role in a disease pathway and to screen efficiently for those targets that are likely to be amenable to drug modulation. We were incorporated in Delaware in June 1996, and we are based in South San Francisco, California.

Our Strategy

Our strategy is to develop a portfolio of drug candidates that can be developed into small molecule therapeutics. We believe that producing a portfolio of many drug candidates and working in conjunction with pharmaceutical companies to further develop those candidates increases our probability of commercial success. By utilizing our technology to rapidly discover and validate new targets and drug candidates in a wide range of applications, we believe that our portfolio approach allows us to minimize the risk of failure by pursuing many drug candidates at once, while concurrently being well positioned to help fill a continuing product pipeline gap of major pharmaceutical companies.

The drug development process is one that is subject to both high costs and high risk of failures. Rather than incur the costs of taking drug candidates all the way through the drug approval process and exposing ourselves to the risk of failure associated with Phase III clinical trials, we intend to identify a portfolio of new drug candidates across a broad range of diseases and develop them through Phase II clinical trials only. We believe that multiple drug candidates can be developed through Phase II clinical trials for approximately the same cost as would be required to take one drug candidate through Phase III clinical trials and marketing approval.

The key elements of our scientific and business strategy are to:

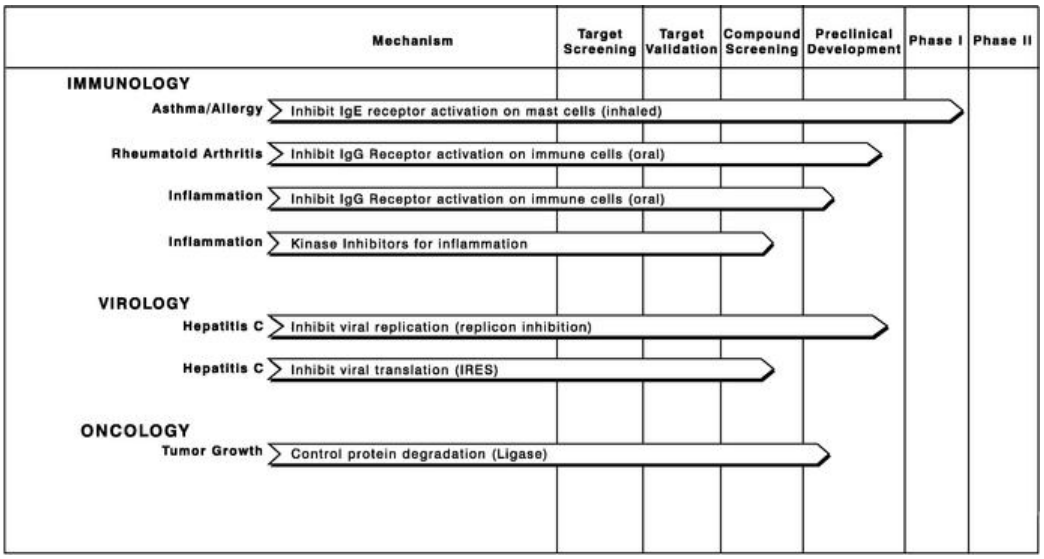
- develop a portfolio of small molecule drugs that can be delivered to intracellular targets;
- focus on diseases that represent large medical markets with significant populations that are currently under served;

- establish strategic collaborations with pharmaceutical and biotechnology companies to enhance product development and commercialization and to partner our research programs in the later stages of drug development;
- structure corporate partnering agreements to permit multiple collaborations in each disease area by focusing on disease pathways and targets; and
- expand, enhance and protect our technology.

Proprietary Product Development

We conduct research programs for our own proprietary programs as well as for programs conducted jointly with our partners. Our proprietary programs are completely owned by us. The following table summarizes the key information for these proprietary programs that focus on specific disease mechanisms:

These Programs are:



(1) "Target screening": Disease-modeled screening in cells using our post-genomics combinatorial biology technology.
(2) "Target validation": Testing to establish a causal link between an intracellular protein target and a cellular response important in a disease process.
(3) "Compound screening": Screening of small molecule compounds in biochemical and cell-based assays to identify a compound that binds to a functionally active site of a validated target.
(4) "Preclinical development": Pharmacology and toxicology testing in animal models to gather data necessary to comply with applicable regulatory protocols prior to submission of an Investigational New Drug application to the United States Food and Drug Administration.
(5) "Phase I": Clinical testing in humans to determine safety.
(6) "Phase II": Clinical testing in humans to determine efficacy.

Immunology

Many diseases and disorders result from defects in the immune system. Over 40 million people in the United States suffered from allergic disorders and over 20 million from asthmatic disorders in 2001. Anti-asthmatic and allergy relief medications exceeded $5 billion in worldwide sales in 2001. In 2001, another 3 million to 5 million patients in the United States were treated for other immune disorders. We currently have four programs in immunology focused on asthma/allergy, rheumatoid arthritis and inflammation.

Our mast cell kinase inhibitor program has produced a number of therapeutic opportunities. The goal of this program is to identify compounds that inhibit the secretion of inflammatory factors resulting from either IgE or IgG binding to receptors on mast cells. We believe that small molecule inhibitors of IgE or IgG signaling pathways could play an important role in the treatment of chronic immune disorders. In addition, we believe that our chemistry efforts may have identified additional kinase inhibitors that regulate other related processes within mast cells and other immune cells.

The first compound out of this program, R112, is an inhaled kinase inhibitor and we expect that a number of additional therapeutic targets could emerge from this program.

Asthma/Allergy We began a Phase I clinical trial of R112 in September 2002 in Britain. In this initial safety study, conducted with healthy volunteers, no significant adverse events were observed. The data from this trial was incorporated into an investigational new drug, or IND, application that was filed with the United States Food and Drug Administration, or FDA, in November 2002. Approval to proceed was received from the FDA in December 2002 and a clinical trial is now underway at National Jewish Medical Center in Denver, Colorado. The clinical trial will evaluate the effectiveness of R112 in patients with documented allergies. We expect to have the results of this study in the middle of 2003.

Rheumatoid Arthritis Another drug candidate that we expect to emerge from our mast cell kinase inhibitor program is a compound that inhibits IgG receptor activation for therapeutic applications in the area of rheumatoid arthritis. We have administered several product candidates into animal models of rheumatoid arthritis. We expect to file an IND application with the FDA for the indication of rheumatoid arthritis by early 2004.

Inflammation We are also researching in other autoimmune mediated inflammation disorders such as multiple sclerosis and inflammation of the bowel. We are in the process of conducting preclinical studies with our product candidates on animal models of multiple sclerosis and inflammation of the bowel.

Inflammation Using Other Targets We have identified more than one kinase which may be inhibited in order to treat inflammation related disorders and we are in the process of screening other compounds against various kinases in order to find additional lead compounds to potentially treat inflammation related disorders.

Virology

Experts estimate that over 170 million people worldwide are infected by the hepatitis C virus, with more than 4 million cases in the United States. Hepatitis C is a major cause of chronic hepatitis, cirrhosis and hepatocellular carcinoma. Approximately 85 percent of those who contract the disease remain chronically infected. Interferon-alpha, the current treatment standard, is ineffective in a significant portion of HCV-infected individuals, and an increasing number of patients are developing drug resistance

Hepatits C Replicon Program. Our lead program in the hepatitis C area is a program with particular emphasis on developing a small-molecule drug candidate to block the ability of the virus to reproduce itself. This approach is substantially different from interferon-alpha, which primarily works

indirectly to boost the immune system. In contrast, our lead compound, R803, appears to target the virus directly by interfering with a viral protein involved in replication. R803

is currently in preclinical development, and we expect to initiate clinical trials in late 2003.

Hepatitis C IRES Program. We initiated a research program based upon technology acquired from Questcor Pharmaceuticals, Inc. in September 2000. The goal of this program is to identify compounds that interfere with the IRES translation mechanism of the hepatitis C virus. A set of high-throughput cell-based screens has been established and initial compounds have been identified as part of this program. Under the terms of our agreement with Questcor, we are obligated to assign back to Questcor all of our rights in the technology and intellectual property to which we are entitled pursuant to the agreement if we commit a material breach of the agreement and if Questcor follows certain procedures set forth in the agreement.

Oncology

Cancer is a group of diseases characterized by the uncontrolled growth and proliferation of cells. This growth invades vital organs and often results in death. The United States market for branded cancer drugs totaled approximately $7.0 billion in 2001 and is projected to grow at an 11% annual growth rate. Cancer is the second leading cause of death in the United States, exceeded only by cardiovascular disease. In 2001, an estimated 1.3 million people were diagnosed with cancer, and more than 550,000 patients died of cancer in the United States. Although there have been improvements in cancer therapies over the last decade, there remains a significant medical need for the development of both more effective and less toxic drugs for the treatment of cancer.

Control Protein Degradation. This program is focused on characterizing and developing specific inhibitors of protein-degrading enzymes referred to as ubiquitin ligases. Many intracellular proteins that play a critical role in signaling pathways are regulated by the protein-degrading process. Many signaling proteins control cell function through active intermediates whose levels vary rapidly during different phases of a physiologic response. Disease processes can be treated by up-regulating or down-regulating these key signaling proteins as a way to enhance or dampen specific cellular responses. This antitumor program is focused on the ubiquitin ligase pathway unique to malignancies. The goal of this program is to use specific inhibitors of ubiquitin ligases that regulate mitosis, or cell division, to stop growth and induce apoptosis, or cell death, in transformed cancer cell lines. We have completed high-throughput screening, or HTS, and have identified several preclinical candidate compounds in this program. We are in the process of conducting preclinical studies.

Corporate Collaborations

We have established and will continue to pursue corporate collaborations with pharmaceutical and biotechnology companies to fund a wide array of research and development programs. We currently have collaborations with four major pharmaceutical companies, including one with Janssen Pharmaceutica N.V., a division of Johnson & Johnson, relating to oncology therapeutics and diagnostics, one with Pfizer Inc. relating to asthma and allergy therapeutics, one with Novartis Pharma AG with four different programs relating to immunology, oncology and chronic bronchitis and one with Daiichi Pharmaceuticals Co., Ltd. in the area of oncology.

As of December 31, 2002, we had received a total of $77.8 million from our collaborators. Included in this amount is $20.0 million from the private placement and public offering of equity securities and $57.8 million from the receipt of technology access fees, research funding and milestone payments, of which $6.2 million was deferred at December 31, 2002. In addition, we have a number of scientific collaborations with academic institutions and biotechnology companies under which we have in-licensed technology. We intend to pursue further collaborations as appropriate.

In most of our collaborations, inventions are intended to be owned by the employer of their inventors in accordance with United States patent law, subject to licenses or assignments granted in the agreements.

Johnson & Johnson

Effective December 1998, we entered into a three-year research collaboration, ended on December 4, 2001, with Johnson & Johnson, to identify, discover and validate novel drug targets that regulate cell cycle, and, specifically, to identify drug targets and the active peptides that bind to them that can restore a mutated cell's ability to stop uncontrolled cell division. In December 2001, Johnson & Johnson extended this research collaboration for an additional two years through December 2003. Under the agreement, we are providing certain assays and associated technology to Johnson & Johnson for the assessment of the alteration or normalization of the dysfunctional cell cycles of cancer cells for Johnson & Johnson's internal research purposes. Furthermore, in an amendment to the collaboration in July 2000, Johnson & Johnson expanded the collaboration whereby we performed compound screening and medicinal chemistry on some of the validated targets accepted by Johnson & Johnson. We have identified several novel drug targets in this program, four of which have been accepted by Johnson & Johnson as validated. Two of these four targets have completed HTS at Rigel and are being prepared for high-throughput screening at Johnson & Johnson.

Under the collaboration, Johnson & Johnson has the exclusive right to utilize our technology, and technology developed during the collaboration, to discover, develop, identify, make and commercialize certain products on a worldwide basis. These products are:

- diagnostic products that are either a component of a drug target and associated active peptide, identified by or on behalf of us or Johnson & Johnson in an assay developed during the collaboration or identified in a Johnson & Johnson screening assay as a result of Johnson & Johnson's internal research;
- products identified by or on behalf of Johnson & Johnson as a result of Johnson & Johnson's internal research;
- products identified by or on behalf of either us or Johnson & Johnson in an assay that incorporates a drug target and associated active peptide delivered to Johnson & Johnson by us; and
- products that contain a component of a drug target and associated active peptide, or the functional equivalent of a component.

Johnson & Johnson also has a non-exclusive right to use our technology, and technology developed during the research collaboration, to the extent necessary to use the assays we transfer to Johnson & Johnson for internal research. Johnson & Johnson's rights are subject to its obligation to provide research funding for the collaboration, make milestone payments and technology access payments to us and pay royalties to us on the sales of products.

We will have the non-exclusive right to use any technology developed by Johnson & Johnson during the research collaboration, and any improvements to our technology developed by Johnson & Johnson during its internal research, on a royalty-free and worldwide basis.

In connection with the collaboration agreement, Johnson & Johnson Development Corporation purchased 1,500,000 shares of our Series D preferred stock at a price per share of $2.00 in connection with our Series D financing. Subsequently, Johnson & Johnson Development Corporation purchased 166,666 shares of our Series E preferred stock at a price per share of $6.00 in connection with our Series E financing. The 1,666,666 shares of preferred stock converted into 1,666,666 shares of common stock upon completion of our initial public offering in December 2000.

Pfizer

Effective January 1999, we entered into a research collaboration with Pfizer to identify and validate intracellular drug targets that control and inhibit the production of IgE in B Cells in the area of asthma/allergy. The research phase of the collaboration was initially scheduled to end on January 31, 2001. In January 2001, Pfizer notified us of its election to exercise its option to extend the funded research portion of the collaboration one additional year to January 31, 2002. During the research phase at Rigel, the collaboration was successful in identifying several intracellular drug targets that control the production of IgE, a key mediator in allergic reactions and asthma in B cells. Through the conclusion of the research phase of the collaboration, which was extended by one additional month to February 28, 2002, Pfizer accepted a total of seven validated targets. We believe that Pfizer has plans to move some of the validated targets forward through its drug discovery process. We have provided the following technology developed or identified during and pursuant to the research portion of the collaboration with Pfizer:

- drug targets;
- technology associated with identified drug targets;
- technology necessary for Pfizer's performance of its research collaboration obligations; and
- technology necessary for Pfizer's performance of HTS on delivered drug targets.

Pfizer will exclusively own drug targets for which it has initiated HTS. We will have no obligation to Pfizer with regard to any drug target Pfizer does not select for HTS.

We and Pfizer each have the non-exclusive right to use for research purposes the technology of the other which was disclosed or developed during the research collaboration, excluding our peptide libraries and proprietary cell lines. Under the collaboration, Pfizer also has the exclusive, worldwide right to develop and market diagnostic and therapeutic products for humans and animals that were identified by Pfizer in HTS and modulate the activity of a drug target identified in the research collaboration. Pfizer's rights to develop and market such products are subject to its obligation to continue to pay research milestones and pay subsequent royalties on the sales of these products.

At the initiation of the collaboration, Pfizer purchased 1,000,000 shares of Series D preferred stock at a price per share of $2.00 in connection with our Series D financing, which converted into 1,000,000 shares of our common stock upon completion of our initial public offering in December 2000.

Novartis

In May 1999, we signed an agreement for the establishment of a broad collaboration with Novartis. We agreed to work with Novartis on up to five different five-year research projects to identify drug targets for products that can treat, prevent or diagnose the effects of human disease. Two of the research projects would be conducted jointly by Novartis and us, and the other three research projects were to be conducted at Novartis. The first research project, a joint research project, was focused on identifying small molecule drug targets that regulate T cells in the area of transplant rejection. The second research project, also a joint research project, related to the identification and validation of small molecule drug targets that mediate specific functions of B cells in the area of autoimmunity. During 2002, Novartis notified us that it was terminating the research phases of the initial T Cell and B Cell joint projects in November 2002 and February 2003, respectively. The third research project, a project currently being carried out at Novartis, is focused on identifying small molecule drug targets that regulate chronic bronchitis. Novartis may terminate this chronic bronchitis research at any time. In July 2001, we amended the agreement to add a three-year joint project at Rigel in the area of angiogenesis in lieu of a project at Novartis. This resulted in both funded research at Rigel and an additional upfront payment of $4.0 million, which were terms not previously included in the project at

Novartis. In January 2002, Novartis chose not to exercise its option to add a second project to be conducted at Novartis.

Once a drug target from any of the four ongoing research projects has been identified and validated, Novartis has the right to conduct compound screening on such drug target on an exclusive basis for two years thereafter. Novartis will have the option to extend this exclusive right for up to five additional one-year periods so long as Novartis pays us an annual fee for such right and satisfies certain diligence conditions. Upon the expiration or termination of this right, both we and Novartis shall have the non-exclusive right to use, and allow others to use, such drug target for compound screening.

Under the 1999 agreement, Novartis has the non-exclusive right to utilize our retroviral technology and pathway mapping technology for confirmational and similar uses relating to validated drug targets, including uses necessary for the further development, registration and commercialization of products for which the principal mechanism of action is based upon, derived or discovered from, or discovered with the use of, a drug target. Novartis also has the exclusive right to utilize other of our technology, and technology developed during the collaboration, to make and commercialize these products. Novartis' rights are subject to its obligation to provide research funding for the joint research projects, pay milestone payments and technology access payments to us and pay third-party royalties associated with Novartis' use of certain of our technology.

Under the agreement, we will have the non-exclusive right to use any improvements to our retroviral technology and pathway mapping technology developed during a research project on a royalty-free and worldwide basis.

Novartis purchased 2,000,000 shares of our Series D preferred stock at a per share purchase price of $2.00 in connection with our Series D financing and purchased 1,428,571 shares of our common stock in a private placement concurrent with the closing of our initial public offering at a price of $7.00 per share. The 2,000,000 shares of preferred stock converted into 2,000,000 shares of our common stock in conjunction with our initial public offering in December 2000.

Daiichi

In August 2002, we signed an agreement for the establishment of a collaboration with Daiichi to pursue research related to a specific protein degradation target. Per the agreement, the research phase of this collaboration is for three years. We will be working with Daiichi to discover and develop cancer pharmaceutical drugs. Under the terms of the collaboration agreement, Daiichi has paid us an upfront amount and a milestone payment, is obligated to pay us ongoing research support and may become obligated to pay us certain other milestones payments. In addition, we will receive royalties on any commercialized products to emerge from the collaboration.

The initial stages of the collaboration focused on the development of the assay for a specific target and the initiation of HTS to identify therapeutic molecules we and Daiichi would like to advance to later stages of drug development. Under terms of the agreement, we retain the rights to co-develop and co-promote products resulting from this collaboration in North America while Daiichi retains co-development and promotion rights in the remainder of the world.

Our Solution

The technologies that we use in connection with both our proprietary product development programs and our corporate collaborations are designed to identify protein targets for compound screening and validate the role of those targets in the disease process. Unlike genomics-based approaches, which begin by identifying genes and then search for their functions, our approach identifies proteins that are demonstrated to have an important role in a disease pathway. By understanding the disease pathway, we attempt to avoid studying genes that will not make good drug

targets and focus only on the sub-set of expressed proteins of genes that we believe are specifically implicated in the disease process.

We begin by developing assays that model the key events in a disease process at the cellular level. We then efficiently search hundreds of millions of cells to identify potential protein targets. In addition, we identify the proteins involved in the intracellular process and prepare a map of their interactions, thus giving us a comprehensive picture of the intracellular disease pathway. We believe that our approach has a number of advantages:

- *improved target identification*: it focuses only on the sub-set of expressed proteins of genes believed to be specifically implicated in the disease process;
- *rapid validation of protein targets*: it produces validated protein targets more quickly because it uses key events in the disease process as the basis to design the functional, disease-based screen;
- *improved disease pathway mapping*: it produces a comprehensive map of the intracellular disease pathway enabling the identification of a larger number of potential protein targets;
- *better informed target selection*: it provides a variety of different types of targets and information concerning the role each plays to better select targets more susceptible to pharmaceutical intervention;
- *more efficient compound screening*: it increases the probability and speed that compound screening will identify "hits" because it provides more detailed knowledge of the target that can be used to guide the design of the compound screen; and
- *risk reduction*: it may reduce the risk of failure in the drug development process due to serious side effects, including toxicity or other reasons, by selecting only targets that are specific to the disease in question and that have no apparent role in other cell types or signaling pathways.

Because of the very large number of cells and proteins employed, our technology is labor intensive. The complexity of our technology requires a high degree of skill and diligence to perform successfully. In addition, successful application of our technology depends on a highly diverse collection of proteins to test in cells. We believe we have been able to and will continue to meet these challenges successfully. Although one or more other companies may utilize technologies similar to certain aspects of our technology, we are unaware of any other company that employs the same combination of technologies as we do.

Technology

Our retroviral and pathway mapping technologies enable us to identify and validate new protein targets and establish a map of the intracellular proteins that define a specific signaling pathway controlling cellular responses. We believe that, together, these technologies allow for rapid pathway mapping of complex biological processes and increase our ability to identify targets for drug discovery.

Retroviral Functional Screening. Our retroviral technology introduces up to 100 million different peptides, or proteins, into an equal number of normal or diseased cells. Each retrovirus delivers a specific gene into an individual cell, causing the cell to produce a specific protein. Then, we stimulate the cells in a manner known to produce a disease-like behavioral response or phenotype of the disease process. Once in the cell, the expressed protein interacts with potential protein targets in the cell. Then, we sort the cells at a rate of up to 60,000 cells/second to collect data on up to five different parameters, which means that a sort of 100 million cells can be completed in approximately half an hour. By analyzing the approximately 500 million resulting data points, we can rapidly identify those few cells containing an expressed protein that has interacted with a protein target in a way that causes the cell to change its behavior from diseased back to normal. Using this method, we believe that we can identify the relatively few targets that are validated in the context of a disease-specific cellular response.

Pathway Mapping. Our pathway mapping technology identifies specific proteins that bind with other proteins that are known to be part of a signaling pathway, either because we identified them using our retroviral technology or because the proteins have been described in the scientific literature. This pathway mapping technology is directed at:

- mapping an entire protein-protein intracellular functional pathway in disease-relevant cells;
- finding new proteins interacting with other new and known proteins; and
- eliminating potential targets rapidly because they interact with multiple signaling pathways, thus identifying the protein as a less desirable target.

Using our pathway mapping technology, we split a protein that gives a detectable signal (reporter protein), such as fluorescence, into two inactive parts. One part of the reporter protein is fused with a specific protein known to be involved in a signaling disease-relevant pathway (bait protein). Multiple copies of the other part of the reporter protein are fused one by one with all the proteins known to be present in the cell type being studied (library protein). When the bait protein binds to a specific library protein, the two parts of the reporter protein reunite and become active again, thereby generating a detectable signal. We employ an improved version of the two hybrid protein interaction method in yeast cells. In addition, we have developed a patented method of employing the two hybrid protein interaction technology in mammalian cells. Mammalian cells offer the opportunity to monitor protein-protein interactions in a potentially more relevant cellular environment.

We also use this pathway mapping technology to screen identified protein targets against a library of peptides in order to identify each active interaction site on the target. This information is useful in directing our chemistry efforts to identify compounds specifically designed to bind to the interaction site on the target.

Target Validation

The first step of our target validation occurs when we use our retroviral technology to identify targets. We design a screen that reflects a key event in a disease process so that when one of our proteins changes the behavior of a specific cell, this indicates a causal relationship between the protein-target interaction and the specific disease response. This approach saves time and enhances the probability that those targets that are identified and pursued are disease relevant. It also tells us that the protein interacts with a functional site on the target since the interaction results in a change in the behavior of the cell. We further validate the function of specific targets by:

- using technology to knock out the target from specific cells and seeing if the loss of the target from the cell alters the cell's responses to disease-causing stimuli;
- altering the structure of the target in order to identify which part of the target is functionally important; and
- using peptides that attach to specific sites on the target to change the way the target works inside the cell.

Other Technologies

Our drug discovery technologies utilize the following additional technologies:

High-Throughput Compound Screening

Using our cell sorter system, we conduct screening of small molecule compounds in the same cell-based disease-specific screens that we use to identify the protein targets. This enables us to screen thousands of compounds in a matter of a few hours, while simultaneously examining multiple physiological parameters. In addition, we have established conventional high-throughput screens of small molecule compounds using biochemical methods similar to those widely used in the biotechnology

and pharmaceutical industries. We have a library of approximately 220,000 small molecule compounds having highly diverse molecular structures for our compound screening activities.

We select for compound screening only those protein drug targets we judge to meet several criteria:

- the target's causal relationship to the disease of interest is established;
- the target's activity is determined to be specific to the disease of interest;
- the target is of a protein type, such as an enzyme, for which there is experience indicating that intervention by a synthetic small molecule compound would be an effective therapeutic; and
- the target is novel and provides us freedom of action to pursue drug discovery without interference from the rights of third parties.

Medicinal and Combinatorial Chemistries

Our medicinal chemistry group carries out traditional structure-activity relationship studies of potential lead compounds and makes improvements to those compounds by utilizing chemistry techniques to synthesize new analogs of a lead compound with improved properties. Our chemistry group synthesizes compounds incorporating desirable molecular features. We also utilize outside contract research organizations from time to time to supplement our internal chemistry resources.

Pharmacology and Preclinical Development

We believe that the rapid characterization and optimization of lead compounds identified in HTS will generate high-quality preclinical development candidates. Our pharmacology and preclinical development group facilitates lead optimization by characterizing lead compounds with respect to pharmacokinetics, potency, efficacy and selectivity. The generation of proof-of-principle data in animals and the establishment of standard pharmacological models with which to assess lead compounds represent integral components of lead optimization. As programs move through the lead optimization stage, our pharmacology and preclinical development group supports our chemists and biologists by performing the necessary studies, including toxicology, for IND application submissions.

Clinical Development

We have assembled a team of experts in drug development to design and implement clinical trials and to analyze the data derived from these studies. The clinical development group possesses expertise in project management and regulatory affairs.

Research and Development Expenses

Our research and development expenses were $43.4 million in 2002, $32.3 million in 2001 and $32.0 million in 2000.

Intellectual Property

We will be able to protect our technology from unauthorized use by third parties only to the extent that it is covered by valid and enforceable patents or is effectively maintained as trade secret. Accordingly, patents or other proprietary rights are an essential element of our business. We have over 100 pending patent applications and 23 issued patents in the United States which are owned or exclusively licensed in our field as well as pending corresponding foreign patent applications. Our policy is to file patent applications to protect technology, inventions and improvements to inventions that are commercially important to the development of our business. We seek United States and international patent protection for a variety of technologies, including new screening methodologies and other research tools, target molecules that are associated with disease states identified in our screens, and

lead compounds that can affect disease pathways. We also intend to seek patent protection or rely upon trade secret rights to protect other technologies that may be used to discover and validate targets and that may be used to identify and develop novel drugs. We seek protection, in part, through confidentiality and proprietary information agreements. We are a party to various other license agreements that give us rights to use technologies in our research and development.

In June 2002, we resolved a dispute with Inoxell A/S (formed as a spinout from Pharmexa—formally M&E Biotech) by entering into a global patent settlement concerning certain drug target identification technologies, which includes both cross-licensing and joint ownership to certain patents and allows for worldwide freedom of operation for both companies. Originally, Inoxell notified us that it had received patent protection in some European countries and Australia for a process that it asserted was similar to certain aspects of our technologies.

Competition

We face, and will continue to face, intense competition from pharmaceutical and biotechnology companies, as well as from academic and research institutions and government agencies, both in the United States and abroad. Some of these competitors are pursuing the development of pharmaceuticals that target the same diseases and conditions as our research programs. Our major competitors include fully integrated pharmaceutical companies that have extensive drug discovery efforts and are developing novel small molecule pharmaceuticals. We also face significant competition from organizations that are pursuing the same or similar technologies, including the discovery of targets that are useful in compound screening, as the technologies used by us in our drug discovery efforts. Our competitors or their collaborative partners may utilize discovery technologies and techniques or partner more rapidly or successfully than we or our collaborators are able to do.

Many of these companies and institutions, either alone or together with their collaborative partners, have substantially greater financial resources and larger research and development staffs than we do. In addition, many of these competitors, either alone or together with their collaborative partners, have significantly greater experience than we do in:

- identifying and validating targets;
- screening compounds against targets; and
- undertaking preclinical testing and clinical trials.

Accordingly, our competitors may succeed in obtaining patent protection, identifying or validating new targets or discovering new drug compounds before we do.

Competition may also arise from:

- new or better methods of target identification or validation;
- other drug development technologies and methods of preventing or reducing the incidence of disease;

- new small molecules; or
- other classes of therapeutic agents.

Developments by others may render our product candidates or technologies obsolete or noncompetitive. We face and will continue to face intense competition from other companies for collaborative arrangements with pharmaceutical and biotechnology companies, for establishing relationships with academic and research institutions and for licenses to additional technologies. These competitors, either alone or with their collaborative partners, may succeed in developing technologies or products that are more effective than ours.

Our ability to compete successfully will depend, in part, on our ability to:

- identify and validate targets;
- discover candidate drug compounds that interact with the targets we identify;
- attract and retain scientific and product development personnel;
- obtain patent or other proprietary protection for our new drug compounds and technologies; and
- enter commercialization agreements for our new drug compounds.

Government Regulation

Our ongoing development activities are and will be subject to extensive regulation by numerous governmental authorities in the United States and other countries, including the FDA under the Federal Food, Drug and Cosmetic Act. The regulatory review and approval process is expensive and uncertain. Securing FDA approval requires the submission of extensive preclinical and clinical data and supporting information to the FDA for each indication to establish a product candidate's safety and efficacy. The approval process takes many years, requires the expenditure of substantial resources and may involve ongoing requirements for post-marketing studies. Clinical trials are subject to oversight by institutional review boards and the FDA and:

- must be conducted in conformance with the FDA's IND regulations;
- must meet requirements for institutional review board oversight;
- must meet requirements for informed consent;
- must meet requirements for good clinical practices;
- are subject to continuing FDA oversight;
- may require large numbers of participants; and
- may be suspended by us, our strategic partners or the FDA at any time if it is believed that the subjects participating in these trials are being exposed to unacceptable health risks or if the FDA finds deficiencies in the IND or the conduct of these trials.

Even if we are able to achieve success in our clinical testing, we, or our collaborative partners, must provide the FDA and foreign regulatory authorities with clinical data that demonstrates the safety and efficacy of our products in humans before they can be approved for commercial sale. We began clinical trials in the United States in 2003 and we will not know whether these clinical trials will be successful or if such trials will be completed on schedule or at all. We also do not know whether any future clinical trials will demonstrate sufficient safety and efficacy necessary to obtain the requisite regulatory approvals or will result in marketable products. Our failure, or the failure of our strategic partners, to adequately demonstrate the safety and efficacy of our products under development will prevent receipt of FDA and similar foreign regulatory approval and, ultimately, commercialization of our products.

Any clinical trial may fail to produce results satisfactory to the FDA. Preclinical and clinical data can be interpreted in different ways, which could delay, limit or prevent regulatory approval. Negative or inconclusive results or adverse medical events during a clinical trial could cause a clinical trial to be repeated or a program to be terminated. In addition, delays or rejections may be encountered based upon additional government regulation from future legislation or administrative action or changes in FDA policy or interpretation during the period of product development, clinical trials and FDA regulatory review. Failure to comply with applicable FDA or other applicable regulatory requirements may result in criminal prosecution, civil penalties, recall or seizure of products, total or partial suspension of production or injunction, as well as other regulatory action against our potential

products, collaborative partners or us. Additionally, we have no experience in working with our partners in conducting and managing the clinical trials necessary to obtain regulatory approval.

Outside the United States, our ability to market a product is contingent upon receiving a marketing authorization from the appropriate regulatory authorities. The requirements governing the conduct of clinical trials, marketing authorization, pricing and reimbursement vary widely from country to country. At present, foreign marketing authorizations are applied for at a national level, although within the European Union, or EU, registration procedures are available to companies wishing to market a product in more than one EU member state. If the regulatory authority is satisfied that adequate evidence of safety, quality and efficacy has been presented, a marketing authorization will be granted. This foreign regulatory approval process involves all of the risks associated with FDA clearance.

Employees

As of December 31, 2002, we had 160 employees. In January 2003, we announced a restructuring of our business, and, as a result, the number of employees was reduced to 135 on January 31, 2003.

Scientific Advisors

We utilize scientists and physicians to advise us on scientific and medical matters as part of our ongoing research and drug development efforts, including experts in human genetics, mouse genetics, molecular biology, biochemistry, cell biology, chemistry, infectious diseases, immunology and structural biology. Certain of our scientific and medical advisors and consultants receive an option to purchase our common stock and an honorarium for time spent assisting us.

Available Information

We maintain a site on the world wide web at www.rigel.com; however, information found on our website is not incorporated by reference into this report. We make available free of charge on or through our website our annual report of Form 10-K, quarterly reports on Form 10-Q, current reports on Form 8-K and amendments to those reports filed or furnished pursuant to Section 13(a) or 15(d) of the Exchange Act as soon as reasonably practicable after we electronically file such material with, or furnish it to,

the SEC.

In 2003, we intend to adopt a code of ethics that applies to our principal executive officer, principal financial officer, principal accounting officer or controller, or persons performing similar functions. We intend to post the text of our code of ethics on our website at www.rigel.com in connection with "Investor Resources" materials. In addition, we intend to promptly disclose (1) the nature of any amendment to our code of ethics that applies to our principal executive officer, principal financial officer, principal accounting officer or controller, or persons performing similar functions and (2) the nature of any waiver, including an implicit waiver, from a provision of our code of ethics that is granted to one of these specified officers, the name of such person who is granted the waiver and the date of the waiver on our website in the future.

Risk Factors

An investment in our securities is risky. Prior to making a decision about investing in our securities you should carefully consider the following risks, as well as the other information contained in this annual report on Form 10-K. If any of the following risks actually occurs, our business could be harmed. In that case, the trading price of our securities could decline, and you might lose all or part of your investment. The risks and uncertainties described below are not the only ones facing us. Additional risks and uncertainties not presently known to us, or that we currently see as immaterial, may also harm our business. If any of these additional risks or uncertainties occur, the trading price of our securities could decline, and you might lose all or part of your investment.

Our existing and committed capital resources are not sufficient to support our current operating plan beyond September 30, 2003, and we will need to obtain funding in order to continue operations beyond 2003.

We believe that our existing capital resources, together with anticipated payments under current collaborations, will be sufficient to support our current operating plan and spending through the end of September 2003. We will require additional financing to fund our operations as currently planned beyond that date. While we have been actively seeking both financing and corporate partnering opportunities, we cannot assure you that a sufficient financing or corporate partnering transaction can be completed on acceptable terms, or at all. If a sufficient financing or corporate partnering transaction cannot be completed or assured, we will not be able to continue our current operating plans and will be forced to reduce the scale of our operations. If a sufficient financing or corporate partnering transaction is not reasonably assured by the middle of May 2003, we will complete our R112 clinical trial currently under way and continue only with certain external preclinical studies in our Hepatitis C program. All other external studies would be terminated. If as of June 30, 2003 a sufficient financing or corporate partnering transaction is not reasonably assured, we will be required to significantly scale back our operations by reducing our headcount by approximately 50% and significantly reducing all discretionary spending. We anticipate that upon the execution of these actions, our existing capital resources will be sufficient to support the substantially reduced funding of our current programs as well as our operations through the end of 2003. To the extent we raise additional capital by issuing equity securities, our stockholders would at this time experience substantial dilution.

We will need additional capital in the future to sufficiently fund our operations and research.

Our operations will require significant additional funding in large part due to our research and development expenses, future preclinical and clinical-testing costs, the expansion of our facilities and the absence of any meaningful revenues for the foreseeable future. The amount of future funds needed will depend largely on the success of our collaborations and our research activities, and we do not know whether additional financing will be available when needed, or that, if available, we will obtain financing on terms favorable to our stockholders or us. We have consumed substantial amounts of capital to date, and operating expenditures are expected to increase over the next several years as we expand our infrastructure and research and development activities.

To the extent we raise additional capital by issuing equity securities, our stockholders would at this time experience substantial dilution. To the extent that we raise additional funds through collaboration and licensing arrangements, we may be required to relinquish some rights to our technologies or product candidates, or grant licenses on terms that are not favorable to us.

Our future funding requirements will depend on many uncertain factors.

Our future funding requirements will depend upon many factors, including, but not limited to:

- our ability to maintain our existing collaboration partnerships;

- our ability to establish and the scope of new collaborations;
- the progress and number of research programs carried out at Rigel;
- the progress of the research and development efforts of our collaborators;
- any changes in the breadth of our research and development programs;
- our ability to meet the milestones identified in our collaborative agreements that trigger payments;
- our ability to maintain and establish new corporate relationships and research collaborations;
- our ability to acquire or license other technologies or compounds, if any;
- the progress and success of preclinical studies and clinical trials of our drug candidates conducted by us or our collaborative partners or licensees;
- our ability to manage our growth;
- competing technological and market developments;
- the costs and timing of obtaining, enforcing and defending our patent and intellectual rights;
- the costs and timing of regulatory approvals; and
- expenses associated with unforeseen litigation.

Insufficient funds may require us to delay, scale back or eliminate some or all of our research or development programs, to lose rights under existing licenses or to

relinquish greater or all rights to product candidates at an earlier stage of development or on less favorable terms than we would otherwise choose or may adversely affect our ability to operate as a going concern.

Our workforce reduction announced in January 2003 and any future workforce and expense reductions may have an adverse impact on our ability to make significant progress on our internal programs.

In January 2003, we announced a workforce reduction of approximately 25 employees in order to reduce expenses. In light of our continued need for funding, we may be required to implement further workforce and expense reductions this year. Workforce and expense reductions have resulted, and further reductions could result, in reduced progress on our internal programs. In addition, employees, whether or not directly affected by a reduction, may seek future employment with our business partners or competitors. Although our employees are required to sign a confidentiality agreement at the time of hire, the confidential nature of certain proprietary information may not be maintained in the course of any such future employment. Further, we believe that our future success will depend in large part upon our ability to attract and retain highly skilled personnel. We may have difficulty attracting such personnel as a result of a perceived risk of future workforce and expense reductions. In addition, the implementation of expense reduction programs may result in the diversion of efforts of our executive management team and other key employees, which could adversely affect our business.

Our success as a company is uncertain due to our limited operating history, our history of operating losses and the uncertainty of future profitability.

Due in large part to the significant research and development expenditures required to identify and validate new drug candidates and advance our programs into clinical testing, we have not been profitable and have generated operating losses since we were incorporated in June 1996. The extent of our future losses and the timing of potential profitability are highly uncertain, and we may never achieve profitable operations. We have incurred net losses of $37.0 million, $23.8 million and $25.3 million in each of the last three fiscal years, respectively. Currently, our revenues are generated

solely from research payments from our collaboration agreements and licenses and are insufficient to generate profitable operations. As of December 31, 2002, we had an accumulated deficit of approximately $114.8 million. Even if we are able to secure the financing necessary to continue our operations beyond 2003, we expect to incur losses for at least the next several years and expect that these losses will increase as we expand our research and development activities, incur significant clinical and testing costs and expand our facilities.

There is a high risk that early-stage drug discovery and development might not successfully generate good drug candidates.

At the present time, the majority of our operations are in the early stages of drug identification and development. To date only one of our drug compounds has made it into the clinical testing stage. In our industry, it is statistically unlikely that the limited number of compounds that we have identified as potential drug candidates will actually lead to successful drug development efforts, and we do not expect any drugs resulting from our research to be commercially available for several years, if at all. Our one product in the clinic and our future leads for potential drug compounds will be subject to the risks and failures inherent in the development of pharmaceutical products based on new technologies. These risks include, but are not limited to, the inherent difficulty in selecting the right drug target and avoiding unwanted side effects as well as the unanticipated problems relating to product development, testing, regulatory compliance, manufacturing, marketing, competition and costs and expenses that may exceed current estimates.

We might not be able to commercialize our drug candidates successfully if problems arise in the clinical testing and approval process.

Commercialization of our product candidates depends upon successful completion of preclinical studies and clinical trials. Preclinical testing and clinical development are long, expensive and uncertain processes. We do not know whether we, or any of our collaborative partners, will be permitted to undertake clinical trials of potential products beyond the one trial already concluded and the trial currently in process. It may take us or our collaborative partners several years to complete any such testing, and failure can occur at any stage of testing. Interim results of trials do not necessarily predict final results, and acceptable results in early trials may not be repeated in later trials. A number of companies in the pharmaceutical industry, including biotechnology companies, have suffered significant setbacks in advanced clinical trials, even after achieving promising results in earlier trials. Moreover, when our projects reach clinical trials, we or our collaborative partners may decide to discontinue development of any or all of these projects at any time for commercial, scientific or other reasons.

Delays in clinical testing could result in increased costs to us.

Significant delays in clinical testing could materially impact our product development costs. We do not know whether planned clinical trials will begin on time, will need to be revamped or will be completed on schedule, or at all. Clinical trials can be delayed for a variety of reasons, including delays in obtaining regulatory approval to commence a study, delays in reaching agreement on acceptable clinical study agreement terms with prospective clinical sites, delays in obtaining institutional review board approval to conduct a study at a prospective clinical site or delays in recruiting subjects to participate in a study.

In addition, we typically rely on third-party clinical investigators to conduct our clinical trials and other third-party organizations to oversee the operations of such trials and to perform data collection and analysis. As a result, we may face additional delaying factors outside our control if these parties do not perform their obligations in a timely fashion. While we have not yet experienced delays that have materially impacted our clinical trials or product development costs, delays of this sort could occur for the reasons identified above or other reasons. If we have delays in testing or approvals, our product

development costs will increase. For example, we may need to make additional payments to third-party investigators and organizations to retain their services or we may need to pay recruitment incentives. If the delays are significant, our financial results and the commercial prospects for our product candidates will be harmed, and our ability to become profitable will be delayed.

Because most of our expected future revenues are contingent upon collaborative and license agreements, we might not meet our strategic objectives.

Our ability to generate revenues in the near term depends on our ability to enter into additional collaborative agreements with third parties and to maintain the agreements we currently have in place. Our ability to enter into new collaborations and the revenue, if any, that may be recognized under these collaborations is highly uncertain. If we are unable to enter into new collaborations, our business prospects could be harmed, which could have an immediate adverse effect on the trading price of our stock.

To date, most of our revenues have been related to the research phase of each of our collaborative agreements. Such revenues are for specified periods, and the impact of such revenues on our results of operations is partially offset by corresponding research costs. Following the completion of the research phase of each collaborative agreement, additional revenue may come only from milestone payments and royalties, which may not be paid, if at all, until some time well into the future. The risk is heightened due to the fact that unsuccessful research efforts may preclude us from receiving any milestone payments under these agreements. Our receipt of revenue from collaborative arrangements is also significantly affected by the timing of efforts expended by us and our collaborators and the timing of lead compound identification. In late 2001, we recorded the first revenue from achievement of milestones in both the Pfizer and Johnson & Johnson collaborations. During 2002, we recorded our first milestone for both Novartis and Daiichi.

Under many agreements, however, milestone payments may not be earned until the collaborator has advanced products into clinical testing, which may never occur or may not occur until some time well into the future. If we are not able to recognize revenue under our collaborations when and in accordance with our expectations or the expectations of industry analysts, this failure could harm our business and have an immediate adverse effect on the trading price of our stock.

Our business requires us to generate meaningful revenue from royalties and licensing agreements. To date, we have not received any revenue from royalties for the commercial sale of drugs, and we do not know when we will receive any such revenue, if at all. Likewise, we have not licensed any lead compounds or drug development candidates to third parties, and we do not know whether any such license will be entered into on acceptable terms in the future, if at all.

If our current corporate collaborations or license agreements are unsuccessful our research and development efforts could be delayed.

Our strategy depends upon the formation and sustainability of multiple collaborative arrangements and license agreements with third parties in the future. We rely on these arrangements for not only financial resources, but also for expertise that we expect to need in the future relating to clinical trials, manufacturing, sales and marketing, and for licenses to technology rights. To date, we have entered into several such arrangements with corporate collaborators; however, we do not know if such third parties will dedicate sufficient resources or if any development or commercialization efforts by third parties will be successful. Should a collaborative partner fail to develop or commercialize a compound or product to which it has rights from us, such failure might delay ongoing research and development efforts at Rigel because we might not receive any future milestone payments and we will not receive any royalties associated with such compound or product. In addition, the continuation of some of our partnered drug discovery and development programs may be dependent on the periodic renewal of our corporate collaborations. For example, the funded research phase of our collaboration with Pfizer has been

completed and the development portion of our collaboration is ongoing at Pfizer. In addition, in May 2002, Novartis elected to conclude the research phases of our two initial joint projects in the autoimmunity and transplant rejection areas, after 42 months, effective November 2002 and February 2003, respectively. Pursuant to the collaboration agreement, Novartis had the option to end the research phase on these programs after 24 months or 42 months. More generally, our current corporate collaboration agreements may terminate upon a breach or a change of control. We may not be able to renew these collaborations on acceptable terms, if at all, or negotiate additional corporate collaborations on acceptable terms, if at all.

Conflicts also might arise with collaborative partners concerning proprietary rights to particular compounds. While our existing collaborative agreements typically provide that we retain milestone payments and royalty rights with respect to drugs developed from certain derivative compounds, any such payments or royalty rights may be at reduced rates, and disputes may arise over the application of derivative payment provisions to such drugs, and we may not be successful in such disputes.

We are also a party to various license agreements that give us rights to use specified technologies in our research and development processes. The agreements pursuant to which we have in-licensed technology permit our licensors to terminate the agreements under certain circumstances If we are not able to continue to license these and future technologies on commercially reasonable terms, our product development and research may be delayed.

If conflicts arise between our collaborators or advisors and us, any of them may act in their self-interest, which may be adverse to your interests.

If conflicts arise between us and our corporate collaborators or scientific advisors, the other party may act in its self-interest and not in the interest of our stockholders. Some of our corporate collaborators are conducting multiple product development efforts within each disease area that is the subject of the collaboration with us. In some of our collaborations, we have agreed not to conduct, independently or with any third party, any research that is competitive with the research conducted under our collaborations. Our collaborators, however, may develop, either alone or with others, products in related fields that are competitive with the products or potential products that are the subject of these collaborations. Competing products, either developed by our collaborators or to which our collaborators have rights, may result in their withdrawal of support for our product candidates.

If any of our corporate collaborators were to breach or terminate its agreement with us or otherwise fail to conduct the collaborative activities successfully and in a timely manner, the preclinical or clinical development or commercialization of the affected product candidates or research programs could be delayed or terminated. We generally do not control the amount and timing of resources that our corporate collaborators devote to our programs or potential products. We do not know whether current or future collaborative partners, if any, might pursue alternative technologies or develop alternative products either on their own or in collaboration with others, including our competitors, as a means for developing treatments for the diseases targeted by collaborative arrangements with us.

If we fail to enter into new collaborative arrangements in the future, our business and operations would be negatively impacted.

Although we have established several collaborative arrangements and various license agreements, we do not know if we will be able to establish additional arrangements in the future. For example, there have been, and may continue to be, a significant number of recent business combinations among large pharmaceutical companies that have resulted, and may continue to result, in a reduced number of potential future corporate collaborators, which may limit our ability to find partners who will work with us in developing and commercializing our drug targets. We entered into only one collaboration, with Daiichi, in 2002. If business combinations involving our existing corporate collaborators were to occur,

the effect could be to diminish, terminate or cause delays in one or more of our corporate collaborations.

Our success is dependent on intellectual property rights held by us and third parties, and our interest in such rights is complex and uncertain.

Our success will depend to a large part on our own, our licensees' and our licensors' ability to obtain and defend patents for each party's respective technologies and the compounds and other products, if any, resulting from the application of such technologies. We have over 100 pending patent applications and 23 issued patents in the United States that are owned or exclusively licensed in our field as well as pending corresponding foreign patent applications. In the future, our patent position might be highly uncertain and involve complex legal and factual questions. Additional uncertainty may result from because no consistent policy regarding the breadth of legal claims allowed in biotechnology patents has emerged to date. Accordingly, we cannot predict the breadth of claims allowed in our or other companies' patents.

Because the degree of future protection for our proprietary rights is uncertain, we cannot ensure that:

- we were the first to make the inventions covered by each of our pending patent applications;
- we were the first to file patent applications for these inventions;
- others will not independently develop similar or alternative technologies or duplicate any of our technologies;

- any of our pending patent applications will result in issued patents;
- any patents issued to us or our collaborators will provide a basis for commercially viable products or will provide us with any competitive advantages or will not be challenged by third parties;
- we will develop additional proprietary technologies that are patentable; or
- the patents of others will not have a negative effect on our ability to do business.

We rely on trade secrets to protect technology where we believe patent protection is not appropriate or obtainable. However, trade secrets are difficult to protect. While we require employees, collaborators and consultants to enter into confidentiality agreements, we may not be able to adequately protect our trade secrets or other proprietary information in the event of any unauthorized use or disclosure or the lawful development by others of such information.

We are a party to certain in-license agreements that are important to our business, and we generally do not control the prosecution of in-licensed technology. Accordingly, we are unable to exercise the same degree of control over this intellectual property as we exercise over our internally-developed technology. Moreover, some of our academic institution licensors, research collaborators and scientific advisors have rights to publish data and information in which we have rights. If we cannot maintain the confidentiality of our technology and other confidential information in connection with our collaborations, then our ability to receive patent protection or protect our proprietary information will be impaired. In addition, some of the technology we have licensed relies on patented inventions developed using U.S. government resources. The U.S. government retains certain rights, as defined by law, in such patents, and may choose to exercise such rights.

If a dispute arises regarding the infringement or misappropriation of the proprietary rights of others, such dispute could be costly and result in delays in our research and development activities.

Our success will also depend, in part, on our ability to operate without infringing or misappropriating the proprietary rights of others. There are many issued patents and patent applications filed by third parties relating to products or processes that are similar or identical to ours or our licensors, and others may be filed in the future. There can be no assurance that our activities, or those of our licensors, will not infringe patents owned by others. For example, in June 2002, we resolved a dispute with Inoxell A/S (formed as a spinout from Pharmexa—formally M&E Biotech) by entering into a global patent settlement concerning certain drug target identification technologies, which includes both cross-licensing and joint ownership to certain patents and allows for worldwide freedom of operation for both companies. We believe that there may be significant litigation in the industry regarding patent and other intellectual property rights, and we do not know if we or our collaborators would be successful in any such litigation. Any legal action against our collaborators or us claiming damages or seeking to enjoin commercial activities relating to the affected products, our methods or processes could:

- require our collaborators or us to obtain a license to continue to use, manufacture or market the affected products, methods or processes, which may not be available on commercially reasonable terms, if at all;
- prevent us from using the subject matter claimed in the patents held by others;
- subject us to potential liability for damages;
- consume a substantial portion of our managerial and financial resources; and
- result in litigation or administrative proceedings that may be costly, whether we win or lose.

If we are unable to obtain regulatory approval to market products in the United States and foreign jurisdictions, we might not be permitted to commercialize products from our research and development.

Due, in part, to the early stage of our drug candidate research and development process, we cannot predict whether regulatory clearance will be obtained for any product that we, or our collaborative partners, hope to develop. Satisfaction of regulatory requirements typically takes many years, is dependent upon the type, complexity and novelty of the product and requires the expenditure of substantial resources. Of particular significance to us are the requirements covering research and development and testing.

Before commencing clinical trials in humans in the United States, we, or our collaborative partners, will need to submit and receive approval from the FDA of an IND. Clinical trials are subject to oversight by institutional review boards and the FDA and:

- must be conducted in conformance with the FDA's good clinical practices and other applicable regulations;
- must meet requirements for institutional review board oversight;
- must meet requirements for informed consent;
- are subject to continuing FDA oversight;
- may require large numbers of test subjects; and
- may be suspended by us or the FDA at any time if it is believed that the subjects participating in these trials are being exposed to unacceptable health risks or if the FDA finds deficiencies in the IND or the conduct of these trials.

While we have stated that we intend to file additional INDs, this is only a statement of intent, and we may not be able to do so because we may not be able to identify potential product candidates. In addition, the FDA may not approve any IND in a timely manner, or at all.

Before receiving FDA clearance to market a product, we must demonstrate that the product is safe and effective on the patient population that will be treated. Data obtained from preclinical and clinical activities are susceptible to varying interpretations that could delay, limit or prevent regulatory clearances. In addition, delays or rejections may be encountered based upon additional government regulation from future legislation or administrative action or changes in FDA policy during the period of product development, clinical trials and FDA regulatory review. Failure to comply with applicable FDA or other applicable regulatory requirements may result in criminal prosecution,

civil penalties, recall or seizure of products, total or partial suspension of production or injunction, as well as other regulatory action against our potential products or us. Additionally, we have limited experience in conducting and managing the clinical trials necessary to obtain regulatory approval.

If regulatory clearance of a product is granted, this clearance will be limited to those disease states and conditions for which the product is demonstrated through clinical trials to be safe and efficacious. We cannot ensure that any compound developed by us, alone or with others, will prove to be safe and efficacious in clinical trials and will meet all of the applicable regulatory requirements needed to receive marketing clearance.

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

If our competitors develop technologies that are more effective than ours, our commercial opportunity will be reduced or eliminated.

The biotechnology and pharmaceutical industries are intensely competitive and subject to rapid and significant technological change. Many of the drugs that we are attempting to discover will be competing with existing therapies. In addition, a number of companies are pursuing the development of pharmaceuticals that target the same diseases and conditions that we are targeting. We face competition from pharmaceutical and biotechnology companies both in the United States and abroad.

Our competitors may utilize discovery technologies and techniques or partner with collaborators in order to develop products more rapidly or successfully than we, or our collaborators, are able to do. Many of our competitors, particularly large pharmaceutical companies, have substantially greater financial, technical and human resources than we do. In addition, academic institutions, government agencies and other public and private organizations conducting research may seek patent protection with respect to potentially competitive products or technologies and may establish exclusive collaborative or licensing relationships with our competitors.

We believe that our ability to compete is dependent, in part, upon our ability to create, maintain and license scientifically-advanced technology and upon our and our strategic partners' ability to develop and commercialize pharmaceutical products based on this technology, as well as our ability to attract and retain qualified personnel, obtain patent protection or otherwise develop proprietary technology or processes and secure sufficient capital resources for the expected substantial time period between technological conception and commercial sales of products based upon our technology. The failure by us or any of our collaborators in any of those areas may prevent the successful commercialization of our potential drug targets.

Our competitors might develop technologies and drugs that are more effective or less costly than any that are being developed by us or that would render our technology and potential drugs obsolete

and noncompetitive. In addition, our competitors may succeed in obtaining the approval of the FDA or other regulatory agencies for drug candidates more rapidly. Companies that complete clinical trials, obtain required regulatory agency approvals and commence commercial sale of their drugs before their competitors may achieve a significant competitive advantage, including certain patent and FDA marketing exclusivity rights that would delay or prevent our ability to market certain products. Any drugs resulting from our research and development efforts, or from our joint efforts with our existing or future collaborative partners, might not be able to compete successfully with competitors' existing or future products or products under development or obtain regulatory approval in the United States or elsewhere.

Our ability to generate revenues will be diminished if our collaborative partners fail to obtain acceptable prices or an adequate level of reimbursement for products from third-party payors.

The drugs we hope to develop may be rejected by the marketplace due to many factors, including cost. Our ability to commercially exploit a drug may be limited due to the continuing efforts of government and third-party payors to contain or reduce the costs of health care through various means. For example, in some foreign markets, pricing and profitability of prescription pharmaceuticals are subject to government control. In the United States, we expect that there will continue to be a number of federal and state proposals to implement similar government control. In addition, increasing emphasis on managed care in the United States will likely continue to put pressure on the pricing of pharmaceutical products. Cost control initiatives could decrease the price that any of our collaborators would receive for any products in the future. Further, cost control initiatives could adversely affect our collaborators' ability to commercialize our products and our ability to realize royalties from this commercialization.

Our ability to commercialize pharmaceutical products with collaborators may depend, in part, on the extent to which reimbursement for the products will be available from:

- government and health administration authorities;
- private health insurers; and
- other third-party payors.

Significant uncertainty exists as to the reimbursement status of newly-approved healthcare products. Third-party payors, including Medicare, are challenging the prices charged for medical products and services. Government and other third-party payors increasingly are attempting to contain healthcare costs by limiting both coverage and the level of reimbursement for new drugs and by refusing, in some cases, to provide coverage for uses of approved products for disease indications for which the FDA has not granted labeling approval. Third-party insurance coverage may not be available to patients for any products we discover and develop, alone or with collaborators. If government and other third-party payors do not provide adequate coverage and reimbursement levels for our products, the market acceptance of these products may be reduced.

If product liability lawsuits are successfully brought against us, we may incur substantial liabilities and may be required to limit commercialization of our products.

The testing and marketing of medical products entail an inherent risk of product liability. If we cannot successfully defend ourselves against product liability claims, we may incur substantial liabilities or be required to limit commercialization of our products. We currently do not have product liability insurance, and our inability to obtain sufficient product liability insurance at an acceptable cost to protect against potential product liability claims could prevent or inhibit the commercialization of pharmaceutical products we develop, alone or with corporate collaborators. We, or our corporate collaborators, might not be able to obtain insurance at a reasonable cost, if at all. While under various

circumstances we are entitled to be indemnified against losses by our corporate collaborators, indemnification may not be available or adequate should any claim arise.

Our research and development efforts will be seriously jeopardized, if we are unable to attract and retain key employees and relationships.

As a small company with only 135 employees as of January 31, 2003, our success depends on the continued contributions of our principal management and scientific personnel and on our ability to develop and maintain important relationships with leading academic institutions, scientists and companies in the face of intense competition for such personnel. In particular, our research programs depend on our ability to attract and retain highly skilled chemists, other scientists, and regulatory and clinical personnel. If we lose the services of any of our personnel, our research and development efforts could be seriously and adversely affected. Our employees can terminate their employment with us at any time.

We depend on various scientific consultants and advisors for the success and continuation of our research efforts.

We work extensively with various scientific consultants and advisors. The potential success of our drug discovery programs depends, in part, on continued collaborations with certain of these consultants and advisors. We, and various members of our management and research staff, rely on certain of these consultants and advisors for expertise in our research, regulatory and clinical efforts. Our scientific advisors are not employees of ours and may have commitments to, or consulting or advisory contracts with, other entities that may limit their availability to us. We do not know if we will be able to maintain such consulting agreements or that such scientific advisors will not enter into consulting arrangements, exclusive or otherwise, with competing pharmaceutical or biotechnology companies, any of which would have a detrimental impact on our research objectives and could have a material adverse effect on our business, financial condition and results of operations.

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

Our research and development activities involve the controlled use of potentially harmful biological materials as well as hazardous materials, chemicals and various radioactive compounds. We cannot completely eliminate the risk of accidental contamination or injury from the use, storage, handling or disposal of these materials. In the event of contamination or injury, we could be held liable for damages that result, and such liability could exceed our resources. We are subject to federal, state and local laws and regulations governing the use, storage, handling and disposal of these materials and specified waste products. The cost of compliance with, or any potential violation of, these laws and regulations could be significant.

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

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

If our officers, directors and largest stockholders choose to act together, they may be able to significantly affect our management and operations, acting in their best interests and not necessarily those of other stockholders.

Our directors, executive officers and principal stockholders and their affiliates beneficially own approximately 47% of our common stock, based on their beneficial ownership as of February 15, 2003. Accordingly, they collectively will have the ability to significantly affect the election of all of our directors and the outcome of most corporate actions requiring stockholder approval. They may exercise this ability in a manner that advances their best interests and not necessarily those of other stockholders.

Our common stock may be delisted from Nasdaq.

Since January 22, 2003, the closing price of our common stock has been below $1.00 for greater than 30 consecutive business days. On March 7, 2003, we received written notice from Nasdaq that we have failed to maintain the minimum closing bid price of $1.00 for 30 consecutive business days as required by the Nasdaq National Market. If we are unable to demonstrate compliance with this or any other Nasdaq requirement, Nasdaq may take further action with respect to a potential delisting of our common stock. We may appeal any such decision by Nasdaq to the Nasdaq Listing Qualifications Panel. If our common stock were delisted from the Nasdaq National Market this could result, among other things, in a number of negative implications, including reduced liquidity in our common stock as a result of the loss of market efficiencies associated with the Nasdaq National Market, as well as the potential loss of confidence by suppliers, collaborators and employees, the loss of analyst coverage and institutional investor interest, fewer business development opportunities and greater difficulty in obtaining financing.

Our stock price may be volatile, and your investment in our stock could decline in value.

The market prices for our securities and those of other biotechnology companies have been highly volatile and may continue to be highly volatile in the future. The following factors, in addition to other risk factors described in this section, may have a significant impact on the market price of our common stock:

- the receipt or failure to receive the significant amount of additional funding necessary to conduct our business;
- the progress and success of preclinical studies and clinical trials of our drug candidates conducted by us or our collaborative partners or licensees;
- announcements of technological innovations or new commercial products by our competitors or us;
- developments concerning proprietary rights, including patents;
- developments concerning our collaborations;
- publicity regarding actual or potential medical results relating to products under development by our competitors or us;
- regulatory developments in the United States and foreign countries;
- litigation;
- economic and other external factors or other disaster or crisis; and
- period-to-period fluctuations in financial results.

Anti-takeover provisions in our charter documents and under Delaware law may make an acquisition of us, which may be beneficial to our stockholders, more difficult.

Provisions of our amended and restated certificate of incorporation and bylaws, as well as provisions of Delaware law, could make it more difficult for a third party to acquire us, even if doing so would benefit our stockholders. These provisions:

- establish that members of the board of directors may be removed only for cause upon the affirmative vote of stockholders owning at least two-thirds of our capital stock;
- authorize the issuance of "blank check" preferred stock that could be issued by our board of directors to increase the number of outstanding shares and thwart a takeover attempt;
- limit who may call a special meeting of stockholders;
- prohibit stockholder action by written consent, thereby requiring all stockholder actions to be taken at a meeting of our stockholders;
- establish advance notice requirements for nominations for election to the board of directors or for proposing matters that can be acted upon at stockholder meetings; and
- provide for a board of directors with staggered terms.

In addition, Section 203 of the Delaware General Corporation Law, which imposes certain restrictions relating to transactions with major stockholders, may discourage, delay or prevent a third party from acquiring us.

Item 2. Properties

Our current facilities consist of approximately 147,000 square feet of research and office space located at 1180 Veterans Boulevard, South San Francisco, California. We believe our facilities are in good operating condition and that the real property leased is adequate for all present and near term uses.

Item 3. Legal Proceedings

None.

Item 4. Submission of Matters to a Vote of Security Holders

None.

PART II

Item 5. Market for the Registrant's Common Equity and Related Stockholder Matters.

Our common stock has traded on the Nasdaq National Market under the symbol "RIGL" since November 29, 2000. The following table sets forth, for the periods indicated, the high and low sales prices for the common stock as reported by the Nasdaq National Market:

	High	Low
Year Ended December 31, 2001		
First Quarter	$ 12.75	$ 3.38
Second Quarter	$ 8.50	$ 3.25
Third Quarter	$ 8.75	$ 4.00
Fourth Quarter	$ 6.42	$ 4.00
Year Ended December 31, 2002		
First Quarter	$ 5.10	$ 3.40
Second Quarter	$ 4.83	$ 2.20
Third Quarter	$ 2.97	$ 1.41
Fourth Quarter	$ 1.90	$ 1.05

On March 14, 2003, the last reported sale price for our common stock on the Nasdaq National Market was $0.65 per share.

Holders

As of March 14, 2003, there were approximately 224 stockholders of record of our common stock.

Dividends

We have not paid dividends on our common stock and currently do not plan to pay any cash dividends in the foreseeable future.

Securities Authorized for Issuance Under Equity Compensation Plans

Please See Part III, Item 12, page 66, for information with respect to an equity compensation plan adopted without the approval of our stockholders.

Sales of Unregistered Securities

In conjunction with the amendment of our master lease agreement for our 1180 Veterans Blvd. facility entered into in October 2002, we issued a warrant to purchase 500,000 shares of our common stock at an exercise price of $1.97 per share to Kwacker Limited. This warrant will expire on October 18, 2007. The warrant was issued in a private transaction pursuant to an exemption from registration in reliance upon Section 4(2) of the Securities Act of 1934, as amended. In conjunction with this amendment, we also amended the terms of an outstanding warrant that had been issued to Kwacker Limited in May 2001 to purchase 150,000 shares of our common stock at an exercise price of $8.91 per share. This warrant was amended and restated into the form of the new warrant issued in October 2002.

In conjunction with the equipment lease line executed in December 2002, we issued a warrant to purchase 186,916 shares of our common stock at an exercise price of $1.07 per share to Lighthouse Capital Partners IV, L.P. This warrant will expire on December 23, 2007. The warrant was issued in a private transaction pursuant to an exemption from registration in reliance upon Section 4(2) of the Securities Act of 1934, as amended.

Item 6. Selected Financial Data

The following selected financial data should be read in conjunction with "Item 7. Management's Discussion and Analysis of Financial Condition and Results of Operations" and "Item 8. Financial Statements and Supplementary Data" included elsewhere in this annual report on Form 10-K.

	Fiscal Years Ended December 31,				
	2002	2001	2000	1999	1998
	(in thousands, except per share amounts)				
Statements of Operations Data:					
Contract revenues	$ 15,788	$ 15,303	$ 13,218	$ 8,984	$ 28
Costs and expenses:					
Research and development (see Note A)	43,350	32,313	32,034	17,112	8,305
General and administrative (see Note A)	9,454	7,950	6,689	3,952	2,217
	52,804	40,263	38,723	21,064	10,522
Loss from operations	(37,016)	(24,960)	(25,505)	(12,080)	(10,494)
Interest income	856	1,957	1,078	311	246
Interest expense	(870)	(802)	(933)	(597)	(356)
Net loss	(37,030)	(23,805)	(25,360)	(12,366)	(10,604)
Deemed dividend to Series E preferred stockholders	—	—	(10,133)	—	—
Net loss allocable to common stockholders	$ (37,030)	$ (23,805)	$ (35,493)	$ (12,366)	$ (10,604)
Net loss per share, basic and diluted	$ (0.82)	$ (0.64)	$ (4.89)	$ (4.39)	$ (4.01)
Weighted average shares used in computing net loss per share, basic and diluted	44,954	37,287	7,263	2,818	2,643
Pro forma net loss per share, basic and diluted			$ (0.86)	$ (0.52)	
Shares used in computing pro forma net loss per share, basic and diluted			29,543	23,996	
Note A:					
Includes charges for stock-based compensation as follows:					
Research and development	$ 568	$ 1,596	$ 9,184	$ 2,321	$ 6
General and administrative	191	527	976	254	—
Total stock-based compensation	$ 759	$ 2,123	$ 10,160	$ 2,575	$ 6

	As of December 31,				
	2002	2001	2000	1999	1998
	(in thousands)				
Balance Sheet Data:					
Cash, cash equivalents and available-for-sale securities	$ 27,291	$ 33,415	$ 52,994	$ 5,836	$ 9,493
Working capital (deficiency)	22,493	26,371	46,627	(990)	4,547
Total assets	44,342	46,448	64,262	17,169	12,956
Capital lease obligations, less current portion	2,313	4,243	5,761	5,478	1,652
Deferred stock compensation	(772)	(2,452)	(5,792)	(5,814)	—
Accumulated deficit	(114,814)	(77,784)	(53,979)	(28,619)	(16,253)
Total stockholders' equity	25,441	28,941	49,010	756	5,445

See Notes to the Financial Statements for description of the number of shares used in the computation of basic and diluted and pro forma basic and diluted net loss per common share.

Item 7. Management's Discussion and Analysis of Financial Condition and Results of Operations

The following discussion and analysis contains forward-looking statements that are based upon current expectations. Forward-looking statements involve risks and uncertainties. Our actual results and the timing of events may differ significantly from the results discussed in the forward-looking statements. Factors that might cause such a difference include, but are not limited to, those discussed in "Business—Risk Factors" as well as those discussed elsewhere in this annual report on Form 10-K. Historical operating results are not necessarily indicative of results that may occur in future periods. You should read the following discussion and analysis in conjunction with "Item 6. Selected Financial Data," and "Item 8. Financial Statements and Supplementary Data" included elsewhere in this annual report on Form 10-K.

Overview

Our mission is to become a source of novel, small-molecule therapeutic drugs to meet large, unmet medical needs. Our business model is to develop a portfolio of drug candidates and to take these through phase II clinical trials, after which we intend to seek partners for completion of clinical trials, regulatory approval and marketing. We have incurred net losses since inception and expect to incur substantial and increasing losses for the next several years as we continue to move drug candidates into and through preclinical and clinical stages of drug development and expand our research and development activities. To date, we have funded our operations primarily through the sale of equity securities, non-equity payments from collaborative partners and capital asset lease financings. We received our first funding from our collaborative partners in December 1998. As of December 31, 2002, including both research funding and equity investments, we had received an aggregate of $77.8 million from our collaborative partners, including $15.7 million in the year ended December 31, 2002. As of December 31, 2002, our accumulated deficit was approximately $114.8 million.

We expect our sources of revenue for the next several years to consist primarily of payments under our current and future corporate collaborations. Under these arrangements, sources of revenue may include up-front payments, funded research, milestone payments and royalties. The process of carrying out our research programs for our collaborative partners and the development of our own non-partnered products to the later stages of development will require significant additional research and development expenditures, including preclinical testing and clinical trials. These activities, together with our general and administrative expenses, are expected to result in substantial operating losses for the foreseeable future. We will not receive product revenue unless we or our collaborative partners complete clinical trials, obtain regulatory approval and successfully commercialize one or more of our products.

To date, we have entered into collaborations with four major pharmaceutical companies: Johnson & Johnson, Pfizer, Novartis and Daiichi. Johnson & Johnson, Pfizer and Novartis have contributed nearly all of our revenues over the last three years. The Daiichi collaboration was entered into in the last half of 2002.

In July 2001, we expanded our collaboration with Novartis with the initiation of our angiogenesis program, the fourth and final program in our Novartis collaboration. Pursuant to the expanded Novartis collaboration, we received a $4.0 million up-front payment from Novartis, which is being recognized as revenue ratably through July 2004. In addition, the expanded collaboration provides that the angiogenesis research program will be carried out at Rigel, provides for research reimbursement through the middle of 2004 and includes potential future milestones and royalty payments to us. In conjunction with the original collaboration, Novartis paid $4.0 million for 2,000,000 shares of our series D preferred stock that converted to 2,000,000 shares of common stock upon the completion of our initial public offering. The original collaboration also allowed for an additional equity investment by Novartis of up to $10.0 million that was callable by us until our initial public offering. We exercised

this right and sold to Novartis 1,428,571 shares of common stock at $7.00 per share concurrent with the closing of the our initial public offering.

In May 2002, Novartis elected to conclude the research phases of our two initial joint projects in the autoimmunity and transplant rejection areas, after 42 months each, effective in November 2002 and February 2003, respectively.

In December 2001, Johnson & Johnson elected to extend the research phase of our collaboration for an additional two years, and we estimate that this extension will result in additional research reimbursement through the end of 2003 of approximately $5.0 million, of which $2.5 million has been received as of December 31, 2002.

In February 2002, the research phase of our collaboration with Pfizer concluded with Pfizer accepting a total of seven validated targets. Under our collaboration with Pfizer, we expect that these validated targets will continue through the drug discovery and development process at Pfizer.

In August 2002, we signed an agreement for the establishment of a collaboration with Daiichi to pursue research related to a specific protein degradation target. Per the agreement, the research phase of this collaboration is for three years. We will be working with Daiichi to discover and develop cancer pharmaceutical drugs. Under the terms of the collaboration agreement, Daiichi has paid us an upfront amount and a milestone payment, is obligated to pay us ongoing research support and may become obligated to pay us certain other milestones payments. In addition, we will receive royalties on any commercialized products to emerge from the collaboration.

The initial stages of the collaboration focused on the development of the assay for a specific target and the initiation of HTS to identify therapeutic molecules we and Daiichi would like to advance to later stages of drug development. Under terms of the agreement, we retain the rights to co-develop and co-promote products resulting from this collaboration in North America while Daiichi retains co-development and promotion rights in the remainder of the world.

A summary of these partnerships is as follows:

Partner	Research Program	Commencement Date	Research Phase Termination Date
Johnson & Johnson	Tumor Growth—Cell Cycle Inhibition	December 4, 1998	December 2003
Pfizer	Asthma/Allergy—IgE Production in B Cells	January 31, 1999	February 2002
Novartis	Transplant Rejection—T Cell Activation	May 26, 1999	November 2002
Novartis	Autoimmunity Disease—B Cell Activation	August 1, 1999	February 2003
Novartis	Chronic Bronchitis (conducted at Novartis)	January 1, 2000	Ongoing at Novartis
Novartis	Tumor Growth—Inhibition of Tumor Angiogenesis	July 6, 2001	July 2004
Daiichi	Tumor Growth—Protein Degradation Oncology Target	August 1, 2002	August 2005

Under the terms of these collaborations, Johnson & Johnson, Novartis and Daiichi have agreed to provide up to approximately $10.3 million in future research funding over the next three years, none of which is cancelable at the option of these partners. In addition, we may receive additional payments upon the achievement of specific research and development milestones and royalties upon commercialization of any products.

In order to maintain and increase proceeds from collaborations, we are exploring new opportunities with existing and new potential collaborators. Our earliest partnerships focused on the early stages of drug discovery, specifically on target discovery and validation, while our collaboration with Johnson & Johnson has been expanded to also include both chemistry and compound HTS, and our recent collaboration with Daiichi focuses on drug discovery and development. We currently anticipate that in order to support our current research programs we will need to self-fund, at an increased rate of spending, our own research programs to later stages of development prior to partnering with collaborative partners. Therefore, it is expected that future collaborative partnerships may have an expanded focus and could include HTS, combinatorial and medicinal chemistry, preclinical evaluations and/or clinical development. For some programs, we may also seek to enter into collaborations for the development of compounds that we have discovered. The timing, the amount of funds received and the scope of any new collaborations are uncertain, and any compound collaboration will depend on the successful progress of clinical trials. New, expanded or larger collaborations will also be necessary to offset any decrease in proceeds as collaborations come to the end of their terms. Our remaining Novartis program focused on angiogenesis is a multiple-year agreement with the research phase terminating in 2004, the Johnson & Johnson collaboration concludes its research phase at the end of 2003 and the Daiichi collaboration concludes its research phase in August 2005. As each collaboration reaches the conclusion of its research phase, the parties may evaluate the status of the collaboration and, if appropriate, seek to extend the research phase of the collaboration agreement or negotiate alternative terms.

In June 2002, we resolved a dispute with Inoxell A/S (formed as a spinout from Pharmexa—formally M&E Biotech) by entering into a global patent settlement concerning certain drug target identification technologies, which includes both cross-licensing and joint ownership to certain patents and allows for worldwide freedom of operation for both companies.

In September 2000, we entered into a Technology Transfer Agreement with Questcor Pharmaceuticals, Inc. and acquired the license and technology to a hepatitis C research program. Under the terms of this agreement, we have paid a nonrefundable and noncreditable fee of $500,000, issued to Questcor 83,333 shares of Series E preferred stock that subsequently converted to 83,333 shares of common stock upon completion of the our initial public offering and will be responsible for satisfying certain milestones and royalties. We were also committed to invest a total of $2.0 million in research and development expenses over a two-year period through 2002. This committed spending level was achieved midway through 2002. The agreement terminates upon the expiration of the last patent within the agreement. We accounted for the Series E preferred stock at $9.00 per share based on the deemed fair value of our common stock at the date of sale, and we expensed the aggregate value of approximately $1.2 million in September 2000, as the acquired technology was not yet fully developed and had no alternative use.

Critical Accounting Policies and the Use of Estimates

Our discussion and analysis of our financial condition and results of operations are based upon our 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, revenues and expenses, and related disclosure of contingent assets and liabilities. On an on-going basis, we evaluate our estimates, including those related to terms of the research collaborations, investments, stock compensation, impairment issues, the estimated useful life of assets, and contingencies. We base 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

Non-refundable, up-front payments received in connection with research and development collaboration agreements, including technology access fees, are deferred and recognized on a straight-line basis over the relevant periods of continuing involvement, generally the research term.

Revenues related to collaborative research with our corporate collaborators are recognized as research services are performed over the related funding periods for each contract. Under these agreements, we are required to perform research and development activities as specified in each respective agreement. The payments received are not refundable and are generally based on a contractual cost per full-time equivalent employee working on the project. Research and development expenses under the collaborative research agreements approximate or exceed the revenue recognized under such agreements over the term of the respective agreements. Deferred revenue may result if we were not to incur the required level of effort during a specific period in comparison to funds received under the respective contracts.

Milestones are recognized pursuant to collaborative agreements upon the achievement of these specified at risk milestones.

Royalties will be recognized as earned in accordance with the contract terms when the third party results are reliably measurable and collectibility is reasonably assured.

Stock-based Compensation

We recorded no deferred stock compensation with respect to options granted to employees for the year ended December 31, 2002. We recorded deferred stock compensation with respect to options granted to employees of approximately $0.3 million and $4.9 million in the years ended December 31, 2001 and 2000, respectively, representing the difference between the deemed fair value of our common stock for financial reporting purposes on the date these options were granted and the exercise price. These amounts have been reflected as components of stockholders' equity, and the deferred expense is being amortized to operations over the vesting period of the options, generally four to five years, using the graded vesting method. We amortized deferred stock compensation of $1.0 million, $2.6 million and $4.9 million for the years ended December 31, 2002, 2001 and 2000, respectively. At December 31, 2002, we had a total of $0.8 million remaining to be amortized over the remaining vesting periods of the stock options.

In addition to the amortization of the deferred stock compensation, we also record charges associated with options granted to consultants in accordance with accounting principles generally accepted in the United States that involve the periodic revaluation of outstanding unvested consultant options based upon the current market value of our common stock and other assumptions, including the expected future volatility of our stock price. We recognized stock-based compensation recovery for revaluation of consultant options of $0.2 million and $0.5 million for the years ended December 31, 2002 and 2001, respectively. We recognized stock-based compensation expense for revaluation of consultant options of $5.3 million for the year ended December 31, 2000. Even though the number of unvested outstanding options issued to consultants continues to decline, we expect to see continued fluctuations in the future as a portion of these options are revalued based on the current market price of our common stock through the application of the graded vesting method.

Years Ended December 31, 2002, 2001 and 2000

Revenues. Contract revenues from collaborations were $15.8 million in 2002, compared to $15.3 million in 2001 and $13.2 million in 2000. Revenues in 2002, 2001 and 2000 consisted primarily of research support and amortization of upfront fees from the continuation of our collaborations with Pfizer, Johnson & Johnson, Novartis, and, in 2002 only, Daiichi. In 2002 and 2001, revenues also included milestone payments for targets delivered and accepted from certain collaborators. Revenue was flat in 2002 as compared to 2001 primarily due to a combination of the end of the research phase of the Pfizer collaboration, offset by a full year of the angiogenesis program with Novartis and the commencement of the collaboration with Daiichi. The increase in revenues of $2.1 million from 2000 to 2001 was primarily due to the commencement of the angiogenesis program with Novartis in July 2001 and milestones achieved in the Johnson & Johnson and Pfizer programs. We expect contract revenues from collaborations to be a significant component of our total revenues for the foreseeable future.

Research and Development. Research and development expenses were $43.4 million in 2002, compared to $32.3 million in 2001 and $32.0 million in 2000. Excluding stock-based compensation, research and development expenses were $42.8 million in 2002, compared to $30.7 million in 2001 and $22.9 million in 2000. The increase in 2002 of $12.1 million reflects primarily the continued expansion of our drug development infrastructure, the addition of both drug development and research headcount, increased outside contract efforts, increased preclinical activities, the commencement of clinical trials and costs associated with our intellectual property. In September 2002, we began the Phase I clinical trial of our lead compound, R112, in the United Kingdom and subsequently filed an IND application for this compound with the FDA for the clinical indication of allergic rhinitis. The increase in 2001 of $7.8 million primarily reflected the expansion of our drug development infrastructure, the addition of both drug development and research headcount, increased outside contract efforts, increased preclinical activities and costs associated with our intellectual property. We expect research and development expenses to increase in future years, particularly as we continue to move our solely-owned drug candidates through preclinical activities and into clinical trials.

The scope and magnitude of future research and development expenses are difficult to predict at this time given the number of studies that will need to be conducted for any of our potential products as well as our limited capital resources. In general, biopharmaceutical-development involves a series of steps—beginning with identification of a potential target and including, among others, proof of concept in animals and Phase I, II and III clinical studies in humans—each of which is typically more expensive than the previous step. Success in development therefore results in increasing expenditures. Our research and development expenditures currently include costs for scientific personnel, supplies, equipment, consultants, patent filings, sponsored research, allocated facility costs and costs related to clinical trials.

Because of the number of research projects we have ongoing at any one time, and the ability to utilize resources across several projects, the majority of our research and development costs are not directly tied to any individual project and are allocated among multiple projects. Our project management is based primarily on scientific data and supplemented by these cost allocations, which are based primarily on human resource time incurred on each project. As a result the costs allocated to a project do not necessarily reflect the actual costs of the project. Accordingly, we do not maintain actual cost incurred information for our projects on a project-by-project basis.

General and Administrative Expenses. General and administrative expenses were $9.5 million in 2002, compared to $8.0 million in 2001 and $6.7 million in 2000. The increases in both 2002 and 2001 of $1.5 million and $1.3 million, respectively, were primarily attributable to higher employee costs and greater infrastructure costs to support the growing research and development activities. We expect that general and administrative expenses will increase in the future to support the continued growth of our research and development efforts as our products continue to move into clinical trials.

Net Interest Expense. Net interest expense was $14,000 in 2002, compared with net interest income of $1.2 million in 2001 and $0.1 million in 2000. Interest income results from our interest-bearing cash and investment balances, whereas interest expense is the result of our capital lease obligations associated with fixed asset purchases. In 2002, interest expense exceeded interest income due primarily to a reduction in interest rates on our owned securities. The increase in net interest income in 2001 is directly related to the investment interest earned from the proceeds of our initial public offering in December of 2000.

Deemed Dividend to Series E Preferred Stockholders. In February 2000, we completed a private placement of 2,508,330 shares of series E preferred stock at $6.00 per share for net proceeds of approximately $15.1 million. At the date of issuance, we believed the per share price of $6.00 represented the fair value of the preferred stock. Subsequent to the commencement of the our initial public offering process, we re-evaluated the fair value of our common stock as of February 2000 and determined it to be $9.00 per share. Accordingly, the increase in fair value resulted in a beneficial conversion feature of $10.0 million that was recorded as a deemed dividend to the preferred stockholders in 2000. In August 2000, we issued 33,333 shares of series E preferred stock to one of our directors. We recorded a deemed dividend of approximately $100,000 at the time of issuance.

Effect of New Accounting Standards

In June 2002, the Financial Accounting Standards Board (or FASB) issued FAS 146, "Accounting for Costs Associated with Exit or Disposal Activities," which addresses accounting for restructuring, discontinued operation, plant closing or other exit or disposal activity. FAS 146 requires companies to recognize costs associated with exit or disposal activities when they are incurred rather than at the date of a commitment to an exit or disposal plan. FAS 146 is to be applied prospectively to exit or disposal activities initiated after December 31, 2002. The adoption of FAS 146 is not expected to have a significant impact on our financial position or results of operations.

In November 2002, the FASB issued Interpretation No. 45 (or FIN 45), "Guarantor's Accounting and Disclosure Requirements for Guarantees, Including Indirect Guarantees of Indebtedness of Others." FIN 45 elaborates on the existing disclosure requirements for most guarantees, including residual value guarantees issued in conjunction with operating lease agreements. It also clarifies that at the time a company issues a guarantee, the company must recognize an initial liability for the fair value of the obligation it assumes under that guarantee and must disclose that information in its interim and annual financial statements. The initial recognition and measurement provisions apply on a prospective basis to guarantees issued or modified after December 31, 2002. We have made the disclosure requirements in our 2002. Our adoption of the recognition requirements of FIN 45 are not expected to have a material impact on our results of operations and financial position.

In January 2003, the FASB issued Interpretation No. 46 (or FIN 46), "Consolidation of Variable Interest Entities." FIN 46 requires a variable interest entity to be consolidated by a company if that company is subject to a majority of the risk of loss from the variable interest entity's activities or entitled to receive a majority of the entity's residual returns or both. A variable interest entity is a corporation, partnership, trust, or any other legal structures used for business purposes that either (a) does not have equity investors with voting rights or (b) has equity investors that do not provide sufficient financial resources for the entity to support its activities. A variable interest entity often holds financial assets, including loans or receivables, real estate or other property. A variable interest entity may be essentially passive or it may engage in research and development or other activities on behalf of another company. The consolidation requirements of FIN 46 apply immediately to variable interest entities created after January 31, 2003. The consolidation requirements apply to older entities in the first fiscal year or interim period beginning after June 15, 2003. Certain of the disclosure requirements apply to all financial statements issued after January 31, 2003, regardless of when the variable interest

entity was established. Our adoption of FIN 46 is not expected to have a material impact on our results of operations and financial position.

In December 2002, the FASB issued Statement No. 148, "Accounting for Stock-Based Compensation—Transition and Disclosure." FAS 148 amends FAS 123 "Accounting for Stock-Based Compensation" to provide alternative methods of transition for a voluntary change to the fair value based method of accounting for stock-based employee compensation. In addition, FAS 148 amends the disclosure requirements of FAS 123 to require more prominent disclosures in both annual and interim financial statements about the method of accounting for stock-based employee compensation and the effect of the method used on reported results. The additional disclosure requirements

of FAS 148 are effective for fiscal years ending after December 15, 2002. We have elected to continue to follow the intrinsic value method of accounting as prescribed by Accounting Principles Board Opinion No. 25 (or APB 25), "Accounting for Stock Issued to Employees," to account for employee stock options.

In November 2002, the Emerging Issues Task Force (or EITF) reached a consensus on Issue No. 00-21, "Revenue Arrangements with Multiple Deliverables." EITF Issue No. 00-21 provides guidance on how to account for arrangements that involve the delivery or performance of multiple products, services and/or rights to use assets. The provisions of EITF Issue No. 00-21 will apply to revenue arrangements entered into in fiscal periods beginning after June 15, 2002. We believe the adoption of this standard will have no material impact on our financial statements.

Liquidity and Capital Resources

We have financed our operations from inception primarily through sales of equity securities, contract payments payable to us under our collaboration agreements and equipment financing arrangements. As of December 31, 2002, we had received $126.1 million in gross proceeds from the sale of equity securities, including $20.0 million from collaborators, and had received $57.8 million in research funding from collaborators. In addition, as of December 31, 2002, we had financed, through leases and loans, the purchase of equipment and leasehold improvements totaling approximately $17.2 million.

As of December 31, 2002, we had $27.3 million in cash, cash equivalents and available-for-sale securities, as compared to $33.4 million as of December 31, 2001, a decrease of $6.1 million. This decrease was attributable to a combination of approximately $34.5 million in net cash used in operating activities offset by proceeds of $31.2 million, net of commissions and offering costs, from the sale of 7,465,117 shares of our common stock in two offerings in January and February 2002 under our shelf registration statement. We also invested $1.6 million in capital equipment and had debt service payments of $3.7 million in conjunction with our equipment financing arrangements. These payments were offset by $2.0 million of proceeds from lease financing and $0.4 million from the sale of our stock through incentive stock option plans.

As of December 31, 2002, we had $5.7 million in capital lease obligations associated with our financed purchase of equipment and leasehold improvements. All existing equipment financing agreements as of December 31, 2002 are secured by the equipment financed, bear interest rates in a range of 7% to 15% and are due in monthly installments through 2005. In addition, three of these agreements have balloon payments at the end of each loan term, while the fourth agreement allows us to purchase the assets financed at the fair market value or 20% of the original acquisition cost at the end of the financing term. In July 2002, we entered into a tenant improvement and equipment lease line agreement for an aggregate total of $15.0 million. Due to the amendment of the master lease agreement for our 1180 Veterans Blvd. facility signed in October 2002 we have terminated this financing arrangement As of December 31, 2002, we had a total of $2.0 million available for draw down under all financing agreements.

During 2002 our office and research facility located at 240 East Grand in South San Francisco was leased under an operating lease that terminated in conjunction with a 15-year lease for our current office and research facilities at 1180 Veterans Blvd. in South San Francisco signed in May 2001. Under the terms of the lease signed in 2001, we were to occupy our new facilities in late 2002 and were to concurrently terminate our lease of our former facility at 240 East Grand in South San Francisco. We determined that the 2001 lease for our current facility was an operating lease in accordance with FAS 13. In connection with the termination of the current 240 East Grand lease, we accelerated the amortization of tenant improvements and accrued rent charges over the expected remaining life of the lease and incurred minimal costs in connection with the terminated lease. The 1180 Veterans Blvd. research and office facilities were constructed as a build-to-suit facility. Under the original lease, we were obligated to fund approximately $18.0 million of the total tenant improvement obligations. In October 2002, we amended this original lease to provide for a delay of the rent commencement date until February 1, 2003 and an increase in the tenant improvement allowance to cover all of the expected remaining construction obligations on the facility. The lease was also amended to increase the future rental commitments to compensate for the delay of the rent commencement and the increase in the tenant improvement allowance. Since the amendment was considered a material change to the original lease, we reviewed the accounting treatment for this amended lease and again determined the lease to be an operating lease. We moved into the new facility during February 2003.

Prior to the signing of the amendment, we had been directly paying a portion of the pre-construction and construction costs related to the new facility. These costs were being capitalized on our balance sheet as construction-in progress. Per the terms of the amendment, we have estimated that the landlord will be responsible for reimbursing to us all of the costs that we had previously capitalized. Therefore, we have reclassified these costs into a short-term asset "Receivable from Landlord" in our financial statements.

The following are our contractual commitments (by fiscal year) as of December 31, 2002 associated with debt obligations, lease obligations, and contracted research obligations:

	Total	2003	2004 - 2005	2006 - 2007	2008 - 2018
			(in thousands)		
Capital leases	$ 6,322	$ 3,815	$ 2,507	$ —	$ —
Facilities leases	198,128	7,169	21,438	26,546	142,975
Contracted research	500	500	—	—	—
Total	$ 204,950	$ 11,484	$ 23,945	$ 26,546	$ 142,975

On January 31, 2003, we implemented a restructuring plan to reduce the rate of our cash consumption and better align our operating structure with current and expected future economic conditions. The restructuring plan included an immediate reduction in force of approximately 16 percent, or 25 employees, to 135 employees with reductions occurring in all functional areas. Two of our officers were included in this reduction in force. We also deferred a portion of certain officers' salaries.

We believe that our existing capital resources, together with anticipated payments under current collaborations, will be sufficient to support our current operating plan and spending through the end of September 2003. We will require additional financing to fund our operations as currently planned beyond that date. While we have been actively seeking both financing and corporate partnering opportunities, we cannot assure you that a sufficient financing or corporate partnering transaction can be completed on acceptable terms, or at all. If a sufficient financing or corporate partnering transaction cannot be completed or assured, we will not be able to continue our current operating plans and will be forced to reduce the scale of our operations. If a sufficient financing or corporate partnering transaction is not reasonably assured by the middle of May 2003, we will complete our R112 clinical trial currently under way and continue only with certain external preclinical studies in our Hepatitis C

program. All other external studies would be terminated. If as of June 30, 2003 a sufficient financing or corporate partnering transaction is not reasonably assured, we will be required to significantly scale back our operations by reducing our headcount by approximately 50% and significantly reducing all discretionary spending. We anticipate that upon the execution of these actions, our existing capital resources will be sufficient to support the substantially reduced funding of our current programs as well as our operations through the end of 2003. To the extent we raise additional capital by issuing equity securities, our stockholders would at this time experience substantial dilution.

Our future funding requirements will depend on many factors, including, but not limited to:

- our ability to maintain our existing collaboration partnerships;
- our ability to establish and the scope of new collaborations;
- the progress and number of research programs carried out at Rigel;
- the progress of the research and development efforts of our collaborators;
- any changes in the breadth of our research and development programs;
- our ability to meet the milestones identified in our collaborative agreements that trigger payments;
- our ability to maintain and establish new corporate relationships and research collaborations;
- our ability to acquire or license other technologies or compounds, if any;
- the progress and success of preclinical studies and clinical trials of our drug candidates conducted by us or our collaborative partners or licensees;
- our ability to manage our growth;
- competing technological and market developments;
- the costs and timing of obtaining, enforcing and defending our patent and intellectual rights;
- the costs and timing of regulatory approvals; and
- expenses associated with unforeseen litigation.

In addition, we are constantly reviewing potential opportunities to expand our technologies or add to our portfolio of drug candidates. In the future, we may need further capital in order to acquire or invest in technologies, products or businesses. For the next several years, we do not expect the cash generated from our operations to generate the amount of cash required by our future cash needs. We expect to finance future cash needs through strategic collaborations, debt financing and the sale of equity securities. We cannot assure you that additional financing or collaboration and licensing arrangements will be available when needed or that, if available, this financing will be obtained on terms favorable to us or our stockholders. Insufficient funds may require us to delay, scale back or eliminate some or all of our research or development programs, to lose rights under existing licenses or to relinquish greater or all rights to product candidates at an earlier stage of development or on less favorable terms than we would otherwise choose or may adversely affect our ability to operate as a going concern. If additional funds are obtained by issuing equity securities, substantial dilution to existing stockholders may result.

As of December 31, 2002, we had federal net operating loss carryforwards of approximately $90.0 million to offset future taxable income. We also had federal research and development tax credit carryforwards of approximately $3.4 million. If not utilized, net operating loss and credit carryforwards will begin to expire in 2011. Utilization of the net operating losses and credits may be subject to a substantial annual limitation due to ownership change limitations provided by the Internal Revenue

Code of 1986. The annual limitation may result in the expiration of our net operating losses and credits before they can be used. You should read Note 8 of the notes to our financial statements.

Item 7A. Quantitative and Qualitative Disclosures about Market Risk

The primary objective of our investment activities is to preserve principal while at the same time maximizing the income we receive from our investments without significantly increasing risk. Some of the securities in which we invest may have market risk. This means that a change in prevailing interest rates may cause the fair value amount of the investment to fluctuate. For example, if we hold a security that was issued with a fixed interest rate at the then-prevailing rate and the prevailing interest rate later rises, the market value amount of our investment will decline. To minimize this risk in the future, we intend to maintain our portfolio of cash equivalents and short-term investments in a variety of securities, including commercial paper, money market funds and government and non-government debt securities. In 2002, 2001 and 2000, we maintained an investment portfolio primarily in depository accounts and corporate commercial paper. Due to the short-term nature of these investments, we believe we do not have a material exposure to interest rate risk arising from our investments. Therefore, no quantitative tabular disclosure is provided.

We have operated primarily in the United States, and all funding activities with our collaborators to date have been made in U.S. dollars. Accordingly, we have not had any exposure to foreign currency rate fluctuations.

Item 8. Financial Statements and Supplementary Data

INDEX TO FINANCIAL STATEMENTS
Rigel Pharmaceuticals, Inc.

Report of Ernst & Young LLP, Independent Auditors

The Board of Directors and Stockholders
Rigel Pharmaceuticals, Inc.

We have audited the accompanying balance sheets of Rigel Pharmaceuticals, Inc. as of December 31, 2002 and 2001, and the related statements of operations, stockholders' equity, and cash flows for each of the three years in the period ended December 31, 2002. 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 in accordance with auditing standards generally accepted in the 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. An audit also includes assessing the accounting principles used and significant estimates made by management, as well as evaluating the overall financial statement presentation. We believe that our audits provide a reasonable basis for our opinion.

In our opinion, the financial statements referred to above present fairly, in all material respects, the financial position of Rigel Pharmaceuticals, Inc. at December 31, 2002 and 2001, and the results of its operations and its cash flows for each of the three years in the period ended December 31, 2002, in conformity with accounting principles generally accepted in the United States.

/s/ ERNST & YOUNG LLP

Palo Alto, California
January 24, 2003 except for Note 9 as to
which the date is January 31, 2003.

RIGEL PHARMACEUTICALS, INC.

BALANCE SHEETS
(In thousands, except share and per share amounts)

	December 31,	
	2002	2001
Assets		
Current assets:		
Cash and cash equivalents	$ 26,535	$ 11,488
Available-for-sale securities	756	21,927
Accounts receivable	1,503	1,153
Receivable from landlord	6,175	389
Prepaid expenses and other current assets	1,894	1,576
Total current assets	36,863	36,533
Property and equipment, net	5,206	8,440
Other assets	2,273	1,475
	$ 44,342	$ 46,448
Liabilities and stockholders' equity		
Current liabilities:		
Accounts payable	$ 3,460	$ 1,952
Accrued compensation	799	671
Accrued liabilities	2,662	1,104
Deferred revenue	4,061	3,264
Capital lease obligations	3,388	3,171
Total current liabilities	14,370	10,162
Capital lease obligations	2,313	4,243

Long-term portion of deferred revenue	2,147	2,240
Other long-term liabilities	71	862
Commitments		
Stockholders' equity:		
Common stock, $0.001 par value; 100,000,000 shares authorized; 45,702,227 and 37,732,209 shares issued and outstanding in 2002 and 2001, respectively	46	38
Additional paid-in capital	140,982	109,095
Deferred stock compensation	(772)	(2,452)
Accumulated other comprehensive (loss) income	(1)	44
Accumulated deficit	(114,814)	(77,784)
Total stockholders' equity	25,441	28,941
	$ 44,342	$ 46,448

See accompanying notes.

RIGEL PHARMACEUTICALS, INC.

STATEMENT OF OPERATIONS
(In thousands, except per share amounts)

	Years ended December 31,		
	2002	2001	2000
Contract revenues from collaborations	$ 15,788	$ 15,303	$ 13,218
Costs and expenses:			
Research and development (See Note A)	43,350	32,313	32,034
General and administrative (See Note A)	9,454	7,950	6,689
	52,804	40,263	38,723
Loss from operations	(37,016)	(24,960)	(25,505)
Interest income	856	1,957	1,078
Interest expense	(870)	(802)	(933)
Net loss	(37,030)	(23,805)	(25,360)
Deemed dividend to Series E preferred stockholders	—	—	(10,133)
Net loss allocable to common stockholders	$ (37,030)	$ (23,805)	$ (35,493)
Net loss per common share, basic and diluted	$ (0.82)	$ (0.64)	$ (4.89)
Weighted average shares used in computing net loss per common share, basic and diluted	44,954	37,287	7,263

Note A:

Includes charges for stock-based compensation as follows:

Research and development	$ 568	$ 1,596	$ 9,184
General and administrative	191	527	976
	$ 759	$ 2,123	$ 10,160

See accompanying notes.

RIGEL PHARMACEUTICALS, INC.

STATEMENT OF STOCKHOLDERS' EQUITY
(In thousands, except per share and per share amounts)

	Convertible Shares	Preferred Stock Amount	Common Stock Shares	Common Stock Amount	Additional Paid-in Capital	Deferred Stock Compensation	Accumulated Other Comprehensive Income	Accumulated Deficit	Total Stock-holders Equity
Balance at December 31, 1999	22,053,887	$ 22	3,095,834	$ 3	$ 35,164	$ (5,814)	$ —	$ (28,619)	$ 756

Issuance of Series E preferred stock at $6.00 per share for cash, net of issuance cost	2,541,663	3	—	—	15,247	—	—	—	15,250
Issuance of Series E preferred stock in exchange for a technology license	133,333	—	—	—	1,250	—	—	—	1,250
Issuance of Series D preferred stock upon exercise of warrant at $2.00 per share	167,074	—	—	—	215	—	—	—	215
Conversion of preferred stock to common stock upon closing of initial public offering	(24,895,957)	(25)	24,895,957	25	—	—	—	—	—
Issuance of common stock at $7.00 per share for cash, net of issuance costs	—	—	7,078,571	7	45,553	—	—	—	45,560
Issuance of common stock upon exercise of options	—	—	1,633,824	2	275	—	—	—	277
Issuance of common stock for services	—	—	100,000	—	900	—	—	—	900
Compensation expense related to options granted to consultants	—	—	—	—	5,280	—	—	—	5,280
Deferred stock compensation	—	—	—	—	4,858	(4,858)	—	—	—
Amortization of deferred stock compensation	—	—	—	—	—	4,880	—	—	4,880
Net loss and comprehensive loss	—	—	—	—	—	—	2	(25,360)	(25,358)
Balance at December 31, 2000	—	—	36,804,186	37	108,742	(5,792)	2	(53,979)	49,010
Issuance of common stock upon exercise of options and participation in Purchase Plan	—	—	928,023	1	887	—	—	—	888
Issuance of warrant to purchase common stock for services	—	—	—	—	683	—	—	—	683
Compensation recovery related to options granted to consultants	—	—	—	—	(510)	—	—	—	(510)
Deferred stock compensation	—	—	—	—	285	(285)	—	—	—
Amortization of deferred stock compensation, net of cancellations	—	—	—	—	(992)	3,625	—	—	2,633
Net loss and comprehensive loss	—	—	—	—	—	—	42	(23,805)	(23,763)
Balance at December 31, 2001	—	—	37,732,209	38	109,095	(2,452)	44	(77,784)	28,941
Issuance of common stock at $4.50 per share for cash, net of issuance costs	—	—	7,000,000	7	29,421	—	—	—	29,428
Issuance of common stock at $4.30 per share for cash, net of issuance costs	—	—	465,117	—	1,923	—	—	—	1,923
Issuance of common stock upon exercise of options and participation in Purchase Plan	—	—	504,901	1	445	—	—	—	446
Issuance of warrants to purchase common stock for services	—	—	—	—	1,018	—	—	—	1,018
Compensation recovery related to options granted to consultants	—	—	—	—	(196)	—	—	—	(196)
Amortization of deferred stock compensation, net of cancellations	—	—	—	—	(724)	1,680	—	—	956
Net loss and comprehensive loss	—	—	—	—	—	—	(45)	(37,030)	(37,075)
Balance at December 31, 2002	—	$ —	45,702,227	$ 46	$ 140,982	$ (772)	$ (1)	$ (114,814)	$ 25,441

See accompanying notes

RIGEL PHARMACEUTICALS, INC.

STATEMENTS OF CASH FLOWS
(In thousands)

	Years ended December 31,		
	2002	2001	2000
Operating activities			
Net loss	$ (37,030)	$ (23,805)	$ (25,360)
Adjustments to reconcile net loss to net cash used in operating activities:			
Depreciation and amortization	4,868	4,127	2,677
Amortization of deferred stock compensation, net	956	2,633	4,880
Noncash stock (recovery) compensation	(196)	(510)	5,280
Issuances of equity instruments for noncash benefits	20	—	2,150
Changes in assets and liabilities:			
Accounts receivable	(350)	(490)	1,685
Prepaid expenses and other current assets, including receivable from landlord	(4,593)	(939)	(680)
Other assets	201	(551)	—
Accounts payable	1,480	638	431
Accrued compensation	128	(53)	436
Accrued liabilities	74	408	(707)
Deferred revenue	704	2,734	(2,956)
Other long-term liabilities	(790)	(173)	576
Net cash used in operating activities	(34,528)	(15,981)	(11,588)
Investing activities			
Purchases of available-for-sale securities	(26,713)	(47,511)	(3,962)
Maturities of available-for-sale securities	22,875	29,590	—
Sales of available-for-sale securities	24,964	—	—

Capital expenditures	(1,635)	(3,229)	(3,617)
Net cash provided (used) in investing activities	19,491	(21,150)	(7,579)
Financing activities			
Proceeds from capital lease financing	1,999	1,748	3,471
Principal payments on capital lease obligations	(3,712)	(3,047)	(2,412)
Net proceeds from issuances of common stock	31,797	888	45,837
Net proceeds from issuances of convertible preferred stock	—	—	15,465
Net cash provided by (used in) financing activities	30,084	(411)	62,361
Net increase (decrease) in cash and cash equivalents	15,047	(37,542)	43,194
Cash and cash equivalents at beginning of period	11,488	49,030	5,836
Cash and cash equivalents at end of period	$ 26,535	$ 11,488	$ 49,030
Supplemental disclosure of cash flow information			
Interest paid	$ 870	$ 802	$ 933
Schedule of non cash transactions			
Deferred stock compensation	$ —	$ 285	$ 4,858
Issuance of warrants for services	$ 1,018	$ 683	$ —
Series E deemed dividend	$ —	$ —	$ 10,133

See accompanying notes.

Rigel Pharmaceuticals, Inc.
NOTES TO FINANCIAL STATEMENTS

In this Annual Report, "Rigel," "we," "us" and "our" refer to Rigel Pharmaceuticals, Inc. "Common Stock" refers to Rigel's common stock, par value $0.001 per share.

1. SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES

Nature of operations and basis of presentation

We were incorporated in the state of Delaware on June 14, 1996. We are engaged in the discovery and development of a broad range of new small molecule drug candidates.

Management's Plans

We have incurred net losses since inception and expect to incur substantial and increasing losses for the next several years as we continue to move drug candidates into and through preclinical and clinical stages of drug development and expand our research and development activities. To date, we have funded our operations primarily through the sale of equity securities, non-equity payments from collaborative partners and capital asset lease financings. We believe that our existing capital resources, together with anticipated payments under current collaborations, will be sufficient to support our current operating plan and spending through the end of September 2003. We will require additional financing to fund our operations as currently planned beyond that date. While we have been actively seeking both financing and corporate partnering opportunities, we cannot assure you that a sufficient financing or corporate partnering transaction can be completed on acceptable terms, or at all. If a sufficient financing or corporate partnering transaction cannot be completed or assured, we will not be able to continue our current operating plans and will be forced to reduce the scale of our operations. If a sufficient financing or corporate partnering transaction is not reasonably assured by the middle of May 2003, we will complete our R112 clinical trial currently under way and continue only with certain external preclinical studies in our Hepatitis C program. All other external studies would be terminated. If as of June 30, 2003 a sufficient financing or corporate partnering transaction is not reasonably assured, we will be required to significantly scale back our operations by reducing our headcount by approximately 50% and significantly reducing all discretionary spending. We anticipate that upon the execution of these actions, our existing capital resources will be sufficient to support the substantially reduced funding of our current programs as well as our operations through the end of 2003. To the extent we raise additional capital by issuing equity securities, our stockholders would at this time experience substantial dilution.

Use of estimates

The preparation of financial statements in conformity with accounting principles generally accepted in the United States requires management to make estimates and assumptions that affect the amounts reported in the financial statements and accompanying notes. Actual results could differ from these estimates.

Stock Award Plans

We have elected to continue to follow Accounting Principles Board Opinion No. 25 (or APB 25), "Accounting for Stock Issued to Employees," to account for employee stock options because the alternative fair value method of accounting prescribed by Statement of Financial Accounting Standards (or FAS) No. 123, "Accounting for Stock-Based Compensation," requires the use of option valuation models that were not developed for use in valuing employee stock options. Under APB 25, the intrinsic

value method of accounting, no compensation expense is recognized because the exercise price of our employee stock options equals the market price of the underlying stock on the date of grant.

In December 2002, the FASB issued Statement No. 148, "Accounting for Stock-Based Compensation—Transition and Disclosure." FAS 148 amends FAS 123 "Accounting for Stock-Based Compensation" to provide alternative methods of transition for a voluntary change to the fair value based method of accounting for stock-based employee compensation. In addition, FAS 148 amends the disclosure requirements of FAS 123 to require more prominent disclosures in both annual and interim financial statements about the method of accounting for stock-based employee compensation and the effect of the method used on reported results. The additional disclosure requirements of FAS 148 are effective for fiscal years ending after December 15, 2002. We have elected to continue to follow the intrinsic value method of accounting as prescribed by Accounting Principles Board Opinion No. 25 (or APB 25), "Accounting for Stock Issued to Employees," to account for employee stock options. See Note 1 "Significant Accounting Polices" for the disclosures required by FAS 148.

Pro forma information regarding net loss and net loss per share is required by SFAS 123 and SFAS 148 and has been determined as if we had accounted for our employee stock options and employee stock purchase plan under the fair value method prescribed by the Statement. The fair value for these options was estimated at the date of grant using the Black-Scholes model in both 2002 and 2001, and the minimum value method in 2000 with the following weighted-average assumptions for the years ended December 31, 2002, 2001 and 2000: risk-free interest rates of 2.1%, 3.7% and 4.8%, respectively; volatility of 0.85 in 2002 and 0.65 in 2001and 2000; an expected option life of five years; and no dividend yield.

For purposes of pro forma disclosures, the estimated fair value of the options is amortized to expense over the vesting period of the options. Our pro forma information follows (in thousands, except per share amounts):

	Years Ended December 31,		
	2002	2001	2000
Net loss allocable to common stockholders—as reported:	$ (37,030)	$ (23,805)	$ (35,493)
Add: Total stock-based compensation determined under APB 25	(759)	(2,123)	(10,160)
Add: Total stock-based compensation expense determined under the fair value based method for all awards	4,150	4,931	11,976
Pro forma net loss	(40,421)	(26,613)	(37,309)
Basic and diluted net loss per common share:			
As reported	$ (0.82)	$ (0.64)	$ (4.89)
Pro forma	(0.90)	(0.71)	(5.14)

Cash, cash equivalents and available-for-sale securities

We consider all highly liquid investments in debt securities with a remaining maturity from the date of purchase of 90 days or less to be cash equivalents. Cash equivalents consist of money market funds and corporate debt securities. Our short-term investments include obligations of governmental agencies and corporate debt securities. By policy, we limit the concentration of credit risk by diversifying our investments among a variety of high credit-quality issuers.

All cash equivalents and short-term investments are classified as available-for-sale. Available-for-sale securities are carried at amortized cost, and approximated their fair value at December 31, 2002 and 2001. Unrealized gains (losses) are reported in stockholders' equity and included in other comprehensive income. Fair value is estimated based on available market information. The cost of securities sold is based on the specific identification method. For the years ended December 31, 2002, 2001 and 2000, gross realized gains and losses on available-for-sale securities were not material. See Note 4 for a summary of available-for-sale securities at December 31, 2002 and 2001.

Fair value of financial instruments

Financial instruments, including cash and cash equivalents, accounts receivable, accounts payable, accrued liabilities and accrued compensation are carried at cost or amortized cost, which management believes approximates fair value.

Derivative financial instruments and hedging activities

All derivatives are required to be recognized on the balance sheet at fair value. Derivatives that are not designated as hedges must be adjusted to fair value through earnings. If the derivative is designated and qualifies as a hedge, depending on the nature of the hedge, changes in the fair value of the derivative are either offset against the change in fair value of assets, liabilities, or firm commitments through earnings or recognized in other comprehensive income until the hedged item is recognized in earnings. The ineffective portion of a derivative's change in fair value will be immediately recognized in earnings. We do not hold derivative financial instruments and do no currently engage in hedging activities.

Property and equipment

Property and equipment are stated at cost. Depreciation is calculated using the straight-line method over the estimated useful lives of the assets, which range from three to seven years. Leasehold improvements are amortized using the straight-line method over the estimated useful lives of the assets or the term of the lease, whichever is shorter.

Revenue recognition

Non-refundable, up-front payments received in connection with research and development collaboration agreements, including technology access fees, are deferred and recognized on a straight-line basis over the relevant periods of continuing involvement, generally the research term.

Revenues related to collaborative research with our corporate collaborators are recognized as research services are performed over the related development funding periods for each contract. Under these agreements, we are required to perform research and development activities as specified in each respective agreement. The payments received are not refundable and are generally based on a contractual cost per full-time equivalent employee working on the project. Research and development expenses under the collaborative research agreements approximate or exceed the revenue recognized under such agreements over the term of the respective agreements. Deferred revenue may result if we were not to incur the required level of effort during a specific period in comparison to funds received under the respective contracts.

Milestones are recognized pursuant to collaborative agreements upon the achievement of these specified at risk milestones.

Royalties will be recognized as earned in accordance with the contract terms when the third party results are reliably measurable and collectibility is reasonably assured.

Research and development

Research and development expenses include costs for scientific personnel, supplies, equipment, consultants, patent filings, research sponsored by us, allocated facility costs and costs related to clinical trials. All such costs are charged to research and development expense as incurred. Collaboration agreements generally specify minimum levels of research effort required to be performed by us.

Impairment of long-lived assets

We adopted FAS 144, "Accounting for the Impairment or Disposal of Long-Lived Assets," on January 1, 2002. FAS 144 supersedes FAS 121, "Accounting for the Impairment of Long-Lived Assets and for Long-Lived Assets to Be Disposed Of." The primary objectives of FAS 144 are to develop one accounting model based on the framework established in FAS 121 for long-lived assets to be disposed of by sale, and to address significant implementation issues. Our adoption of FAS 144 did not have a material impact on our financial position or results of operations.

Segment reporting

We have determined that we operate in only one segment.

Contingencies

We are subject to claims related to the patent protection of certain of our technologies. We are required to assess the likelihood of any adverse judgments or outcomes to these matters as well as potential ranges of probable losses. A determination of the amount of reserves required, if any, for these contingencies is made after careful analysis of each individual issue. The required reserves may change in the future due to new developments in each matter or changes in approach such as a change in settlement strategy in dealing with these matters.

Net loss per share

Net loss per share has been computed according to Financial Accounting Standards Board Statement No. 128, "Earnings Per Share," which requires disclosure of basic and diluted earnings per share. Basic earnings per share excludes any dilutive effects of options, shares subject to repurchase, warrants and convertible securities. Diluted earnings per share includes the impact of potentially dilutive securities.

Our preferred stock converted into common stock upon the closing of our initial public offering in December 2000. For informational purposes, the following unaudited pro forma net loss per share data

reflects the assumed conversion of our preferred stock at the date of issuance (in thousands, except per share information):

	Year Ended December 31, 2000
Net loss to common stockholders before deemed dividend	$ (25,360)
Weighted-average shares of common stock outstanding	7,263
Pro forma adjustment to reflect weighted average effect of assumed conversion of preferred stock	22,280
Total weighted average shares outstanding pro forma	29,543
Basic and diluted pro forma loss per share	$ (0.86)

During all periods presented, we had securities outstanding which could potentially dilute basic earnings per share in the future, but were excluded from the computation of diluted net loss per share, as their effect would have been antidilutive. These outstanding securities consist of the following (in thousands, except per share information):

	December 31,		
	2002	2001	2000
Outstanding options	6,465	5,761	5,700
Warrants	1,150	300	457
Weighted average exercise price of options	$ 3.47	$ 3.48	$ 2.70
Weighted average exercise price of warrants	$ 2.76	$ 5.03	$ 1.01

Recent accounting pronouncements

In June 2002, the Financial Accounting Standards Board (or FASB) issued FAS 146, "Accounting for Costs Associated with Exit or Disposal Activities," which addresses accounting for restructuring, discontinued operation, plant closing or other exit or disposal activity. FAS 146 requires companies to recognize costs associated with exit or disposal activities when they are incurred rather than at the date of a commitment to an exit or disposal plan. FAS 146 is to be applied prospectively to exit or disposal activities initiated after December 31, 2002. The adoption of FAS 146 is not expected to have a significant impact on our financial position and results of operations.

In November 2002, the FASB issued Interpretation No. 45 (or FIN 45), "Guarantor's Accounting and Disclosure Requirements for Guarantees, Including Indirect Guarantees of Indebtedness of Others." FIN 45 elaborates on the existing disclosure requirements for most guarantees, including residual value guarantees issued in conjunction with operating lease agreements. It also clarifies that at the time a company issues a guarantee, the company must recognize an initial liability for the fair value of the obligation it assumes under that guarantee and must disclose that information in its interim and annual financial statements. The initial recognition and measurement provisions apply on a prospective basis to guarantees issued or modified after December 31, 2002. The disclosure requirements are effective for financial statements of interim or annual periods ending after December 15, 2002. Our adoption of FIN 45 did not have a material impact on our results of operations and financial position.

In January 2003, the FASB issued Interpretation No. 46 (or FIN 46), "Consolidation of Variable Interest Entities." FIN 46 requires a variable interest entity to be consolidated by a company if that company is subject to a majority of the risk of loss from the variable interest entity's activities or

entitled to receive a majority of the entity's residual returns or both. A variable interest entity is a corporation, partnership, trust, or any other legal structures used for business purposes that either (a) does not have equity investors with voting rights or (b) has equity investors that do not provide sufficient financial resources for the entity to support its activities. A variable interest entity often holds financial assets, including loans or receivables, real estate or other property. A variable interest entity may be essentially passive or it may engage in research and development or other activities on behalf of another company. The consolidation requirements of FIN 46 apply immediately to variable interest entities created after January 31, 2003. The consolidation requirements apply to older entities in the first fiscal year or interim period beginning after June 15, 2003. Certain of the disclosure requirements apply to all financial statements issued after January 31, 2003, regardless of when the variable interest entity was established. Our adoption of FIN 46 did not have a material impact on our results of operations and financial position.

In November 2002, the Emerging Issues Task Force (or EITF) reached a consensus on Issue No. 00-21, "Revenue Arrangements with Multiple Deliverables." EITF Issue No. 00-21 provides guidance on how to account for arrangements that involve the delivery or performance of multiple products, services and/or rights to use assets. The provisions of EITF Issue No. 00-21 will apply to revenue arrangements entered into in fiscal periods beginning after June 15, 2002. We believe the adoption of this standard will have no material impact on our financial statements.

2. SPONSORED RESEARCH AND LICENSE AGREEMENTS

Research agreements

On December 4, 1998, we entered into a research collaboration agreement with Johnson and Johnson Pharmaceutical and Development, LLC to research and identify novel targets for drug discovery. Under the terms of the contract, Johnson & Johnson paid a one-time non-refundable, non-creditable fee and will provide support for research activities during the research period, as well as various milestones and royalties. In December of 2001, Johnson & Johnson extended the funded research portion of the collaboration through December 2003. Johnson & Johnson participated in our series D and E preferred stock financings. Johnson & Johnson contributed $3,000,000 for 1,500,000 shares of series D preferred stock and contributed $1,000,000 for 166,666 shares of series E preferred stock. The preferred stock purchased by Johnson & Johnson automatically converted to 1,666,666 shares of common stock upon completion of our initial public offering.

On January 31, 1999, we entered into a two-year collaborative research agreement with Pfizer Inc. to discover and develop various molecular targets. Upon signing of the agreement, Pfizer was obligated to pay a one-time, nonrefundable, noncreditable fee. Under the terms of the contract, Pfizer provided support for research for two years and is obligated to pay us various milestones and royalties if certain conditions are met. On January 25, 2001, Pfizer notified us that it was electing to exercise its option to extend the funded research portion of the collaboration one additional year to January 31, 2002 and then extended it again for one additional month to February 28, 2002. In February 2002, the research phase of our collaboration with Pfizer concluded with Pfizer accepting a total of seven validated targets. Under our collaboration with Pfizer, we expect that these validated targets will continue through the drug discovery and development process at Pfizer. In conjunction with the original agreement, Pfizer contributed $2,000,000 in exchange for 1,000,000 shares of series D preferred stock that subsequently converted to 1,000,000 shares of common stock upon completion of the our initial public offering.

On May 28, 1999, we entered into a broad collaboration with Novartis Pharma AG, whereby we and Novartis agreed to work on up to five different research programs to identify various targets for drug development. Two programs were initiated in 1999 while the third program to be conducted at Novartis was initiated on January 1, 2000. In July 2001, we expanded our collaboration with Novartis with the initiation of our angiogenesis program, the fourth and final program in our Novartis collaboration. Pursuant to the expanded Novartis collaboration, we received a $4.0 million up-front payment from Novartis, which will be recognized as revenue ratably over the life of the contract. In addition, the expanded collaboration provides that the angiogenesis research program will be carried out at Rigel, provides for research reimbursement over the next three years and includes potential future milestones and royalty payments to Rigel. Novartis notified us that it has chosen not to exercise its option for a second program of research that would have been carried out at Novartis. In May 2002, Novartis elected to conclude the research phases of our two initial joint projects in the autoimmunity and transplant rejection areas, after 42 months each, effective in November 2002 and February 2003, respectively. Pursuant to the collaboration agreement, Novartis had the option to end the research phase on these programs after either 24 months or 42 months.

For all programs, Novartis will provide payment for various milestones and royalties if certain conditions in the collaboration agreement are met. In conjunction with the original agreement, Novartis contributed $4,000,000 in exchange for 2,000,000 shares of series D preferred stock that converted to 2,000,000 shares of common stock upon the completion of our initial public offering. The agreement also allowed for an additional equity investment of up to $10,000,000, which was callable by us up through an initial public offering. We exercised this right and sold to Novartis 1,428,571 shares of common stock at $7.00 per share concurrent with the closing of our initial public offering.

In August 2002, we signed an agreement for the establishment of collaboration with Daiichi Pharmaceuticals Co., Ltd to pursue research related to a specific protein degradation target. Per the agreement, the research phase of this collaboration is for three years. We will be working with Daiichi to discover and develop cancer pharmaceutical drugs. Under the terms of the collaboration agreement, Daiichi has paid us an upfront amount and a milestone payment, is obligated to pay us ongoing research support and may become obligated to pay us certain other milestones payments. In addition, we will receive royalties on any commercialized products to emerge from the collaboration.

The initial stages of the collaboration focused on the development of the assay for this specific target and the initiation of HTS to identify therapeutic molecules we and Daiichi would like to advance to later stages of drug development. Under terms of the agreement, we retain the rights to co-develop and co-promote products resulting from this collaboration in North America while Daiichi retains co-development and promotion rights in the remainder of the world.

Technology transfer agreement

In September 2000, we entered into a technology transfer agreement with Questcor Pharmaceuticals, Inc. and acquired the license and technology to a hepatitis C research program. Under the terms of this agreement, we paid a nonrefundable and noncreditable fee of $500,000, and are required to pay future milestones and royalties, and issued to Questcor 83,333 shares of series E preferred stock, which converted to 83,333 of common stock upon the completion of our initial public offering. We were also committed to invest a total of $2 million in research and development expenses over a two-year period through 2002. This committed spending level was achieved midway through 2002. The agreement terminates upon the expiration of the last patent within the agreement. We have accounted for the series E preferred stock at $9.00 per share based on the deemed fair value of its common stock at the date of grant. We have expensed the aggregate value of approximately

$1.2 million in September 2000 as the acquired technology is not yet fully developed and has no alternative use.

3. SIGNIFICANT CONCENTRATIONS

For the year ended December 31, 2002, Novartis, Johnson and Johnson, Daiichi and Pfizer accounted for 70%, 18%, 6% and 6% of total revenues, respectively. For the year ended December 31, 2001, Pfizer, Johnson and Johnson and Novartis accounted for 17%, 27% and 56% of total revenues, respectively. For the year ended December 31, 2000, Pfizer, Johnson & Johnson and Novartis accounted for 22%, 25% and 52% of total revenues, respectively. Accounts receivable relate mainly to these collaborative partners. The Company does not require collateral or other security for accounts receivable.

4. AVAILABLE-FOR-SALE SECURITIES

Available-for-sale securities consist of the following (in thousands):

	Amortized Cost and Fair Value at December 31,	
	2002	2001
Money market funds	$ 26,535	$ 11,488
Corporate commercial paper	756	21,927
	$ 27,291	$ 33,415
Reported as:		
Cash and cash equivalents	$ 26,535	$ 11,488
Available-for-sale securities	756	21,927
	$ 27,291	$ 33,415

At December 31, 2002, the available-for-sale securities had maturities of less than one year, with an average maturity of approximately 105 days.

There were no material gross realized gains or losses from sales of securities in the periods presented. Recorded unrealized gains and losses on available-for-sale securities were not material at December 31, 2002 or 2001.

5. PROPERTY AND EQUIPMENT

Property and equipment consists of the following (in thousands):

	Years Ended December 31,	
	2002	2001
Laboratory and office equipment	$ 16,691	$ 14,667
Leasehold improvements	3,175	3,169
Construction in progress	197	592
Total property and equipment	20,063	18,428
Less accumulated depreciation and amortization	(14,857)	(9,988)
Property and equipment, net	$ 5,206	$ 8,440

At December 31, 2002 and 2001, equipment under capital leases was approximately $15.0 million and $15.2 million, respectively with accumulated depreciation and amortization of approximately $13.3 million and $8.5 million, respectively. Amortization expense was $1.7 million, $1.0 million, and $0.3 million for the years ended December 31, 2002, 2001, and 2000, respectively.

6. LONG-TERM OBLIGATIONS

At December 31, 2002, future minimum lease payments and obligations under all noncancelable leases were as follows (in thousands):

	Capital Leases	Operating Leases
2003	$ 3,815	$ 7,169
2004	1,955	7,566
2005	552	13,872
2006	—	13,034
2007	—	13,512
2008 and thereafter	—	142,975
Total minimum payments required	6,322	$ 198,128
Less amount representing interest	621	
Present value of future lease payments	5,701	
Less current portion	(3,388)	
Noncurrent obligations under capital leases	2,313	

During 2002, our office and research facility located at 240 East Grand in South San Francisco was leased under an operating lease terminated in conjunction with a 15-year lease for our current office and research facilities at 1180 Veterans Blvd. in South San Francisco signed in May 2001. Under the terms of the lease signed in 2001, we were to occupy our new facility in late 2002 and were to concurrently terminate our lease of our former facility at 240 East Grand in South San Francisco. We determined that the 2001 lease was an operating lease in accordance with FAS 13. In connection with the termination of the current 240 East Grand lease, we accelerated the amortization of tenant improvements and accrued rent charges over the expected remaining life of the lease and incurred minimal costs in connection with the terminated lease. The 1180 Veterans Blvd. research and office facilities were constructed as a build-to-suit facility. Under the original lease we were obligated to fund approximately $18.0 million of the total tenant improvement obligations. In October 2002, we amended this original lease to provide for a delay of the rent commencement date until February 1, 2003 and an increase in the tenant improvement allowance to cover the remaining construction obligations on the facility. The lease was also amended to increase the future rental commitments to compensate for the delay of the rent commencement and the increase in the tenant improvement allowance. Since the amendment was considered a material change to the original lease, we revisited the proper accounting treatment for this lease per FAS 13 and again determined the lease to be an operating lease. We moved into the new facilities during February 2003.

Prior to the signing of the amendment, we had been directly paying a portion of the pre-construction and construction costs related to the new facility. These costs were being capitalized on our balance sheet as construction-in progress. We have estimated that the landlord will be responsible for all of the costs that we had previously capitalized. Therefore, we have reclassified these costs into a short-term asset "Receivable from Landlord" and shown on the face of our balance sheet.

Rent expense under all operating leases amounted to approximately $1,897,000, $2,167,000 and $2,252,000 for the years ended December 31, 2002, 2001 and 2000, respectively.

In June 1998, we entered into a equipment lease line agreement for up to $3,000,000, which was fully utilized in June 1999. The lease period was for four years. The interest on each lease is fixed at the time of the draw down with the interest rates ranging from 6.5% to 7.2%.

In June 1999 and August 1999, we entered into two additional equipment lease line agreements for an aggregate total of $6,000,000, or $3,000,000 each additional lease agreement. These lines were fully utilized in May 2000. The lease period was for four years. The interest on each lease is fixed at the time of the draw down with the interest rates ranging from 11.7% to 15.0%.

In August 2000, we entered into an additional equipment lease line agreement for an aggregate total of $5,000,000. We utilized $4,148,000 of the facility but have no remaining availability under the facility. The lease period was for four years. The interest on the lease is fixed at the time of the draw down with the interest rates ranging from 10.6% to 14.6%.

In January 2002, we entered into an additional equipment lease line agreement for an aggregate total of $2,000,000. This line was fully utilized in August 2002. The lease period was for 37 months. The interest on the lease is fixed at the time of the draw down with the interest rates ranging from 11.5% to 11.7%.

In July 2002, we entered into an tenant improvement and equipment lease line agreement for an aggregate total of $15,000,000. Due to the amendment of our master lease agreement for our 1180 Veterans Blvd. facility signed in October 2002, we terminated the line without drawing down any of the available funds. Therefore, we do not have access to any amount under the line.

In December 2002, we entered into an additional equipment lease line agreement for an aggregate total of $2,000,000. We have the ability to draw down on this line until December 2003. As of December 31, 2002, no amounts under this line had been utilized. The lease period will be for three years. The interest on the lease is fixed at the time of any draw down.

Obligations under all leases are secured by the assets financed under the leases.

7. STOCKHOLDERS' EQUITY

Preferred and common stock

In February 2000, we completed a private placement of 2,508,330 shares of series E preferred stock at $6.00 per share for net proceeds of approximately $15.1 million. At the date of issuance, we believed the per share price of $6.00 represented the fair value of the preferred stock. Subsequent to the commencement of our initial public offering process, we re-evaluated the fair value of its common stock as of February 2000 and determined it to be $9.00 per share. Accordingly, the increase in fair value has resulted in a beneficial conversion feature of $10.0 million that has been recorded as a deemed dividend to the preferred stockholders in 2000. We recorded the deemed dividend at the date of issuance by offsetting charges and credits to additional paid-in-capital without any effect on total stockholders' equity. The preferred stock dividend increases the net loss allocable to common stockholders in the calculation of basic and diluted net loss per common share in 2000. Also in February 2000, we issued 50,000 shares of series E preferred stock for a license of technology. We valued the license at $500,000 and have expensed this amount in 2000 as the useful life is deemed to be less than one year.

In August 2000, we issued 33,333 shares of series E preferred stock to one of our directors. We recorded a deemed dividend of approximately $100,000 at the time of issuance.

In January 2002, we issued 7,000,000 shares of common stock in a registered direct offering to certain institutional investors at a price of $4.50 per share under our shelf registration statement. We received net proceeds of approximately $29.4 million after deducting commissions and offering costs. In February 2002, we issued 465,117 shares of common stock in a registered direct offering to a certain institutional investor at a price of $4.30 per share under our shelf registration statement. We received net proceeds of approximately $1.8 million after deducting commissions and offering costs.

Warrants

In conjunction with the equipment lease line executed in April 1997, we issued a warrant to purchase 175,000 shares of series B preferred stock at an exercise price of $0.80 per share. Upon the closing of our initial public offering, this warrant automatically converted to a warrant to purchase 175,000 shares of common stock at $0.80 per share. this warrant was exercised in June 2001 and was no longer outstanding as of December 31, 2001.

In conjunction with the equipment lease line executed in June 1998, we issued a warrant to purchase 131,578 shares of series C preferred stock at an exercise price of $1.14 per share. Upon the closing of our initial public offering, this warrant automatically converted to a warrant to purchase 131,578 shares of common stock at $1.14 per

share. this warrants was exercised in June 2001 and is no longer outstanding as of December 31, 2001.

In conjunction with the facilities lease entered into in June 1998, we issued three warrants to purchase an aggregate of 150,000 shares of common stock at an exercise price of $1.14 per share. The warrants are exercisable at any time up to November 28, 2007, the seventh anniversary of the closing of our initial public offering.

In conjunction with the facilities lease entered into in May 2001, we issued a warrant to purchase 150,000 shares of our common stock at an exercise price of $8.91 per share, a 15% premium to market at the time of issuance. This warrant will expire on May 16, 2006. The fair market value of this warrant, as determined by the Black-Scholes valuation model, was approximately $683,000. This amount has been capitalized in other long term assets and is being amortized into expense over the life of the lease.

In conjunction with the equipment lease line executed in January 2002, we issued a warrant to purchase 23,810 shares of our common stock at an exercise price of $4.20 per share. This warrant will expire on January 31, 2007. The fair market value of this warrant, as determined by the Black-Scholes valuation model, was approximately $66,000. This amount has been capitalized in other long-term assets and is being amortized into expense over the payment period of the equipment lease line.

In conjunction with the equipment lease line executed in July 2002, we issued a warrant to purchase 138,889 shares of our common stock at an exercise price of $2.70 per share. This warrant will expire on July 12, 2012. The fair market value of this warrant, as determined by the Black-Scholes valuation model, was approximately $251,000. This amount was completely expensed in 2002 in conjunction with the termination of the line.

In conjunction with the amendment of our master lease agreement for our 1180 Veterans Blvd. facility entered into in October 2002, we issued a warrant to purchase 500,000 shares of our common stock at an exercise price of $1.97 per share. This warrant will expire on October 18, 2007. The fair market value of this warrant, as determined by the Black-Scholes valuation model, was approximately $565,000. This amount has been capitalized in other long term assets and is being amortized into expense over the life of the lease.

In conjunction with the equipment lease line executed in December 2002, we issued a warrant to purchase 186,916 shares of our common stock at an exercise price of $1.07 per share. This warrant will expire on December 23, 2007. The fair market value of this warrant, as determined by the Black-Scholes valuation model, was approximately $136,000. This amount has been capitalized in other long-term assets and is being amortized into expense over the payment period of the equipment lease line.

Stock option plans

In January 2000, we adopted the 2000 Equity Incentive Plan (the "2000 Plan"), which was approved in March 2000 by our stockholders. The 2000 Plan is an amendment and restatement of the 1997 Stock Option Plan. Under the 2000 Plan, incentive stock options, nonstatutory stock options and shares of common stock may be granted to our employees, directors and consultants. As of December 31, 2002, a total of 6,320,000 shares of common stock have been authorized for issuance under the 2000 Plan.

In July 2001, we adopted the 2001 Non-Officer Equity Incentive Plan (the "2001 Plan"). Under the 2001 Plan, which was not approved by our stockholders, nonstatutory stock options may be granted to our employees and consultants. As of December 31, 2002, a total of 3,500,000 shares of common stock have been authorized for issuance under the 2001 Plan.

Options granted under our 2000 Plan and 2001 Plan expire no later than ten years from the date of grant. The option price of each incentive stock option shall be at least 100% of the fair value on the date of grant, and the option price for each nonstatutory stock option shall be not less than 85% of the fair value on the date of grant, as determined by the board of directors. Options may be granted with different vesting terms from time to time, not to exceed five years from the date of grant.

In August 2000, we adopted the 2000 Non-Employee Directors Stock Option Plan (the "Directors' Plan"), which was approved in September 2000 by our stockholders. Each non-employee director who becomes a director of Rigel will be automatically granted a nonstatutory stock option to purchase 20,000 shares of common stock on the date on which such person first becomes a director. At each board meeting immediately following each annual meeting of stockholders, beginning with the board meeting following the 2001 Annual Stockholders Meeting, each non-employee director will automatically be granted a nonstatutory option to purchase 5,000 shares of common stock. The exercise price of options under the Directors' Plan will be equal to the fair market value of the common stock on the date of grant. The maximum term of the options granted under the Directors' Plan is ten years. All grants under the Directors' Plan will vest monthly over two years from date of grant. The Directors' Plan will terminate in September 2009, unless terminated earlier in accordance with the provisions of the Directors' Plan. As of December 31, 2002, a total of 300,000 shares of common stock have been authorized for issuance under the Directors' Plan.

Activity under all of the option plans through December 31, 2002 was as follows:

	Shares Available For Grant	Number of Options	Weighted-Average Exercise Price
Outstanding at December 31, 1999	3,694,662	5,242,004	$ 0.19
Authorized for grant	300,000	—	
Shares granted out of the plans	(100,000)	100,000	—
Granted	(2,563,609)	2,563,609	6.09
Exercised	—	(1,733,824)	0.16
Cancelled	501,991	(501,991)	3.47
Outstanding at December 31, 2000	1,833,044	5,669,798	2.70
Authorized for grant	3,500,000	—	—
Granted	(1,031,901)	1,031,901	6.21
Exercised	—	(552,388)	0.57
Cancelled	388,238	(388,238)	3.05
Options outstanding at December 31, 2001	4,689,381	5,761,073	3.48
Granted	(1,662,916)	1,662,916	3.35
Exercised	—	(330,848)	0.26

Cancelled	628,051	(628,051)		4.93
Options outstanding at December 31, 2002	3,654,516	6,465,090	$	3.47

Details of the Company's stock options by exercise price is as follows:

	Options Outstanding			Options Exercisable	
Exercise Price	Number of Outstanding Options	Weighted-Average Remaining Contractual Life	Weighted-Average Exercise Price	Number of Options	Weighted-Average Exercise Price
$0.10 - $0.30	2,260,880	6.03	$ 0.20	1,598,180	$ 0.19
$1.40 - $3.00	646,331	9.78	$ 1.86	33,442	$ 1.91
$3.74 - $5.77	2,468,679	8.21	$ 4.62	1,144,464	$ 4.72
$7.50 - $11.00	1,089,200	7.77	$ 8.61	646,545	$ 8.64
$0.10 - $11.00	6,465,090	7.53	$ 3.47	3,422,631	$ 3.32

The weighted-average fair value of the options granted in 2002, 2001 and 2000 was $2.27, $3.57 and $3.32, respectively.

We granted 65,000, 115,000 and 358,563 common stock options to consultants in exchange for services in 2002, 2001 and 2000, respectively. We have recorded compensation recovery related to these options of $196,000 and $510,000 for the years ended December 31, 2002 and 2001, respectively. We have recorded compensation expense related to these options of $5,280,000 for the year ended December 31, 2000. In accordance with SFAS 123 and EITF 96-18, options granted to consultants are periodically revalued as they vest. In January 2000, the Company recorded an expense of $664,000 related to the accelerated vesting of an option to purchase 75,000 shares of common stock issued to a consultant for services.

We have recorded deferred stock compensation with respect to options granted to employees of approximately $0.3 million and $4.9 million in the years ended December 31, 2001 and 2000, respectively, representing the difference between the exercise price of the options and the deemed fair value of the common stock on the date of the grant. These amounts are being amortized to operations over the vesting periods of the options using the graded vesting method. Such amortization expense amounted to approximately $1.7 million, $3.6 million and $4.9 million for the years ended

December 31, 2002, 2001 and 2000, respectively, and is expected to be approximately $0.7 million in 2003 and $0.1 million in 2004.

2000 employee stock purchase plan

In August 2000, we adopted the 2000 Employee Stock Purchase Plan (the "Purchase Plan"), which was approved in September 2000 by our stockholders. The Purchase Plan permits eligible employees to purchase common stock at a discount through payroll deductions during defined offering periods. The price at which the stock is purchased is equal to the lower of 85% of the fair market value of the common stock on the first day of the offering or 85% of the fair market value of our common stock on the purchase date. The initial offering period commenced on the effective date of our initial public offering. We issued 174,053 shares of common stock during 2002 and 120,458 shares of common stock during 2001 pursuant to the Purchase Plan at an average price of $2.07 per share in 2002 and $4.98 per share in 2001. For 2002 and 2001, the weighted average fair value of stock issued under the Purchase Plan was $1.68 and $2.42, respectively. A total of 400,000 shares of the Company's common stock were initially reserved for issuance under the Purchase Plan. The Purchase Plan provides for annual increases in the number of shares available for issuance under the Purchase Plan on each anniversary date of the effective date of the offering. The number of shares reserved automatically is equal to the lesser of 400,000 shares, 1% of the outstanding shares on the date of the annual increase or such amount as may be determined by the board. The number of shares reserved for future issuance under the Purchase Plan was increased by 400,000 during 2002 and 376,587 during 2001.

Reserved shares

As of December 31, 2002, we had reserved shares of common stock for future issuance as follows:

	December 31, 2002
Warrants	1,149,615
Incentive stock plans.	10,119,606
Purchase Plan	882,076
Total	12,151,297

8. INCOME TAXES

Deferred income taxes reflect the net tax effects of temporary differences between the carrying amounts of assets and liabilities for financial reporting purposes and the amounts used for income tax purposes. Significant components of our deferred tax assets are as follows:

	Years Ended December 31,	
	2002	2001
Deferred tax assets		
Net operating loss carryforwards	$ 31,300	$ 18,500
Research and development credits	5,500	3,100
Capitalized research and development expenses	3,500	2,000

Other, net	4,100	2,600
Total deferred tax assets	44,400	26,200
Valuation allowance	(44,400)	(26,200)
Net deferred tax assets	$ —	$ —

Realization of deferred tax assets is dependent upon future earnings, if any, the timing and amount of which are uncertain. Accordingly, the net deferred tax assets have been fully offset by a valuation allowance. The valuation allowance increased by $18.2 million, $5.2 million, and $10.2 million during 2002, 2001, and 2000, respectively.

Included in the valuation allowance balance is $1.6 million related to the exercise of stock options which are not reflected as an expense for financial reporting purposes. Accordingly, any future reduction in the valuation allowance relating to this amount will be credited directly to equity and not reflected as an income tax benefit in the statement of operations.

As of December 31, 2002, we had net operating loss carryforwards for federal income tax purposes of approximately $90.0 million, which expire in the years 2011 through 2022, and federal research and development tax credits of approximately $3.4 million, which expire in the years 2012 through 2022.

Utilization of the net operating loss and credit may be subject to a substantial annual limitation due to the "change in ownership" provisions of the Internal Revenue Code of 1986 (IRC) and similar state provisions. The annual limitation may result in the expiration of net operating losses and credits before utilization.

Deferred income taxes reflect the net tax effects of temporary differences between the carrying amounts of assets.

9. SUBSEQUENT EVENTS

Reduction in Force

On January 31, 2003, we implemented a restructuring plan to reduce the rate of our cash consumption and better align our operating structure with current and expected future economic conditions. The restructuring plan included an immediate reduction in force of approximately 16 percent, or 25 employees, to 135 employees with reductions occurring in all functional areas. Two of our officers were included in this reduction in force.

10. SELECTED QUARTERLY FINANACIAL DATA (unaudited, in thousands, except per share amounts)

	Year Ended December 31, 2002				Year Ended December 31, 2001			
	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4
Revenue	$ 4,098	$ 4,337	$ 3,653	$ 3,700	$ 3,194	$ 3,123	$ 4,206	$ 4,780
Net loss.	$ (8,372)	$ (10,446)	$ (10,142)	$ (8,070)	$ (4,160)	$ (7,315)	$ (6,219)	$ (6,111)
Net loss per share to common stockholders, basic and diluted	$ (0.19)	$ (0.23)	$ (0.22)	$ (0.18)	$ (0.11)	$ (0.20)	$ (0.17)	$ (0.16)
Weighted average shares used in computing net loss per common share, basic and diluted	43,312	45,339	45,515	45,601	36,901	37,094	37,516	37,628

Item 9. Changes in and Disagreements with Accountants on Accounting and Financial Disclosure

Not applicable.

PART III

Item 10. Directors and Executive Officers of the Registrant

Executive Officers and Directors

Set forth below is the name, age, position and a brief account of the business experience of each of our executive officers and directors as of February 15, 2003.

Name	Age	Position
James M. Gower	54	Chief Executive Officer, Chairman of the Board and Director
Brian C. Cunningham(1)	59	President and Chief Operating Officer
Donald G. Payan, MD	54	Executive Vice President, Chief Scientific Officer and Director
James H. Welch	45	Vice President, Chief Financial Officer and Secretary
Raul R. Rodriguez	42	Senior Vice President, Business Development and Commercial Operations
Susan Molineaux, PhD(2)	49	Vice President, Biology
Elliott B. Grossbard, MD	55	Vice President of Medical Development
Dolly Vance	38	General Counsel and Vice President of Intellectual Property
Jean Deleage, PhD(3)	62	Director

Alan D. Frazier(4)	50	Director
Walter H. Moos, PhD(5)	48	Director
Stephen A. Sherwin, MD(6)	54	Director
Thomas S. Volpe(6)	51	Director

(1) Mr. Cunningham resigned effective January 30, 2003.

(2) Dr. Molineaux was terminated on January 31, 2003.

(3) Member of the audit committee until October 2002. Member of compensation committee since October 2002.

(4) Member of the compensation committee until October 2002. Member of audit committee since October 2002.

(5) Member of the compensation committee.

(6) Member of the audit committee.

James M. Gower has been our Chairman of the Board and Chief Executive Officer since October 2001. Mr. Gower joined us as our President, Chief Executive Officer and as a member of our board of directors in January 1997. From 1992 to March 1996, Mr. Gower was President and Chief Executive Officer of Tularik Inc., a biotechnology company developing small-molecule drugs regulating gene expression. Prior to Tularik, Mr. Gower spent ten years at Genentech, Inc., a biopharmaceutical company, where he most recently served as Senior Vice President. During his ten years at Genentech, Mr. Gower was responsible for business development and sales and marketing functions. In addition, he established and managed Genentech's foreign operations in Canada and Japan and served as President of Genentech Development Corporation. Mr. Gower serves on the board of directors of Cell Genesys, Inc. He holds a BS and an MBA in operations research from the University of Tennessee.

Brian C. Cunningham left Rigel in January 2003 and had been our President and Chief Operating Officer since October 2001. Mr. Cunningham was our Secretary from July 1996 to October 2001. In

July 1998, he joined us as Senior Vice President and Chief Operating Officer, and from February 1999 until October 2001, he was our Chief Financial Officer. From January 1989 to September 1998, Mr. Cunningham was a partner in the law firm Cooley Godward LLP, where he was head of the Life Sciences Group and the Health Care Group. From May 1982 to December 1989, he served as Vice President, Secretary and General Counsel of Genentech Inc. Mr. Cunningham holds a BS and a JD from Washington University.

Donald G. Payan, MD is our co-founder, has been a member of our board of directors since July 1996 and has served as our Executive Vice President and Chief Scientific Officer since January 1997. From January 1997 to July 1998, he also served as our Chief Operating Officer. From July 1996 to January 1997, Dr. Payan served as our President and Chief Executive Officer. From December 1995 to May 1996, Dr. Payan was Vice President of AxyS Pharmaceuticals, Inc., a biopharmaceutical company. From September 1993 to December 1995, Dr. Payan was the founder and Executive Vice President and Chief Scientific Officer of Khepri Pharmaceuticals, Inc., which merged with AxyS Pharmaceuticals. Dr. Payan continues his association with the University of California, San Francisco, which began in 1982, where he is currently an Adjunct Professor of Medicine and Surgery. Dr. Payan holds a BS and an MD from Stanford University.

James H. Welch has been our Vice President, Chief Financial Officer and Secretary since October 2001. Mr. Welch joined us as our Vice President, Finance and Administration and Assistant Secretary in May 1999. From June 1998 to May 1999, he served as an independent consultant at various companies. From February 1997 to June 1998, Mr. Welch served as Chief Financial Officer of Biocircuits Corporation, a manufacturer of medical diagnostic equipment, and from June 1992 to February 1997, he served as Corporate Controller of Biocircuits. Previously, Mr. Welch held various positions at NeXT Computer, Inc., most recently as Division Controller. Mr. Welch holds a BA from Whitworth College and an MBA from Washington State University.

Raul R. Rodriguez joined us as our Vice President, Business Development in April 2000 and became our Senior Vice President, Business Development and Commercial Operations in December 2002. From 1997 to March 2000, he served as Senior Vice President, Business Development and Operations for Ontogeny, Inc., a biotechnology company. From 1994 to 1997, he served as the Executive Director, Business Development and Market Planning for Scios, Inc., a pharmaceutical company. From 1989 to 1994 Mr. Rodriguez held various positions at Searle Pharmaceuticals. Mr. Rodriguez holds an AB from Harvard University, an MPH from the University of Illinois and an MBA from Stanford University.

Susan Molineaux, PhD left Rigel in January 2003 and had been our Vice President, Biology since January 2002. Dr. Molineaux joined us as our Senior Director, Combinatorial Biology and Drug Discovery in February 2000. From 1999 to 2000, Dr. Molineaux served as Vice President of Biology at Praelux Incorporated, a biotechnology company. From 1994 to 1999, she served as Vice President of Drug Development Research at Praecis Pharmaceuticals. From 1989 to 1992, she served as Senior Research Immunologist in the Immunology Department at Merck and Co. Dr. Molineaux holds a BA from Smith College and a PhD in genetics from Johns Hopkins University.

Elliott B. Grossbard, MD joined us as Senior Vice President of Medical Development in April 2002. Prior to joining Rigel, Dr. Grossbard was Vice President, Clinical Affairs for Avigen Inc., a gene therapy products company. Before that, Dr. Grossbard served as Senior Vice President of Development and Vice President of Medical and Regulatory Affairs at Scios, Inc. From 1982 through 1990, Dr. Grossbard held the positions of Associate Director of Clinical Research and Director of Clinical Research at Genentech Inc. Dr. Grossbard holds a BA from Columbia College, an MD from Columbia University and an MS in Law from Yale University School of Law.

Dolly Vance has been our General Counsel and Vice President of Intellectual Property since January 2003. Ms. Vance joined us as Senior Patent Attorney in September 2000 and from

January 2002 until December 2002 she served as Associate General Counsel and Director of Intellectual Property. From 1997 until 2000, she was an attorney with the law firm of Flehr Hohbach Test Albritton & Herbert, where she last held the position of partner. From 1995 until 1997, Ms. Vance was an associate at the law of firm of Arnall Golden & Gregory and from 1993 to 1995 she was an associate with the law firm of Harness Dickey & Pierce. Ms. Vance holds a BA from the Unviersity of California, San Diego and a JD from Boston University School of Law.

Jean Deleage, PhD joined us as a director in January 1997. Dr. Deleage is a founder and managing director of Alta Partners, a venture capital firm investing in information technologies and life science companies. Dr. Deleage is a managing partner of Burr, Egan, Deleage & Co., a venture capital firm that he founded in 1979. Dr. Deleage was a founder of Sofinnova, a venture capital organization in France, and Sofinnova, Inc., the U.S. subsidiary of Sofinnova. Dr. Deleage currently serves on the board of directors of Aclara Biosciences, Inc., Crucell, N.V., Kosan Biosciences, Inc. and Telik, Inc. Dr. Deleage received a Baccalaureate in France, a Masters Degree in

electrical engineering from the Ecole Superieure d'Electricite and a PhD in economics from the Sorbonne.

Alan D. Frazier joined us as a director in October 1997. In 1991, Mr. Frazier founded Frazier Healthcare Ventures, a venture capital firm, and has served as the managing principal since its inception. From 1983 to 1991, Mr. Frazier served as Executive Vice President, Chief Financial Officer and Treasurer of Immunex Corporation, a biopharmaceutical company. From 1980 to 1983, Mr. Frazier was a principal in the Audit Department of Arthur Young & Company (now Ernst & Young). He also serves on the board of trustees of the Fred Hutchinson Cancer Research Center. Mr. Frazier holds a BA in economics from the University of Washington.

Walter H. Moos, PhD joined us as a director in March 1997. Since 1997, Dr. Moos has served as the Chairman and Chief Executive Officer of MitoKor, a biotechnology company. From 1991 to 1997, he served as Corporate Vice President and Vice President, Research and Development in the Technologies Division of Chiron Corporation, a biotechnology company. From 1982 to 1991, Dr. Moos held several positions at the Parke-Davis Pharmaceutical Research Division of the Warner-Lambert Company, last holding the position of Vice President, Neuroscience and Biological Chemistry. He has been an Adjunct Professor at the University of California, San Francisco, since 1992. Dr. Moos holds an AB from Harvard University and a PhD in chemistry from the University of California, Berkeley.

Stephen A. Sherwin, MD joined us as a director in March 2000. Since March 1990, he has served as Chief Executive Officer and director of Cell Genesys, Inc., and as Chairman of the Board of Cell Genesys since March 1994. From March 1990 to August 2001, Dr. Sherwin held the additional position of President of Cell Genesys. From 1983 to 1990, Dr. Sherwin held various positions at Genentech Inc., a biopharmaceutical company, most recently as Vice President, Clinical Research. Dr. Sherwin currently serves as Chairman of the Board of Ceregene, Inc., a majority-owned subsidiary of Cell Genesys, and as a director of Neurocrine Biosciences, Inc. He received his MD from Harvard Medical School and his BA from Yale University.

Thomas S. Volpe joined us as a director in August 2000. Mr. Volpe is the Chairman and Chief Executive Officer of Volpe Investments, LLC, a risk capital investment firm. Until May 2001, he was the Chairman of Prudential Volpe Technology Group. From 1986 to 1999, Mr. Volpe was President, Chief Executive Officer and founder of Volpe Brown Whelan & Company, a risk capital and investment banking firm. Prior to forming Volpe Brown Whelan & Company, he was President, Chief Executive Officer and a member of the board of directors and management committee of Hambrecht & Quist Incorporated. Before joining Hambrecht & Quist, Mr. Volpe was Head of the Science and Technology Group of Blyth Eastman PaineWebber. Mr. Volpe also serves on the board of directors of Linear Technology Corporation. Mr. Volpe holds an AB in economics from Harvard University, an MSc in economics from the London School of Economics and an MBA from the Harvard Business School.

Our executive officers are appointed by our board of directors and serve until their successors are elected or appointed. There are no family relationships among any of our directors or executive officers. No director has a contractual right to serve as a member of our board of directors.

Section 16(a) Beneficial Ownership Reporting Compliance

Section 16(a) of the Securities Exchange Act of 1934 requires our directors and executive officers, and persons who own more than ten percent of a registered class of our equity securities, to file with the SEC initial reports of ownership and reports of changes in ownership of our common stock and other equity securities. Officers, directors and greater than ten percent stockholders are required by SEC regulation to furnish us with copies of all Section 16(a) forms that they file.

To our knowledge, based solely on a review of the copies of such reports furnished to us and written representations that no other reports were required, during the fiscal year ended December 31, 2002, all Section 16(a) filing requirements applicable to our officers, directors and greater than ten percent beneficial owners were complied with.

Item 11. Executive Compensation

The following table sets forth information concerning the compensation that we paid during the fiscal years ended December 31, 2002, 2001 and 2000 to our Chief Executive Officer and each of the four other most highly compensated executive officers who earned more than $100,000 during 2002.

		Annual Compensation		Long Term Compensation	
Name and Principal Position	Year	Salary	Bonus	Securities Underlying Options/SARS(1)	All other Compensation
James M. Gower	2002	$ 330,000	—	—	—
Chief Executive Officer, Chairman of the Board and	2001	288,837	$ 50,000	—	—
Director	2000	267,800	—	—	—
Brian C. Cunningham(2)	2002	300,000	—	—	—
President and Chief Operating Officer	2001	269,626	50,000	—	—
	2000	257,500	—	200,000	—
Donald G. Payan	2002	300,000	—	—	—
Executive Vice President and Chief Scientific Officer	2001	263,833	60,000	—	—
and Director	2000	247,200	—	—	—
Raul Rodriguez(3)	2002	240,000	—	150,000	—
Senior Vice President, Business Development and	2001	216,321	15,000	—	—
Commercial Operations	2000	165,000	—	245,000	$ 12,226(4)
Elliot B. Grossbard(5)	2002	206,270	—	250,000	—
Senior Vice President, Medical Development	2001	—	—	—	—
	2000	—	—	—	—

(1) Options granted in 2000 and 2002 were made under our 2000 Equity Incentive Plan.

(2) Mr. Cunningham resigned effective January 30, 2003.

(3) Mr. Rodriguez began employment effective April 3, 2000.

(4) Other compensation consists of relocation costs incurred by Rigel on behalf of Mr. Rodriguez.

(5) Mr. Grossbard began employment effective April 1, 2002.

Stock Option Grants and Exercises

The following table sets forth summary information regarding the option grants made to our Chief Executive Officer and each of our four other most highly paid executive officers during 2002. Options granted to purchase shares of our common stock under our 2000 Equity Incentive Plan generally vest over a four-year period. The exercise price per share is equal to the fair market value of our common stock on the date of grant.

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 pursuant to rules promulgated by the SEC and does not represent our prediction of our stock price performance. The potential realizable values at 5% and 10% appreciation are calculated by:

- multiplying the number of shares of common stock under the option by the closing price of our stock on December 31, 2002 at a price of $1.10 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 options; and
- subtracting from that result the aggregate option exercise price.

Percentages shown under "% of Total Options Granted to Employees in 2002" are based on an aggregate of 1,662,916 options granted to employees under our 2000 Equity Incentive Plan and our 2001 Non-Officer Equity Incentive Plan during 2002.

Option Grants in Last Fiscal Year Ended December 31, 2002

	Individual Grants					
					Potential Realizable Value at Assumed Annual Rates of Appreciation of Stock Price for Option Term	
Name	Number of Securities Underlying Options Granted	% of Total Options Granted to Employees in 2002	Exercise Price $/Sh	Expiration Date	5%	10%
James M. Gower	—	—	—	—	—	—
Donald G. Payan	—	—	—	—	—	—
Brian C. Cunningham	—	—	—	—	—	—
Raul Rodriguez	150,000	9.0%	$ 1.40	11/22/12	—	—
Elliott B. Grossbard	250,000	15.0%	3.74	4/9/12	54,477	213,963

The following table sets forth summary information regarding the number and value of shares acquired upon exercise of options in 2002 and options held as of December 31, 2002 for our Chief Executive Officer and each of our four most highly compensated executive officers. Amounts shown in the "Value of Unexercised In-the-Money Options at December 31, 2002" column are based on the closing market price on December 31, 2002 of $1.10 per share, without taking into account any taxes that may be payable in connection with the transaction, multiplied by the number of shares underlying the option, less the aggregate exercise price payable for the shares.

Aggregated Option Exercises in Last Fiscal Year and Fiscal Year-End Option Values

			Number of Securities Underlying Unexercised Options at December 31, 2002		Value of Unexercised In-the-Money Options at December 31, 2002	
Name	Shares Acquired on Exercise (#)	Value Realized	Vested	Unvested	Vested	Unvested
James M. Gower	—	—	345,000	105,000	$ 310,500	$ 94,500
Donald G. Payan.	—	—	115,000	35,000	103,500	31,500
Brian C. Cunningham(1)	—	—	587,449	112,501	430,341	438,002
Raul Rodriguez	—	—	176,666	218,334	—	—
Elliott B. Grossbard	—	—	—	250,000	—	—

(1) Mr. Cunningham's options ceased vesting on January 30, 2003 and his options expire on April 30, 2003.

Compensation of Directors

Rigel does not provide cash compensation to members of its board of directors for serving on the board of directors or for attendance at committee meetings. The members of the board of directors are eligible for reimbursement for their expenses incurred in connection with attendance at board meetings in accordance with Rigel policy.

Each of our non-employee directors receives stock option grants under the 2000 Non-Employee Directors' Stock Option Plan, or Directors' Plan. Only non-employee directors or their affiliates are eligible to receive options under the Directors' Plan. Options granted under the Directors' Plan are not intended to qualify as incentive stock options under the Internal Revenue Code of 1986, as amended.

Option grants under the Directors' Plan are non-discretionary. Each person who is elected or appointed for the first time to be a non-employee director automatically receives, upon the date of his or her initial election or appointment to be a non-employee director by the board or Rigel stockholders, an initial grant to purchase 20,000 shares of common stock on the terms and conditions set forth in the plan. In addition, on the day following the annual meeting of stockholders each year, each non-employee director who continues to serve as a non-employee director automatically receives an annual option to purchase 5,000 shares of common stock. No other options may be granted at any

time under the Directors' Plan. The exercise price of options granted under the Directors' Plan is 100% of the fair market value of our common stock on the date of the option grant. The options vest over two years in equal monthly installments provided that the non-employee director continues to provide services to Rigel. The term of options granted under the Directors' Plan is ten years. In the event of a merger of Rigel with or into another corporation or a consolidation, acquisition of assets or other change-in-control transaction involving us, each option either will continue in effect, if we are the surviving entity, or if neither assumed nor substituted, will accelerate and the option will terminate if not exercised prior to the consummation of the transaction.

Pursuant to the Directors' Plan, on June 21, 2002, the day after our 2002 annual meeting of stockholders, we granted options covering 5,000 shares of common stock to each of Drs. Deleage, Moos and Sherwin and Messrs. Volpe and Frazier, each at an exercise price of $3.00 per share. These options vest in 24 equal monthly installments beginning on the grant date.

Employment Contracts and Termination of Employment and Change of Control Arrangements

We have an employment agreement with Dr. Payan, our Executive Vice President and Chief Scientific Officer, dated as of January 16, 1997, and continuing indefinitely. Under the agreement, Dr. Payan is entitled to receive an annualized base salary of $185,000 and was issued 750,000 shares of our common stock. As of January 16, 2000, all such shares were fully vested and not subject to a right

of repurchase by us. Either Rigel or Dr. Payan may terminate his employment at any time for any reason. If we terminate Dr. Payan's employment without cause, he will receive a severance payment equal to one year's base salary.

Compensation Committee Interlocks and Insider Participation

Our Compensation Committee currently consists of two non-employee directors: Drs. Deleage and Moos. No member of the Compensation Committee is currently, or ever has been, an officer or employee of Rigel. No executive officer of Rigel has served as a member of the board of directors or compensation committee of any entity that has one or more executive officers serving as a member of our board of directors or Compensation Committee.

Item 12. Security Ownership of Certain Beneficial Owners and Management

The following table provides certain information with respect to all of our equity compensation plans in effect as of December 31, 2002.

Equity Compensation Plan Information

Plan Category	Number of securities to be issued upon exercise of outstanding options, warrants and rights (a)	Weighted-average exercise price of outstanding options, warrants and rights (b)	Number of securities remaining available for issuance under equity compensation plans (excluding securities reflected in column (a)) (c)
Equity compensation plans approved by security holders	5,451,302	$ 3.43	1,168,302
Equity compensation plans not approved by security holders	1,013,786	$ 3.70	2,486,214
Total	6,465,090	$ 3.47	3,654,516

In July 2001, we adopted our 2001 Non-Officer Equity Incentive Plan without the approval of our stockholders. Under this plan, nonstatutory stock options may be granted to our employees and consultants. As of December 31, 2002, a total of 3,500,000 shares of common stock have been authorized for issuance under the 2001 Non-Officer Equity Incentive Plan. Options granted under Non-Officer Equity Incentive Plan expire no later than ten years from the date of grant. The option price for each nonstatutory stock option shall be not less than 85% of the fair value on the date of grant, as determined by the board of directors. Options may be granted with different vesting terms from time to time but not to exceed five years from the date of grant.

The following table shows information known to us with respect to the beneficial ownership of our common stock as of February 15, 2003, by:

- each person or group who beneficially owns more than 5% of our common stock;
- our chief executive officer;
- each of our four other most highly compensated executive officers whose compensation exceeded $100,000 during 2002;
- each of our directors; and
- all of our directors and executive officers as a group.

Beneficial ownership of shares is determined under the rules of the Securities and Exchange Commission and generally includes any shares over which a person exercises sole or shared voting or investment power. Except as indicated by footnote, and subject to applicable community property laws, each person identified in the table possesses sole voting and investment power with respect to all shares of common stock held by them. Shares of common stock subject to options currently exercisable or exercisable within 60 days of February 15, 2003 and not subject to repurchase as of that date are deemed outstanding for calculating the percentage of outstanding shares of the person holding these options, but are not deemed outstanding for calculating the percentage of any other person. Applicable percentage ownership in the following table is based on 45,851,496 shares of common stock outstanding as of February 15, 2003. Unless otherwise indicated, the address of each of the named individuals is c/o Rigel Pharmaceuticals, Inc., 1180 Veterans Blvd., South San Francisco, California 94080.

Beneficial Owner	Outstanding Shares of Common Stock	Shares Issuable Pursuant to Options Exercisable Within 60 Days of February 15, 2003	Percent of Total Outstanding Shares Beneficially Owned

Five percent stockholders			
Entities affiliated with Lombard Darier Hentsch & Cie(1) 11, rue de la Corraterie 1204 Geneva Switzerland	6,269,538	—	13.7%
Entities affiliated with Alta Partners(2) One Embarcadero Center, Suite 4050 San Francisco, CA 94111	5,832,923	—	12.7
Entities affiliated with Frazier and Company, Inc.(3) 601 Union Street, Suite 2110 Seattle, WA 98101	4,347,719	—	9.5%
Novartis Pharma AG Head Financial Investments CH-4002 Basil, Switzerland	3,428,571	—	7.5%
Directors and named executive officers			
James M. Gower	613,100	375,000	2.1%
Brian C. Cunningham(4)	209,345	599,998	1.7%
Donald G. Payan, MD	767,791	125,000	1.9%
Raul Rodriguez	6,621	206,458	*
Elliott B. Grossbard	—	62,500	*
Jean Deleage, PhD(2)	5,832,923	6,041	12.7%
Alan D. Frazier(3)	4,347,719	1,875	9.5%
Walter H. Moos PhD	—	26,041	*
Stephen A. Sherwin, MD	—	32,382	*
Thomas S. Volpe	33,333	26,041	*
All executive officers and directors as a group (11 people)	11,859,800	1,888,959	30.0%

* Less than one percent (1%).

(1) Includes 6,150,788 shares held by Lombard Odier Darier Hentsch & Cie for the benefit of the LODH Immunology Fund, over which Lombard Odier Darier Hentsch & Cie has sole voting and dispositive power, and 118,750 shares held for the benefit of private or institutional clients, over which Lombard Odier Darier Hentsch & Cie shares dispositive power.

(2) Includes 4,578,327 shares held by Alta California Partners, L.P., 104,596 shares held by Alta Embarcadero Partners, LLC, 1,109,196 shares held by Alta BioPharma Partners II and 40,804 shares held by Alta Embarcadero BioPharma Partners II. Dr. Deleage, a managing general partner of Alta Partners, disclaims

beneficial ownership of the shares held by funds affiliated with Alta Partners except to the extent of his proportionate pecuniary interest therein.

(3) Includes 15,144 shares held by Frazier and Company, Inc. and 4,332,575 shares held by Frazier Healthcare II, L.P. Mr. Frazier, a managing principal of Frazier and Company, Inc., disclaims beneficial ownership of the shares held by Frazier and Company, Inc. and Frazier Healthcare II, L.P. except to the extent of his proportionate pecuniary interest therein.

(4) Mr. Cunningham resigned effective January 30, 2003.

Item 13. Certain Relationships and Related Transactions

Lombard Odier Darier Hentsch & Cie, Alta California Partners, L.P., Alta Embarcadero Partners, LLC, Frazier Healthcare II, L.P., Frazier and Company, Inc., Johnson and Johnson, Novartis and Thomas Volpe are entitled to certain rights with respect to registration under the Securities Act of shares of our common stock that they hold. These rights are provided under an Amended and Restated Investor Rights Agreement, dated February 3, 2000, and under agreements with similar registration rights. If we propose to register any of our securities under the Securities Act, either for our own account or for the account of others, these holders are entitled to notice of the registration and are entitled to include, at our expense, their shares of common stock in the registration and any related underwriting, provided, among other conditions, that the underwriters may limit the number of shares to be included in the registration. In addition, these holders may require us, at our expense and on not more than two occasions, to file a registration statement under the Securities Act with respect to their shares of common stock, and we will be required to use our best efforts to effect the registration. Further, these holders may require us at our expense to register their shares on Form S-3, subject to certain limitations. Pursuant to the registration rights set forth in Section 2.4 of the Amended and Restated Investor Rights Agreement., we registered an aggregate of 17,673,751 shares of common stock held by Lombard Odier Darier Hentsch & Cie, Alta California Partners, L.P., Alta Embarcadero Partners, LLC, Frazier Healthcare II, L.P., Frazier and Company, Inc. and Novartis. These shares were registered on a Registration Statement on Form S-3 filed with the SEC on April 30, 2002 (File No. 333-87276) and declared effective by the SEC on May 8, 2002.

We have entered into indemnification agreements with our directors and certain officers for the indemnification and advancement of expenses to these persons to the fullest extent permitted by law. We also intend to enter into those agreements with our future directors and officers.

In September 1999, we established a research collaboration and license agreement with Cell Genesys, Inc. that ended in 2002. James Gower, our President and Chief Executive Officer, serves on the board of directors of Cell Genesys. Stephen A. Sherwin, MD, who serves on our board of directors, is Chief Executive Officer and Chairman of the Board of Cell Genesys.

We have an employment agreement with Dr. Payan, our Executive Vice President and Chief Scientific Officer, dated as of January 16, 1997, and continuing indefinitely. Under the agreement, Dr. Payan is entitled to receive an annualized base salary of $185,000 and was issued 750,000 shares of our common stock. As of January 16, 2000, all such shares were fully vested and not subject to a right of repurchase by us. Either Rigel or Dr. Payan may terminate his employment at any time for any reason. If we terminate Dr. Payan's employment without cause, he will receive a severance payment equal to one year's base salary.

In May 1999, we signed an agreement for the establishment of a broad collaboration with Novartis, whereby the two companies agreed to work on up to five different five-year research projects to identify drug targets for products that can treat, prevent or diagnose the effects of human disease. According to the terms of the original agreement, two of the research projects were to be conducted jointly by Novartis and us, and the other three research projects were to be conducted at Novartis. Four projects are now underway. The first research project, a joint research project, is focused on

identifying small molecule drug targets that regulate T cells. The second research project, also a joint research project, relates to the identification and validation of small molecule drug targets that can mediate specific functions of B cells. The third research project, a project carried out at Novartis, is focused on identifying small molecule drug targets that regulate chronic bronchitis. In July 2001, Novartis and Rigel amended the agreement to add a three-year joint project at Rigel in the area of angiogenesis in lieu of a project at Novartis. In contrast to the original agreement to conduct an additional project at Novartis, this amendment resulted in both funded research at Rigel and an additional upfront payment to us of $4.0 million. In January 2002, Novartis chose not to exercise its option to add a second project to be conducted at Novartis. During 2002, Novartis notified us that it was terminating the research phase of the initial T Cell and B Cell joint projects after forty-two months. The termination dates for the research phases of the initial joint projects were therefore November 2002 and February 2003, respectively. The third research project, a project carried out at Novartis, is focused on identifying small molecule drug targets that regulate chronic bronchitis.

We believe that all of the transactions set forth above were made on terms no less favorable to us than could have been obtained from unaffiliated third parties. All future transactions, including loans, between us and our officers, directors, principal stockholders and their affiliates will be approved by a majority of our board of directors, including a majority of the independent and disinterested directors, and will be on terms no less favorable to us than could be obtained from unaffiliated third parties.

Item 14. Controls and Procedures.

Evaluation of Disclosure Controls and Procedures. Our chief executive officer and chief financial officer have concluded that our disclosure controls and procedures, as defined Exchange Act Rule 13a-14(c), are sufficiently effective to ensure that the information required to be disclosed by us in the reports we file under the Exchange Act is gathered, analyzed and disclosed with adequate timeliness, accuracy and completeness, based on an evaluation of such controls and procedures conducted within 90 days prior to the date hereof.

Changes in Internal Controls. There have been no significant changes in our internal controls or in other factors that could significantly affect these controls subsequent to the date of the evaluation referred to above, nor were there any significant deficiencies or material weaknesses in our internal controls. Accordingly, no corrective actions were required or undertaken.

Limitations on the Effectiveness of Controls. A control system, no matter how well conceived and operated, can provide only reasonable, not absolute, assurance that the objectives of the controls are met. Because of the inherent limitations in all control systems, no evaluation of controls can provide absolute assurance that all control issues, if any, within a company have been detected.

PART IV

Item 15. Exhibits, Financial Statement Schedules and Reports on Form 8-K

(a) The following documents are being filed as part of this report:

1. Financial Statements—Index to Financial Statements in Item 8 of this report on Form 10-K and selected quarterly financial data for the last two years in Note 10

2. Financial Statement Schedules—None—As all required disclosures have been made in the footnotes to the financial statements.

3. Exhibits:

3.1(1)	Amended and Restated Certificate of Incorporation.
3.2(1)	Amended and Restated Bylaws.
4.1(1)	Specimen Common Stock Certificate.
4.2(1)	Amended and Restated Investor Rights Agreement, dated February 3, 2000, between Rigel and holders of Rigel's Series B, Series C, Series D and Series E preferred stock.
4.3(1)	Form of warrant to purchase shares of common stock.
4.4(1)	Warrant issued to Lighthouse Capital Partners II, L.P. for purchase of shares of Series B preferred stock.
4.5(1)	Warrant issued to Lighthouse Capital Partners II, L.P. for purchase of shares of Series C preferred stock.
4.6(1)	Form of warrant to purchase shares of Series D preferred stock.
4.7(11)	Amended and Restated Warrant issued to Kwacker Limited for the purchase of shares of common stock.
4.8(7)	Warrant issued to TBCC Funding Trust II for the purchase of shares of Common Stock.
4.9(8)	Warrant issued to Comerica Bank-California for the purchase of shares of Common Stock
4.10(11)	Warrant issued to Kwacker Limited for the purchase of shares of common stock.
4.11(11)	Warrant issued to Lighthouse Capital Partners IV, L.P. to purchase shares of common stock.
10.1(1)	Form of Indemnity Agreement.
10.2(11)(2)	2000 Equity Incentive Plan, as amended.
10.3(1)(2)	Form of Stock Option Agreement pursuant to 2000 Equity Incentive Plan.
10.4(1)(2)	2000 Employee Stock Purchase Plan.
10.5(1)(2)	2000 Non-Employee Directors' Stock Option Plan.
10.6(1)	Collaboration Agreement between Rigel and Janssen Pharmaceutica N.V., dated December 4, 1998.
10.7(1)	Collaborative Research and License Agreement between Rigel and Pfizer Inc., dated January 31, 1999.
10.8(1)	Collaboration Agreement between Rigel and Novartis Pharma AG, dated May 26, 1999.
10.9(1)(3)	License and Research Agreement between Rigel and Cell Genesys, Inc., dated September 2, 1999.
10.10(1)	Collaborative Research and Development Agreement between Rigel and Neurocrine Biosciences, Inc., dated December 1997.
10.11(1)(2)	Employment Agreement between Rigel and Donald Payan, dated January 16, 1997.
10.12(1)	Lease between Rigel and Britannia Pointe Grand Limited Partnership, dated June 2, 1998.
10.13(1)	Technology Transfer Agreement between Rigel and Questcor Pharmaceuticals, Inc., dated September 22, 2000.

10.14(3)(4)	License and Research Agreement (Amended and Restated) between Rigel and Cell Genesys, Inc., dated September 2, 1999, as amended and restated on March 26, 2001.
10.15(5)	Lease termination agreement between Rigel and Brittannia Pointe Grand Limited Partnership, dated May 6, 2001.
10.16(5)	Build-to-suit lease between Rigel and Slough BTC, LLC, dated May 16, 2001.
10.17(5)	First amendment to the Collaboration Agreement between Rigel and Novartis Pharma AG, dated May 18, 2001.
10.18(3)(6)	Second Amendment, dated July 6, 2001, to the Collaboration Agreement between Rigel and Novartis Pharma AG.
10.19(3)(6)	Second Amendment, dated July 1, 2001, to the Collaboration Agreement between Rigel and Cell Genesys, Inc.
10.20(2)(11)	2001 Non-Officer Equity Incentive Plan, as amended.
10.21(2)(7)	Form of Stock Option Agreement pursuant to the 2001 Non-Officer Equity Incentive Plan.
10.22(8)	First Amendment, dated June 30, 2000, to the Collaboration Agreement by and between Rigel and Janssen Pharmaceutica N.V.
10.23(8)	Second Amendment, dated December 4, 2001, to the Collaboration Agreement by and between Rigel and Janssen Pharmaceutica N.V.
10.24(10)	Loan and Security Agreement between Rigel and Comerica Bank—California, dated July 12, 2002.
10.25(10)(3)	Collaboration Agreement between Rigel and Daiichi Pharmaceutical Co., Ltd., dated August 1, 2002.
10.26(11)(3)	Amendment to Build-to-suit lease between Rigel and Slough BTC, LLC, dated October 18, 2002.
10.27(11)	Master Lease Agreement between Rigel and Lighthouse Capital Partners IV, L.P., dated December 23, 2002.
23.1(11)	Consent of Ernst & Young LLP, Independent Auditors.
24.1(11)	Power of Attorney. (see page 73)
99.1(11)(12)	Certification pursuant to Section 906 of the Sarbanes-Oxley Act of 2002.

(1) Filed as an exhibit to Rigel's Registration Statement on Form S-1 (No. 333-45864), as amended, and incorporated herein by reference.

(2) Management contract or compensatory plan.

(3) Confidential treatment requested as to specific portions, which portions are omitted and filed separately with the Securities and Exchange Commission.

(4) Filed as an exhibit to Rigel's Quarterly Report on Form 10Q for the quarter ended March 31, 2001 (No. 000-29889) and incorporated herein by reference.

(5) Filed as an exhibit to Rigel's Quarterly Report on Form 10Q for the quarter ended June 30, 2001 (No. 000-29889) and incorporated herein by reference.

(6) Filed as an exhibit to Rigel's Quarterly Report on Form 10Q for the quarter ended September 30, 2001 (No. 000-29889) and incorporated herein by reference.

(7) Filed as an exhibit to Rigel's Registration Statement on Form S-8 (No. 333-72492), as amended, and incorporated herein by reference.

(8) Filed as an exhibit to Rigel's Annual Report on Form 10K for the fiscal year ended December 31, 2001 (No. 000-29889) and incorporated herein by reference.

(9) Filed as an exhibit to Rigel's Quarterly Report on Form 10Q for the quarter ended March 31, 2002 (No. 000-29889) and incorporated herein by reference.

(10) Filed as an exhibit to Rigel's Quarterly Report on Form 10Q for the quarter ended September 30, 2002 (No. 000-29889) and incorporated herein by reference.

(11) Filed herewith.

(12) This certification accompanies this annual report on Form 10K and shall not be deemed "filed" by Rigel for purposes of Section 18 of the Securities Exchange Act of 1934, as amended.

(b) We did not file any reports on Form 8-K during the fourth quarter of 2002.

(c) Exhibits

See Item 15(a) above

(d) Financial Data Schedules

See Item 15(a) above

SIGNATURES

Pursuant to the requirements of the Section 13 or 15(d) of the Securities Exchange Act of 1934, the Registrant has duly caused this report on Form 10-K to be signed on its behalf by the undersigned, thereunto duly authorized, in the City of South San Francisco, State of California, on March 31, 2003.

Rigel Pharmaceuticals, Inc.

By: /s/ JAMES M. GOWER

James M. Gower
Chairman of the Board and Chief Executive Officer

By: /s/ JAMES H. WELCH

James H. Welch
Vice President, Chief Financial Officer and Secretary

POWER OF ATTORNEY

KNOW ALL PERSONS BY THESE PRESENT, that the persons whose signatures appear below each severally constitutes and appoints James M. Gower and James H. Welch, and each or any of them, as true and lawful attorneys-in-fact and agents, with full powers of substitution and resubstitution, for them in their name, place and stead, in any and all capacities, to sign any and all amendments to this Report and to file the same, with all exhibits thereto, and other documents in connection therewith, with the Securities and Exchange Commission, granting unto said attorneys-in-fact and agents, and each of them, full power and authority to do and perform each and every act and thing requisite and necessary to be done in and about the premises, as fully to all intents and purposes as they might or could do in person, hereby ratifying and confirming all which said attorneys-in-fact and agents, or any of them, or their substitute or substitutes, may lawfully do, or cause to be done by virtue hereof.

Pursuant to the requirements of the Securities Exchange Act of 1934, this report has been signed by the following persons on behalf of the Registrant and in the capacities and on the dates indicated.

Signature	Title	Date
/s/ JAMES M. GOWER James M. Gower	Chairman of the Board, Chief Executive Officer and Director *(Principal Executive Officer)*	March 31, 2003
/s/ JAMES H. WELCH James H. Welch	Vice President, Chief Financial Officer, and Secretary *(Principal Finance and Accounting Officer)*	March 31, 2003
/s/ DONALD G. PAYAN Donald G. Payan	Executive Vice President, Chief Scientific Officer and Director	March 31, 2003
/s/ JEAN DELEAGE Jean Deleage	Director	March 31, 2003

/s/ ALAN D. FRAZIER Alan D. Frazier	Director	March 31, 2003
/s/ WALTER H. MOOS Walter H. Moos	Director	March 31, 2003
/s/ STEPHEN A. SHERWIN Stephen A. Sherwin	Director	March 31, 2003
/s/ THOMAS S. VOLPE Thomas S. Volpe	Director	March 31, 2003

CERTIFICATION

I, James M. Gower, certify that:

1. I have reviewed this annual report on Form 10-K of Rigel Pharmaceuticals, Inc.;

2. Based on my knowledge, this annual report does not contain any untrue statement of a material fact or omit to state a material fact necessary to make the statements made, in light of the circumstances under which such statements were made, not misleading with respect to the period covered by this annual report;

3. Based on my knowledge, the financial statements, and other financial information included in this annual report, fairly present in all material respects the financial condition, results of operations and cash flows of the registrant as of, and for, the periods presented in this annual report;

4. The registrant's other certifying officers and I are responsible for establishing and maintaining disclosure controls and procedures (as defined in Exchange Act Rules 13a-14 and 15d-14) for the registrant and have:

a) designed such disclosure controls and procedures to ensure that material information relating to the registrant, including its consolidated subsidiaries, is made known to us by others within those entities, particularly during the period in which this annual report is being prepared;

b) evaluated the effectiveness of the registrant's disclosure controls and procedures as of a date within 90 days prior to the filing date of this annual report (the "Evaluation Date"); and

c) presented in this annual report our conclusions about the effectiveness of the disclosure controls and procedures based on our evaluation as of the Evaluation Date;

5. The registrant's other certifying officers and I have disclosed, based on our most recent evaluation, to the registrant's auditors and the audit committee of registrant's board of directors (or persons performing the equivalent functions):

a) all significant deficiencies in the design or operation of internal controls which could adversely affect the registrant's ability to record, process, summarize and report financial data and have identified for the registrant's auditors any material weaknesses in internal controls; and

b) any fraud, whether or not material, that involves management or other employees who have a significant role in the registrant's internal controls; and

6. The registrant's other certifying officers and I have indicated in this annual report whether there were significant changes in internal controls or in other factors that could significantly affect internal controls subsequent to the date of our most recent evaluation, including any corrective actions with regard to significant deficiencies and material weaknesses.

Date: March 31, 2003

/s/ JAMES M. GOWER

James M. Gower
Chairman and Chief Executive Officer

CERTIFICATION

I, James H. Welch, certify that:

1. I have reviewed this annual report on Form 10-K of Rigel Pharmaceuticals, Inc.;

2. Based on my knowledge, this annual report does not contain any untrue statement of a material fact or omit to state a material fact necessary to make the statements made, in light of the circumstances under which such statements were made, not misleading with respect to the period covered by this annual report;

3. Based on my knowledge, the financial statements, and other financial information included in this annual report, fairly present in all material respects the financial condition, results of operations and cash flows of the registrant as of, and for, the periods presented in this annual report;

4. The registrant's other certifying officers and I are responsible for establishing and maintaining disclosure controls and procedures (as defined in Exchange Act Rules 13a-14 and 15d-14) for the registrant and have:

a) designed such disclosure controls and procedures to ensure that material information relating to the registrant, including its consolidated subsidiaries, is made known to us by others within those entities, particularly during the period in which this annual report is being prepared;

b) evaluated the effectiveness of the registrant's disclosure controls and procedures as of a date within 90 days prior to the filing date of this annual report (the "Evaluation Date"); and

c) presented in this annual report our conclusions about the effectiveness of the disclosure controls and procedures based on our evaluation as of the Evaluation Date;

5. The registrant's other certifying officers and I have disclosed, based on our most recent evaluation, to the registrant's auditors and the audit committee of registrant's board of directors (or persons performing the equivalent functions):

a) all significant deficiencies in the design or operation of internal controls which could adversely affect the registrant's ability to record, process, summarize and report financial data and have identified for the registrant's auditors any material weaknesses in internal controls; and

b) any fraud, whether or not material, that involves management or other employees who have a significant role in the registrant's internal controls; and

6. The registrant's other certifying officers and I have indicated in this annual report whether there were significant changes in internal controls or in other factors that could significantly affect internal controls subsequent to the date of our most recent evaluation, including any corrective actions with regard to significant deficiencies and material weaknesses.

Date: March 31, 2003

/s/ JAMES H. WELCH

James H. Welch
Vice President, Chief Financial Officer and Secretary

EXHIBIT INDEX

3.1(1)	Amended and Restated Certificate of Incorporation.
3.2(1)	Amended and Restated Bylaws.
4.1(1)	Specimen Common Stock Certificate.
4.2(1)	Amended and Restated Investor Rights Agreement, dated February 3, 2000, between Rigel and holders of Rigel's Series B, Series C, Series D and Series E preferred stock.
4.3(1)	Form of warrant to purchase shares of common stock.

4.4(1)	Warrant issued to Lighthouse Capital Partners II, L.P. for purchase of shares of Series B preferred stock.
4.5(1)	Warrant issued to Lighthouse Capital Partners II, L.P. for purchase of shares of Series C preferred stock.
4.6(1)	Form of warrant to purchase shares of Series D preferred stock.
4.7(11)	Amended and Restated Warrant issued to Kwacker Limited for the purchase of shares of common stock.
4.8(7)	Warrant issued to TBCC Funding Trust II for the purchase of shares of Common Stock.
4.9(8)	Warrant issued to Comerica Bank-California for the purchase of shares of Common Stock
4.10(11)	Warrant issued to Kwacker Limited for the purchase of shares of common stock.
4.11(11)	Warrant issued to Lighthouse Capital Partners IV, L.P. to purchase shares of common stock.
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(3) Confidential treatment requested as to specific portions, which portions are omitted and filed separately with the Securities and Exchange Commission.

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(12) This certification accompanies this annual report on Form 10K and shall not be deemed "filed" by Rigel for purposes of Section 18 of the Securities Exchange Act of 1934, as amended.

QuickLinks

Exhibit 4.7

THE SECURITIES REPRESENTED HEREBY HAVE NOT BEEN REGISTERED UNDER THE SECURITIES ACT OF 1933, AS AMENDED (THE "ACT"), OR UNDER THE SECURITIES LAWS OF ANY STATE. THESE SECURITIES ARE SUBJECT TO RESTRICTIONS ON TRANSFERABILITY AND RESALE AND MAY NOT BE TRANSFERRED OR RESOLD EXCEPT AS PERMITTED UNDER THE ACT AND THE APPLICABLE STATE SECURITIES LAWS, PURSUANT TO REGISTRATION OR EXEMPTION THEREFROM. THE ISSUER OF THESE SECURITIES MAY REQUIRE AN OPINION OF COUNSEL IN FORM AND SUBSTANCE SATISFACTORY TO THE ISSUER TO THE EFFECT THAT ANY PROPOSED TRANSFER OR RESALE IS IN COMPLIANCE WITH THE ACT AND ANY APPLICABLE STATE SECURITIES LAWS.

AMENDED AND RESTATED COMMON STOCK PURCHASE WARRANT

Warrant No. CS-4A 150,000 Shares
Original Issue Date: May 16, 2001
Amended and Restated: October 21, 2002

RIGEL PHARMACEUTICALS, INC.

1. Issuance. For value received, this Amended and Restated Common Stock Purchase Warrant (the "*Warrant*") is issued to **KWACKER LIMITED**, a corporation organized and existing under the laws of England ("*Kwacker*"), by **RIGEL PHARMACEUTICALS, INC.**, a Delaware corporation (hereinafter, with its successors, called the *"Company"*), in partial consideration for that certain Build-to-Suit Lease, dated as of May 16, 2001, between the Company and Slough BTC, LLC, as landlord, and in partial consideration for that certain Amendment No. One to Build-to-Suit Lease, dated as of October 21, 2002, between the Company and Slough BTC, LLC, as landlord ("*Amendment No. One*"). This Warrant is being executed and delivered concurrently with the execution and delivery of Amendment No. One and it amends, re-evidences and restates that certain Common Stock Purchase Warrant, dated as of May 16, 2001, issued by the Company to Kwacker.

2. Purchase Price; Number of Shares. The registered holder of this Warrant (the *"Holder"*), commencing on the date hereof, is entitled upon surrender of this Warrant with the subscription form annexed hereto duly executed, at the principal office of the Company, to purchase from the Company one hundred fifty thousand (150,000) fully paid and nonassessable shares (the "*Shares*") of common stock, $.001 par value per share, of the Company (the *"Common Stock"*), at a price per share of $8.9125 (the *"Purchase Price"*). Until such time as this Warrant is exercised in full or expires, the Purchase Price and the securities issuable upon exercise of this Warrant are subject to adjustment as hereinafter provided. The person or persons under whose name or names any certificate representing shares of Common Stock is issued hereunder shall be deemed to have become the holder of record of the shares represented thereby as at the close of business on the date this Warrant is exercised with respect to such shares, whether or not the transfer books of the Company shall be closed.

3. Payment of Purchase Price. The Purchase Price may be paid (i) in cash or by check; (ii) by the surrender by the Holder to the Company of any promissory notes or other

obligations issued by the Company, with all such notes and obligations so surrendered being credited against the Purchase Price in an amount equal to the principal amount thereof plus accrued interest to the date of surrender; or (iii) by any combination of the foregoing.

4. Net Issue Election. The Holder may elect to receive, without the payment by the Holder of any additional consideration, shares of Common Stock equal to the value of this Warrant or any portion hereof by the surrender of this Warrant or such portion to the Company, with the net issue election notice annexed hereto duly executed, at the principal office of the Company. Thereupon, the Company shall issue to the Holder such number of fully paid and nonassessable shares of Common Stock as is computed using the following formula:

$$X = \frac{Y(A-B)}{A}$$

where:
X = the number of shares of Common Stock to be issued to the Holder pursuant to this Section 4.

Y = the number of shares of Common Stock covered by this Warrant in respect of which the net issue election is made pursuant to this Section 4.

A = the Fair Market Value (defined below) of one share of Common Stock, as determined at the time the net issue election is made pursuant to this Section 4.

B = the Purchase Price in effect under this Warrant at the time the net issue election is made pursuant to this Section 4.

"Fair Market Value" of a share of Common Stock as of a particular date (the "*Determination Date*") shall mean the average of the closing or last reported sale prices of the Common Stock as reported on the Nasdaq National Market over the 30-day period ending five business days prior to the Determination Date; *provided, however,* that if (i) the Common Stock is neither traded on the Nasdaq National Market nor on a national securities exchange, then Fair Market Value shall be the average of the closing or last reported sale prices of the Common Stock over the 30-day period ending five business days prior to the Determination Date reflected in the over-the-counter market, as reported by the National Quotation Bureau, Inc. or any organization performing a similar function, or if closing prices are not then routinely reported for the over-the-counter market, the average of the last bid and asked prices of the Common Stock over the 30-day period ending five business days prior to the Determination Date and (ii) if there is no public market for the Common Stock, then Fair Market Value shall be determined in good faith by the Company's Board of Directors.

5. Partial Exercise. This Warrant may be exercised in part, and the Holder shall be entitled to receive a new warrant, which shall be dated as of the date of this Warrant, covering the number of shares in respect of which this Warrant shall not have been exercised.

6. Fractional Shares. In no event shall any fractional share of Common Stock be issued upon any exercise of this Warrant. If, upon exercise of this Warrant as an entirety, the Holder would, except as provided in this Section 6, be entitled to receive a fractional share of Common Stock, then the Company shall pay in lieu thereof, the Fair Market Value of such fractional share in cash.

7. Expiration Date. This Warrant or any Successor Warrant (as defined in Section 10 below) shall remain exercisable until the close of business on May 16, 2006, when it shall expire and thereafter be void.

8. Reserved Shares; Valid Issuance. The Company covenants that it will at all times from and after the date hereof reserve and keep available such number of its authorized shares of Common Stock, free from all preemptive or similar rights therein, as will be sufficient to permit the exercise of this Warrant in full into shares of Common Stock upon such exercise. The Company further covenants that such shares as may be issued pursuant to such exercise will, upon issuance, be duly and validly issued, fully paid and nonassessable and free from all taxes, liens and charges with respect to the issuance thereof.

9. Stock Splits and Dividends. If after the date hereof the Company shall subdivide the Common Stock, by split-up or otherwise, or combine the Common Stock, or issue additional shares of Common Stock in payment of a stock dividend on the Common Stock, the number of shares of Common Stock issuable on the exercise of this Warrant shall forthwith be proportionately increased in the case of a subdivision or stock dividend, or proportionately decreased in the case of a combination, and the Purchase Price shall forthwith be proportionately decreased in the case of a subdivision or stock dividend, or proportionately increased in the case of a combination.

10. Mergers and Reclassifications.

(a) If after the date hereof the Company shall enter into any Reorganization (as hereinafter defined), then, as a condition of such Reorganization, lawful provisions shall be made, and duly executed documents evidencing the same from the Company or its successor shall be delivered to the Holder (a "*Successor Warrant*"), so that the Holder shall thereafter have the right to purchase, at a total price not to exceed that payable upon the exercise of this Warrant in full, the kind and amount of shares of stock and other securities and property receivable upon such Reorganization by a holder of the number of shares of Common Stock which might have been purchased by the Holder immediately prior to such Reorganization, and in any such case appropriate provisions shall be made with respect to the rights and interest of the Holder to the end that the provisions hereof (including without limitation, provisions for the adjustment of the Purchase Price and the number of shares issuable hereunder and the provisions relating to the net issue election) shall thereafter be applicable in relation to any shares of stock or other securities and property thereafter deliverable upon exercise hereof.

(b) If, after the date hereof the Company shall enter into any Acquisition Transaction (as hereinafter defined) pursuant to which the Consideration Per Share (as hereinafter defined) is less than the Purchase Price (prior to any adjustment under Section 10(a)

with respect to such Acquisition Transaction), then in addition to any adjustment of the Purchase Price under Section 10(a) with respect to such Acquisition Transaction, the Purchase Price shall be reduced to a price equal to the product of (a) the Purchase Price times (b) the difference of (i) one minus (ii) a fraction the numerator of which is equal to the product of (A) number of Shares times (B) the Purchase Price and the denominator of which is equal to the sum of (Y) the product of (1) the number of Shares times (2) the Purchase Price plus (Z) the aggregate consideration to be received by the Company's stockholders in the Acquisition Transaction.

(c) For the purposes of this Section 10:

(i) the term "Acquisition Transaction" shall include without limitation any consolidation of the Company with, or merger of the Company into, another corporation or other business organization (other than a merger in which the Company is the surviving corporation and which does not result in any reclassification or change of the outstanding Common Stock);

(ii) the term "Reorganization" shall include without limitation any reclassification, capital reorganization or change of the Common Stock (other than as a result of a subdivision, combination or stock dividend provided for in Section 9 hereof), an Acquisition Transaction, or any sale or conveyance to another corporation or other business organization of all or substantially all of the assets of the Company; and

(iii) the term "Consideration Per Share" shall equal the closing or last reported sale price of the Common Stock as reported on the Nasdaq National Market on the first business day immediately following the public announcement of the Reorganization (such business day being hereinafter referred to as the "*Announcement Date*"); *provided, however,* that if (i) the Common Stock is neither traded on the Nasdaq National Market nor on a national securities exchange, then Consideration Per Share shall be the last reported sale price of the Common Stock on the Announcement Date reflected in the over-the-counter market, as reported by the National Quotation Bureau, Inc. or any organization performing a similar function, or if closing prices are not then routinely reported for the over-the-counter market, the average of the last bid and asked price of the Common Stock on the Announcement Date and (ii) if there is no public market for the Common Stock, then Fair Market Value shall be determined in good faith by the Company's Board of Directors.

11. Certificate of Adjustment. Whenever the Purchase Price is adjusted, as herein provided, the Company shall promptly deliver to the Holder a certificate of the Company's Chief Financial Officer setting forth the Purchase Price after such adjustment and setting forth a brief statement of the facts requiring such adjustment.

12. Notices of Record Date, Etc. In the event of:

(a) any taking by the Company of a record of the holders of any class of securities for the purpose of determining the holders thereof who are entitled to receive any dividend or other distribution, or any right to subscribe for, purchase, sell or otherwise acquire or

dispose of any shares of stock of any class or any other securities or property, or to receive any other right;

(b) any reclassification of the capital stock of the Company, capital reorganization of the Company, consolidation or merger involving the Company, or sale or conveyance of all or substantially all of its assets; or

(c) any voluntary or involuntary dissolution, liquidation or winding-up of the Company;

then in each such event the Company will provide or cause to be provided to the Holder a written notice thereof. Such notice shall be provided at least fifteen (15) calendar days prior to the date specified in such notice on which any such action is to be taken.

13. Representations, Warranties and Covenants. This Warrant is issued and delivered by the Company and accepted by each Holder on the basis of the following representations, warranties and covenants made by the Company:

(a) The Company has all necessary authority to issue, execute and deliver this Warrant and to perform its obligations hereunder. This Warrant has been duly authorized issued, executed and delivered by the Company and is the valid and binding obligation of the Company, enforceable in accordance with its terms, except as enforceability may be limited by bankruptcy, insolvency, reorganization or other similar laws of general application affecting the enforcement of Holders rights or by general equity principals or public policy concerns.

(b) The shares of Common Stock issuable upon the exercise of this Warrant have been duly authorized and reserved for issuance by the Company and, when issued in accordance with the terms hereof, will be validly issued, fully paid and nonassessable.

(c) The issuance, execution and delivery of this Warrant do not, and the issuance of the shares of Common Stock upon the exercise of this Warrant in accordance with the terms hereof will not, (i) violate or contravene the Company's Amended and Restated Certificate of Incorporation or by-laws, or any law, statute, regulation, rule, judgment or order applicable to the Company, (ii) violate, contravene or result in a breach or default under any material contract, agreement or instrument to which the Company is a party or by which the Company or any of its assets are bound or (iii) require the consent or approval of or the filing of any notice or registration with any person or entity.

14. Amendment and Waiver. The terms of this Warrant may be amended, modified or waived only with the written consent of the party against which enforcement of the same is sought.

15. Representations and Covenants of the Holder. This Common Stock Purchase Warrant has been entered into by the Company in reliance upon the following representations and covenants of the Holder, which by its execution hereof the Holder hereby confirms:

(a) Investment Purpose. The right to acquire Common Stock or the Common Stock issuable upon exercise of the Holder's rights contained herein will be acquired for investment and not with a view to the sale or distribution of any part thereof, and the Holder has no present intention of selling or engaging in any public distribution of the same except pursuant to a registration or exemption.

(b) Accredited Investor. Holder is an "accredited investor" within the meaning of the Securities and Exchange Rule 501 of Regulation D, as presently in effect.

(c) Private Issue. The Holder understands (i) that the Common Stock issuable upon exercise of the Holder's rights contained herein is not registered under the 1933 Act or qualified under applicable state securities laws on the ground that the issuance contemplated by this Warrant will be exempt from the registration and qualifications requirements thereof and (ii) that the Company's reliance on such exemption is predicated on the representations set forth in this Section 15.

(d) Financial Risk. The Holder has such knowledge and experience in financial and business matters as to be capable of evaluating the merits and risks of its investment and has the ability to bear the economic risks of its investment.

16. Notices, Transfers, Etc.

(a) Any notice or written communication required or permitted to be given to the Holder may be given by certified mall or delivered to the Holder at the address most recently provided by the Holder to the Company.

(b) Subject to compliance with applicable federal and state securities laws, this Warrant may be transferred by the Holder with respect to any or all of the shares purchasable hereunder. Upon surrender of this Warrant to the Company, together with the assignment notice annexed hereto duly executed, for transfer of this Warrant as an entirety by the Holder, the Company shall issue a new warrant of the same denomination to the assignee. Upon surrender of this Warrant to the Company, together with the assignment hereof properly endorsed, by the Holder for transfer with respect to a portion of the shares of Common Stock purchasable hereunder, the Company shall issue a new warrant to the assignee, in such denomination as shall be requested by the Holder hereof, and shall issue to such Holder a new warrant covering the number of shares in respect of which this Warrant shall not have been transferred.

(c) In case this Warrant shall be mutilated, lost, stolen or destroyed, the Company shall issue a new warrant of like tenor and denomination and deliver the same (i) in exchange and substitution for and upon surrender and cancellation of any mutilated Warrant or (ii) in lieu of any Warrant lost, stolen or destroyed, upon receipt of an affidavit of the Holder or other evidence reasonably satisfactory to the Company of the loss, theft or destruction of such Warrant and an indemnification of loss by the Holder in favor of the Company.

17. Transfer to Comply with the Securities Act of 1933. This Warrant may not be exercised and neither this Warrant nor any of the Shares, nor any interest in either, may be

offered, sold, assigned, pledged, hypothecated, encumbered or in any other manner transferred or disposed of, in whole or in part, except in compliance with applicable United

States federal and state securities laws and the terms and conditions hereof. Each Warrant shall bear a legend in substantially the same form as the legend set forth on the first page of this Warrant. Each certificate for Shares issued upon exercise of this Warrant, unless at the time of exercise such Shares are acquired pursuant to a registration statement that has been declared effective under the Securities Act of 1933, as amended (the "*Securities Act*"), and applicable blue sky laws, shall bear a legend substantially in the following form:

> THE SECURITIES REPRESENTED HEREBY HAVE NOT BEEN REGISTERED UNDER THE SECURITIES ACT OF 1933, AS AMENDED (THE "ACT"), OR UNDER THE SECURITIES LAWS OF ANY STATE. THESE SECURITIES ARE SUBJECT TO RESTRICTIONS ON TRANSFERABILITY AND RESALE AND MAY NOT BE TRANSFERRED OR RESOLD EXCEPT AS PERMITTED UNDER THE ACT AND THE APPLICABLE STATE SECURITIES LAWS, PURSUANT TO REGISTRATION OR EXEMPTION THEREFROM. THE ISSUER OF THESE SECURITIES MAY REQUIRE AN OPINION OF COUNSEL IN FORM AND SUBSTANCE SATISFACTORY TO THE ISSUER TO THE EFFECT THAT ANY PROPOSED TRANSFER OR RESALE IS IN COMPLIANCE WITH THE ACT AND ANY APPLICABLE STATE SECURITIES LAWS.

Any certificate for any Shares issued at any time in exchange or substitution for any certificate for any Shares bearing such legend (except a new certificate for any Shares issued after the acquisition of such Shares pursuant to a registration statement that has been declared effective under the Securities Act) shall also bear such legend unless, in the opinion of counsel for the Company, the Shares represented thereby need no longer be subject to the restriction contained herein. The provisions of this Section 17 shall be binding upon all subsequent holders of certificates for Shares bearing the above legend and all subsequent holders of this Warrant, if any.

18. Rights of Holder. Holder shall not, by virtue hereof, be entitled to any rights of a stockholder of the Company, either at law or equity, and the rights of Holder are limited to those expressed in this Warrant. Nothing contained in this Warrant shall be construed as conferring upon Holder hereof the right to vote or to consent or to receive notice as a stockholder of the Company on any matters or with respect to any rights whatsoever as a stockholder of the Company. No dividends or interest shall be payable or accrued in respect of this Warrant or the interest represented hereby or the Shares purchasable hereunder until, and only to the extent that, this Warrant shall have been exercised in accordance with its terms.

19. "Market Stand Off" Agreement Holder hereby agrees not sell, transfer, make any short sale of, grant any option for the purchase of, or enter into any hedging or similar transaction with the same economic effect as a sale of, any Common Stock (or other securities) of the Company held by Holder for a period specified by a representative of the underwriters of Common Stock (or other securities) of the Company not to exceed ninety (90) days following the effective date of a registration statement of the Company filed under the Securities Act; *provided*

that all officers and directors of the Company and each holder of that number of shares of Common Stock equal to or greater than the number of Shares then issuable upon exercise of this Warrant enter into similar agreements.

20. No Impairment. The Company will not, by amendment of its Certificate or through any reclassification, capital reorganization, consolidation, merger, sale or conveyance of assets, dissolution, liquidation, issue or sale of securities or any other voluntary action, avoid or seek to avoid the observance of performance of any of the terms of this Warrant, but will at all times in good faith assist in the carrying out of all such terms and in the taking of all such action as may be necessary or appropriate in order to protect the rights of the Holder.

21. Governing Law. The provisions and terms of this Warrant shall be governed by and construed in accordance with the internal laws of the State of California.

22. Successors and Assigns. This Warrant shall be binding upon the Company's successors and assigns and shall inure to the benefit of the Holder's successors, legal representatives and permitted assigns.

23. Business Days. If the last or appointed day for the taking of any action required or the expiration of any rights granted herein shall be a Saturday or Sunday or a legal holiday in California, then such action may be taken or right may be exercised on the next succeeding day which is not a Saturday or Sunday or such a legal holiday.

IN WITNESS WHEREOF, the Company has duly caused this Amended and Restated Common Stock Purchase Warrant to be signed by its duly authorized officer and to be dated as of the date first written above.

Company:

RIGEL PHARMACEUTICALS, INC.

By: /s/ James M. Gower
James M. Gower
Chief Executive Officer

SUBSCRIPTION

To: _____ Date: _____

The undersigned hereby subscribes for _____ shares of Common Stock covered by this Warrant. The certificate(s) for such shares shall be issued in the name of the undersigned or as otherwise indicated below:

_____
Signature

_____
Name for Registration

_____
Mailing Address

NET ISSUE ELECTION NOTICE

To: _____ Date: _____

The undersigned hereby elects under Section 4 to surrender the right to purchase _____ shares of Common Stock pursuant to this Warrant. The certificate(s) for such shares issuable upon such net issue election shall be issued in the name of the undersigned or as otherwise indicated below:

_____
Signature

_____
Name for Registration

_____
Mailing Address

ASSIGNMENT

For value received _____ hereby sells, assigns and transfers unto

_____

_____
[Please print or type the name and address of Assignee]

_____

the within Warrant, and does hereby irrevocably constitute and appoint _____ _____ its attorney to transfer the within Warrant on the books of the within named Company with full power of substitution on the premises.

DATED: _____ _____

IN THE PRESENCE OF:

_____

Exhibit 4.10

THE SECURITIES REPRESENTED HEREBY HAVE NOT BEEN REGISTERED UNDER THE SECURITIES ACT OF 1933, AS AMENDED (THE "ACT"), OR UNDER THE SECURITIES LAWS OF ANY STATE. THESE SECURITIES ARE SUBJECT TO RESTRICTIONS ON TRANSFERABILITY AND RESALE AND MAY NOT BE TRANSFERRED OR RESOLD EXCEPT AS PERMITTED UNDER THE ACT AND THE APPLICABLE STATE SECURITIES LAWS, PURSUANT TO REGISTRATION OR EXEMPTION THEREFROM. THE ISSUER OF THESE SECURITIES MAY REQUIRE AN OPINION OF COUNSEL IN FORM AND SUBSTANCE SATISFACTORY TO THE ISSUER TO THE EFFECT THAT ANY PROPOSED TRANSFER OR RESALE IS IN COMPLIANCE WITH THE ACT AND ANY APPLICABLE STATE SECURITIES LAWS.

COMMON STOCK PURCHASE WARRANT

Warrant No. CS-7 500,000 Shares
October 18, 2002

RIGEL PHARMACEUTICALS, INC.

WARRANT FOR THE PURCHASE OF SHARES OF COMMON STOCK

1. Issuance. For value received, this Warrant is issued to **KWACKER LIMITED**, a corporation organized and existing under the laws of England, by **RIGEL PHARMACEUTICALS, INC.,** a Delaware corporation (hereinafter with its successors called the *"Company"*), in partial consideration for that certain Amendment No. One to Build-to-Suit Lease, dated as of the date hereof, between the Company and Slough BTC, LLC, as landlord.

2. Purchase Price; Number of Shares. The registered holder of this Warrant (the *"Holder"*), commencing on the date hereof, is entitled upon surrender of this Warrant with the subscription form annexed hereto duly executed, at the principal office of the Company, to purchase from the Company five hundred thousand (500,000) fully paid and nonassessable shares (the "*Shares*") of common stock, $.001 par value per share, of the Company (the *"Common Stock"*), at a price per share of $1.97 (the *"Purchase Price"*). Until such time as this Warrant is exercised in full or expires, the Purchase Price and the securities issuable upon exercise of this Warrant are subject to adjustment as hereinafter provided. The person or persons under whose name or names any certificate representing shares of Common Stock is issued hereunder shall be deemed to have become the holder of record of the shares represented thereby as at the close of business on the date this Warrant is exercised with respect to such shares, whether or not the transfer books of the Company shall be closed.

3. Payment of Purchase Price. The Purchase Price may be paid (i) in cash or by check; (ii) by the surrender by the Holder to the Company of any promissory notes or other obligations issued by the Company, with all such notes and obligations so surrendered being credited against the Purchase Price in an amount equal to the principal amount thereof plus accrued interest to the date of surrender; or (iii) by any combination of the foregoing.

4. Net Issue Election. The Holder may elect to receive, without the payment by the Holder of any additional consideration, shares of Common Stock equal to the value of this Warrant or any portion hereof by the surrender of this Warrant or such portion to the Company, with the net issue election notice annexed hereto duly executed, at the principal office of the Company. Thereupon, the Company shall issue to the Holder such number of fully paid and nonassessable shares of Common Stock as is computed using the following formula:

$$X = \frac{Y(A-B)}{A}$$

where:
X = the number of shares of Common Stock to be issued to the Holder pursuant to this Section 4.

Y = the number of shares of Common Stock covered by this Warrant in respect of which the net issue election is made pursuant to this Section 4.

A = the Fair Market Value (defined below) of one share of Common Stock, as determined at the time the net issue election is made pursuant to this Section 4.

B = the Purchase Price in effect under this Warrant at the time the net issue election is made pursuant to this Section 4.

"Fair Market Value" of a share of Common Stock as of a particular date (the "Determination Date") shall mean the average of the closing or last reported sale prices of the Common Stock as reported on the Nasdaq National Market over the 30-day period ending five business days prior to the Determination Date; *provided, however,* that if (i) the Common Stock is neither traded on the Nasdaq National Market nor on a national securities exchange, then Fair Market Value shall be the average of the closing or last reported sale prices of the Common Stock over the 30-day period ending five business days prior to the Determination Date reflected in the over-the-counter market, as reported by the National Quotation Bureau, Inc. or any organization performing a similar function, or if closing prices are not then routinely reported for the over-the-counter market, the average of the last bid and asked prices of the Common Stock over the 30-day period ending five business days prior to the Determination Date and (ii) if there is no public market for the Common Stock, then Fair Market Value shall be determined in good faith by the Company's Board of Directors.

5. Partial Exercise. This Warrant may be exercised in part, and the Holder shall be entitled to receive a new warrant, which shall be dated as of the date of this Warrant, covering the number of shares in respect of which this Warrant shall not have been exercised.

6. Fractional Shares. In no event shall any fractional share of Common Stock be issued upon any exercise of this Warrant. If, upon exercise of this Warrant as an entirety, the Holder would, except as provided in this Section 6, be entitled to receive a fractional share of Common Stock, then the Company shall pay in lieu thereof, the Fair Market Value of such fractional share in cash.

7. Expiration Date. This Warrant or any Successor Warrant (as defined in Section 10 below) shall remain exercisable until the close of business on October 18, 2007, when it shall expire and thereafter be void.

8. Reserved Shares; Valid Issuance. The Company covenants that it will at all times from and after the date hereof reserve and keep available such number of its authorized shares of Common Stock, free from all preemptive or similar rights therein, as will be sufficient to permit the exercise of this Warrant in full into shares of Common Stock upon such exercise. The Company further covenants that such shares as may be issued pursuant to such exercise will, upon issuance, be duly and validly issued, fully paid and nonassessable and free from all taxes, liens and charges with respect to the issuance thereof.

9. Stock Splits and Dividends. If after the date hereof the Company shall subdivide the Common Stock, by split-up or otherwise, or combine the Common Stock, or issue additional shares of Common Stock in payment of a stock dividend on the Common Stock, the number of shares of Common Stock issuable on the exercise of this Warrant shall forthwith be proportionately increased in the case of a subdivision or stock dividend, or proportionately decreased in the case of a combination, and the Purchase Price shall forthwith be proportionately decreased in the case of a subdivision or stock dividend, or proportionately increased in the case of a combination.

10. Mergers and Reclassifications.

(a) If after the date hereof the Company shall enter into any Reorganization (as hereinafter defined), then, as a condition of such Reorganization, lawful provisions shall be made, and duly executed documents evidencing the same from the Company or its successor shall be delivered to the Holder (a "Successor Warrant"), so that the Holder shall thereafter have the right to purchase, at a total price not to exceed that payable upon the exercise of this Warrant in full, the kind and amount of shares of stock and other securities and property receivable upon such Reorganization by a holder of the number of shares of Common Stock which might have been purchased by the Holder immediately prior to such Reorganization, and in any such case appropriate provisions shall be made with respect to the rights and interest of the Holder to the end that the provisions hereof (including without limitation, provisions for the adjustment of the Purchase Price and the number of shares issuable hereunder and the provisions relating to the net issue election) shall thereafter be applicable in relation to any shares of stock or other securities and property thereafter deliverable upon exercise hereof.

(b) If, after the date hereof the Company shall enter into any Acquisition Transaction (as hereinafter defined) pursuant to which the Consideration Per Share (as hereinafter defined) is less than the Purchase Price (prior to any adjustment under Section 10(a) with respect to such Acquisition Transaction), then in addition to any adjustment of the Purchase Price under Section 10(a) with respect to such Acquisition Transaction, the Purchase Price shall be reduced to a price equal to the product of (a) the Purchase Price times (b) the difference of (i) one minus (ii) a fraction the numerator of which is equal to the product of (A) number of Shares times (B) the Purchase Price and the denominator of which is equal to the sum of (Y) the product

of (1) the number of Shares times (2) the Purchase Price plus (Z) the aggregate consideration to be received by the Company's stockholders in the Acquisition Transaction.

(c) For the purposes of this Section 10:

(i) the term "Acquisition Transaction" shall include without limitation any consolidation of the Company with, or merger of the Company into, another corporation or other business organization (other than a merger in which the Company is the surviving corporation and which does not result in any reclassification or change of the outstanding Common Stock);

(ii) the term "Reorganization" shall include without limitation any reclassification, capital reorganization or change of the Common Stock (other than as a result of a subdivision, combination or stock dividend provided for in Section 9 hereof), an Acquisition Transaction, or any sale or conveyance to another corporation or other business organization of all or substantially all of the assets of the Company and

(iii) the term "Consideration Per Share" shall equal the closing or last reported sale price of the Common Stock as reported on the Nasdaq National Market on the first business day immediately following the public announcement of the Reorganization (such business day being hereinafter referred to as the "Announcement Date"); *provided, however,* that if (i) the Common Stock is neither traded on the Nasdaq National Market nor on a national securities exchange, then Consideration Per Share shall be the last reported sale price of the Common Stock on the Announcement Date reflected in the over-the-counter market, as reported by the National Quotation Bureau, Inc. or any organization performing a similar function, or if closing prices are not then routinely reported for the over-the-counter market, the average of the last bid and asked price of the Common Stock on the Announcement Date and (ii) if there is no public market for the Common Stock, then Fair Market Value shall be determined in good faith by the Company's Board of Directors.

11. Certificate of Adjustment. Whenever the Purchase Price is adjusted, as herein provided, the Company shall promptly deliver to the Holder a certificate of the Company's Chief Financial Officer setting forth the Purchase Price after such adjustment and setting forth a brief statement of the facts requiring such adjustment.

12. Notices of Record Date, Etc. In the event of:

(a) any taking by the Company of a record of the holders of any class of securities for the purpose of determining the holders thereof who are entitled to receive any dividend or other distribution, or any right to subscribe for, purchase, sell or otherwise acquire or dispose of any shares of stock of any class or any other securities or property, or to receive any other right;

(b) any reclassification of the capital stock of the Company, capital reorganization of the Company, consolidation or merger involving the Company, or sale or conveyance of all or substantially all of its assets; or

(c) any voluntary or involuntary dissolution, liquidation or winding-up of the Company;

then in each such event the Company will provide or cause to be provided to the Holder a written notice thereof. Such notice shall be provided at least fifteen (15) calendar days prior to the date specified in such notice on which any such action is to be taken.

13. Representations, Warranties and Covenants. This Warrant is issued and delivered by the Company and accepted by each Holder on the basis of the following representations, warranties and covenants made by the Company:

(a) The Company has all necessary authority to issue, execute and deliver this Warrant and to perform its obligations hereunder. This Warrant has been duly authorized issued, executed and delivered by the Company and is the valid and binding obligation of the Company, enforceable in accordance with its terms, except as enforceability may be limited by bankruptcy, insolvency, reorganization or other similar laws of general application affecting the enforcement of Holders rights or by general equity principals or public policy concerns.

(b) The shares of Common Stock issuable upon the exercise of this Warrant have been duly authorized and reserved for issuance by the Company and, when issued in accordance with the terms hereof, will be validly issued, fully paid and nonassessable.

(c) The issuance, execution and delivery of this Warrant do not, and the issuance of the shares of Common Stock upon the exercise of this Warrant in accordance with the terms hereof will not, (i) violate or contravene the Company's Amended and Restated Certificate of Incorporation or by-laws, or any law, statute, regulation, rule, judgment or order applicable to the Company, (ii) violate, contravene or result in a breach or default under any material contract, agreement or instrument to which the Company is a party or by which the Company or any of its assets are bound or (iii) require the consent or approval of or the filing of any notice or registration with any person or entity.

14. Amendment and Waiver. The terms of this Warrant may be amended, modified or waived only with the written consent of the party against which enforcement of the same is sought.

15. Representations and Covenants of the Holder. This Common Stock Purchase Warrant has been entered into by the Company in reliance upon the following representations and covenants of the Holder, which by its execution hereof the Holder hereby confirms:

(a) Investment Purpose. The right to acquire Common Stock or the Common Stock issuable upon exercise of the Holder's rights contained herein will be acquired for investment and not with a view to the sale or distribution of any part thereof, and the Holder has no present intention of selling or engaging in any public distribution of the same except pursuant to a registration or exemption.

(b) Accredited Investor. Holder is an "accredited investor" within the meaning of the Securities and Exchange Rule 501 of Regulation D, as presently in effect.

(c) Private Issue. The Holder understands (i) that the Common Stock issuable upon exercise of the Holder's rights contained herein is not registered under the 1933 Act or qualified under applicable state securities laws on the ground that the issuance contemplated by this Warrant will be exempt from the registration and qualifications requirements thereof and (ii) that the Company's reliance on such exemption is predicated on the representations set forth in this Section 15.

(d) Financial Risk. The Holder has such knowledge and experience in financial and business matters as to be capable of evaluating the merits and risks of its investment and has the ability to bear the economic risks of its investment.

16. Notices, Transfers, Etc.

(a) Any notice or written communication required or permitted to be given to the Holder may be given by certified mall or delivered to the Holder at the address most recently provided by the Holder to the Company.

(b) Subject to compliance with applicable federal and state securities laws, this Warrant may be transferred by the Holder with respect to any or all of the shares purchasable hereunder. Upon surrender of this Warrant to the Company, together with the assignment notice annexed hereto duly executed, for transfer of this Warrant as an entirety by the Holder, the Company shall issue a new warrant of the same denomination to the assignee. Upon surrender of this Warrant to the Company, together with the assignment hereof properly endorsed, by the Holder for transfer with respect to a portion of the shares of Common Stock purchasable hereunder, the Company shall issue a new warrant to the assignee, in such denomination as shall be requested by the Holder hereof, and shall issue to such Holder a new warrant covering the number of shares in respect of which this Warrant shall not have been transferred.

(c) In case this Warrant shall be mutilated, lost, stolen or destroyed, the Company shall issue a new warrant of like tenor and denomination and deliver the same (i) in exchange and substitution for and upon surrender and cancellation of any mutilated Warrant or (ii) in lieu of any Warrant lost, stolen or destroyed, upon receipt of an affidavit of the Holder or other evidence reasonably satisfactory to the Company of the loss, theft or destruction of such Warrant and an indemnification of loss by the Holder in favor of the Company.

17. Transfer to Comply with the Securities Act of 1933. This Warrant may not be exercised and neither this Warrant nor any of the Shares, nor any interest in either, may be offered, sold, assigned, pledged, hypothecated, encumbered or in any other manner transferred or disposed of, in whole or in part, except in compliance with applicable United States federal and state securities laws and the terms and conditions hereof. Each Warrant shall bear a legend in substantially the same form as the legend set forth on the first page of this Warrant. Each certificate for Shares issued upon exercise of this Warrant, unless at the time of exercise such Shares are acquired pursuant to a registration statement that has been declared effective under the

Securities Act of 1933, as amended (the "Securities Act"), and applicable blue sky laws, shall bear a legend substantially in the following form:

THE SECURITIES REPRESENTED HEREBY HAVE NOT BEEN REGISTERED UNDER THE SECURITIES ACT OF 1933, AS AMENDED (THE "ACT"), OR UNDER THE SECURITIES LAWS OF ANY STATE. THESE SECURITIES ARE SUBJECT TO RESTRICTIONS ON TRANSFERABILITY AND RESALE AND MAY NOT BE TRANSFERRED OR RESOLD EXCEPT AS PERMITTED UNDER THE ACT AND THE APPLICABLE STATE SECURITIES LAWS, PURSUANT TO REGISTRATION OR EXEMPTION THEREFROM. THE ISSUER OF THESE SECURITIES MAY REQUIRE AN OPINION OF COUNSEL IN FORM AND SUBSTANCE SATISFACTORY TO THE ISSUER TO THE EFFECT THAT ANY PROPOSED TRANSFER OR RESALE IS IN COMPLIANCE WITH THE ACT AND ANY APPLICABLE STATE SECURITIES LAWS.

Any certificate for any Shares issued at any time in exchange or substitution for any certificate for any Shares bearing such legend (except a new certificate for any Shares issued after the acquisition of such Shares pursuant to a registration statement that has been declared effective under the Securities Act) shall also bear such legend unless, in the opinion of counsel for the Company, the Shares represented thereby need no longer be subject to the restriction contained herein. The provisions of this Section 17 shall be binding upon all subsequent holders of certificates for Shares bearing the above legend and all subsequent holders of this Warrant, if any.

18. Rights of Holder. Holder shall not, by virtue hereof, be entitled to any rights of a stockholder of the Company, either at law or equity, and the rights of Holder are limited to those expressed in this Warrant. Nothing contained in this Warrant shall be construed as conferring upon Holder hereof the right to vote or to consent or to receive notice as a stockholder of the Company on any matters or with respect to any rights whatsoever as a stockholder of the Company. No dividends or interest shall be payable or accrued in respect of this Warrant or the interest represented hereby or the Shares purchasable hereunder until, and only to the extent that, this Warrant shall have been exercised in accordance with its terms.

19. "Market Stand Off" Agreement Holder hereby agrees not sell, transfer, make any short sale of, grant any option for the purchase of, or enter into any hedging or similar transaction with the same economic effect as a sale of, any Common Stock (or other securities) of the Company held by Holder for a period specified by a representative of the underwriters of Common Stock (or other securities) of the Company not to exceed ninety (90) days following the effective date of a registration statement of the Company filed under the Securities Act; *provided* that all officers and directors of the Company and each holder of that number of shares of Common Stock equal to or greater than the number of Shares then issuable upon exercise of this Warrant enter into similar agreements.

20. No Impairment. The Company will not, by amendment of its Certificate or through any reclassification, capital reorganization, consolidation, merger, sale or conveyance of

assets, dissolution, liquidation, issue or sale of securities or any other voluntary action, avoid or seek to avoid the observance of performance of any of the terms of this Warrant, but will at all times in good faith assist in the carrying out of all such terms and in the taking of all such action as may be necessary or appropriate in order to protect the rights of the Holder.

21. Governing Law. The provisions and terms of this Warrant shall be governed by and construed in accordance with the internal laws of the State of California.

22. Successors and Assigns. This Warrant shall be binding upon the Company's successors and assigns and shall inure to the benefit of the Holder's successors, legal representatives and permitted assigns.

23. Business Days. If the last or appointed day for the taking of any action required or the expiration of any rights granted herein shall be a Saturday or Sunday or a legal holiday in California, then such action may be taken or right may be exercised on the next succeeding day which is not a Saturday or Sunday or such a legal holiday.

IN WITNESS WHEREOF, the Company has duly caused this Warrant to be signed by its duly authorized officer and to be dated as of the date first written above.

Company:

RIGEL PHARMACEUTICALS, INC.

By: /s/ James M. Gower
James M. Gower
Chief Executive Officer

SUBSCRIPTION

To: _____ Date: _____

The undersigned hereby subscribes for _____ shares of Common Stock covered by this Warrant. The certificate(s) for such shares shall be issued in the name of the undersigned or as otherwise indicated below:

_____
Signature

_____
Name for Registration

_____
Mailing Address

NET ISSUE ELECTION NOTICE

To: _____ Date: _____

The undersigned hereby elects under Section 4 to surrender the right to purchase _____ shares of Common Stock pursuant to this Warrant. The certificate(s) for such shares issuable upon such net issue election shall be issued in the name of the undersigned or as otherwise indicated below:

_____
Signature

_____
Name for Registration

_____
Mailing Address

ASSIGNMENT

For value received _____ hereby sells, assigns and transfers unto

_____

_____
[Please print or type the name and address of Assignee]

_____

the within Warrant, and does hereby irrevocably constitute and appoint _____ _____ its attorney to transfer the within Warrant on the books of the within named Company with full power of substitution on the premises.

DATED: _____ _____

IN THE PRESENCE OF:

_____

Exhibit 4.11

THE SECURITIES REPRESENTED HEREBY HAVE NOT BEEN REGISTERED UNDER THE SECURITIES ACT OF 1933, AS AMENDED (THE "ACT"), OR UNDER THE SECURITIES LAWS OF ANY STATE. THESE SECURITIES ARE SUBJECT TO RESTRICTIONS ON TRANSFERABILITY AND RESALE AND MAY NOT BE TRANSFERRED OR RESOLD EXCEPT AS PERMITTED UNDER THE ACT AND THE APPLICABLE STATE SECURITIES LAWS, PURSUANT TO REGISTRATION OR EXEMPTION THEREFROM. THE ISSUER OF THESE SECURITIES MAY REQUIRE AN OPINION OF COUNSEL IN FORM AND SUBSTANCE SATISFACTORY TO THE ISSUER TO THE EFFECT THAT ANY PROPOSED TRANSFER OR RESALE IS IN COMPLIANCE WITH THE ACT AND ANY APPLICABLE STATE SECURITIES LAWS.

COMMON STOCK PURCHASE WARRANT

Warrant No. CS- 186,916 Shares
December 24, 2002

RIGEL PHARMACEUTICALS, INC.

WARRANT FOR THE PURCHASE OF SHARES OF COMMON STOCK

1. Issuance. For value received, this Warrant is issued to **LIGHTHOUSE CAPITAL PARTNERS IV, L.P.**, a Delaware limited partnership, by **RIGEL PHARMACEUTICALS, INC.**, a Delaware corporation (hereinafter with its successors called the *"Company"*).

2. Purchase Price; Number of Shares. The registered holder of this Warrant (the *"Holder"*), commencing on the date hereof, is entitled upon surrender of this Warrant with the subscription form annexed hereto duly executed, at the principal office of the Company, to purchase from the Company one hundred eighty-six thousand, nine hundred sixteen (186,916) fully paid and nonassessable shares (the "*Shares*") of common stock, $.001 par value per share, of the Company (the *"Common Stock"*), at a price per share of $1.07 (the *"Purchase Price"*). Until such time as this Warrant is exercised in full or expires, the Purchase Price and the securities issuable upon exercise of this Warrant are subject to adjustment as hereinafter provided. The person or persons under whose name or names any certificate representing shares of Common Stock is issued hereunder shall be deemed to have become the holder of record of the shares represented thereby as at the close of business on the date this Warrant is exercised with respect to such shares, whether or not the transfer books of the Company shall be closed.

3. Payment of Purchase Price. The Purchase Price may be paid (i) in cash or by check; (ii) by the surrender by the Holder to the Company of any promissory notes or other obligations issued by the Company, with all such notes and obligations so surrendered being credited against the Purchase Price in an amount equal to the principal amount thereof plus accrued interest to the date of surrender; or (iii) by any combination of the foregoing.

4. Net Issue Election. The Holder may elect to receive, without the payment by the Holder of any additional consideration, shares of Common Stock equal to the value of this Warrant or any portion hereof by the surrender of this Warrant or such portion to the Company,

with the net issue election notice annexed hereto duly executed, at the principal office of the Company. Thereupon, the Company shall issue to the Holder such number of fully paid and nonassessable shares of Common Stock as is computed using the following formula:

$$X = \frac{Y(A-B)}{A}$$

where:
X = the number of shares of Common Stock to be issued to the Holder pursuant to this Section 4.

Y = the number of shares of Common Stock covered by this Warrant in respect of which the net issue election is made pursuant to this Section 4.

A = the Fair Market Value (defined below) of one share of Common Stock, as determined at the time the net issue election is made pursuant to this Section 4.

B = the Purchase Price in effect under this Warrant at the time the net issue election is made pursuant to this Section 4.

"Fair Market Value" of a share of Common Stock as of a particular date (the "Determination Date") shall mean the average of the closing or last reported sale prices of the Common Stock as reported on the Nasdaq National Market over the 30-day period ending five business days prior to the Determination Date; *provided, however,* that if (i) the Common Stock is neither traded on the Nasdaq National Market nor on a national securities exchange, then Fair Market Value shall be the average of the closing or last reported sale prices of the Common Stock over the 30-day period ending five business days prior to the Determination Date reflected in the over-the-counter market, as reported by the National Quotation Bureau, Inc. or any organization performing a similar function, or if closing prices are not then routinely reported for the over-the-counter market, the average of the last bid and asked prices of the Common Stock over the 30-day period ending five business days prior to the Determination Date and (ii) if there is no public market for the Common Stock, then Fair Market Value shall be determined in good faith by the Company's Board of Directors.

5. Partial Exercise. This Warrant may be exercised in part, and the Holder shall be entitled to receive a new warrant, which shall be dated as of the date of this Warrant, covering the number of shares in respect of which this Warrant shall not have been exercised.

6. Fractional Shares. In no event shall any fractional share of Common Stock be issued upon any exercise of this Warrant. If, upon exercise of this Warrant as an entirety, the Holder would, except as provided in this Section 6, be entitled to receive a fractional share of Common Stock, then the Company shall pay in lieu thereof, the Fair Market Value of such fractional share in cash.

7. Expiration Date; Automatic Exercise. Except as otherwise set forth in Section 10, this Warrant shall expire on the close of business on December 23, 2007, and shall be void thereafter.

8. Reserved Shares; Valid Issuance. The Company covenants that it will at all times from and after the date hereof reserve and keep available such number of its authorized shares of Common Stock, free from all preemptive or similar rights therein, as will be sufficient to permit the exercise of this Warrant in full into shares of Common Stock upon such exercise. The Company further covenants that such shares as may be issued pursuant to such exercise will, upon issuance, be duly and validly issued, fully paid and nonassessable and free from all taxes, liens and charges with respect to the issuance thereof.

9. Stock Splits and Dividends. If after the date hereof the Company shall subdivide the Common Stock, by split-up or otherwise, or combine the Common Stock, or issue additional shares of Common Stock in payment of a stock dividend on the Common Stock, the number of shares of Common Stock issuable on the exercise of this Warrant shall forthwith be proportionately increased in the case of a subdivision or stock dividend, or proportionately decreased in the case of a combination, and the Purchase Price shall forthwith be proportionately decreased in the case of a subdivision or stock dividend, or proportionately increased in the case of a combination.

10. Mergers and Reclassifications. If after the date hereof the Company shall enter into any Reorganization (as hereinafter defined), then, as a condition of such Reorganization, lawful provisions shall be made, and duly executed documents evidencing the same from the Company or its successor shall be delivered to the Holder, so that the Holder shall thereafter have the right to purchase, at a total price not to exceed that payable upon the exercise of this Warrant in full, the kind and amount of shares of stock and other securities and property receivable upon such Reorganization by a holder of the number of shares of Common Stock which might have been purchased by the Holder immediately prior to such Reorganization, and in any such case appropriate provisions shall be made with respect to the rights and interest of the Holder to the end that the provisions hereof (including without limitation, provisions for the adjustment of the Purchase Price and the number of shares issuable hereunder and the provisions relating to the net issue election) shall thereafter be applicable in relation to any shares of stock or other securities and property thereafter deliverable upon exercise hereof. For the purposes of this Section 10, the term "Reorganization" shall include without limitation any reclassification, capital reorganization or change of the Common Stock (other than as a result of a subdivision, combination or stock dividend provided for in Section 9 hereof), or any consolidation of the Company with, or merger of the Company into, another corporation or other business organization (other than a merger in which the Company is the surviving corporation and which does not result in any reclassification or change of the outstanding Common Stock), or any sale or conveyance to another corporation or other business organization of all or substantially all of the assets of the Company.

Notwithstanding the term of this Warrant fixed pursuant to Section 7 above and the provisions of this Section 10, the right to purchase Common Stock as granted herein shall expire, to the extent not previously exercised, immediately upon the closing of a merger or consolidation of the Company with or into another corporation when the Company is not the surviving

corporation (other than a merger or consolidation for the principal purpose of changing the domicile of the Company), and provided that any securities received in such merger or consolidation are publicly traded or the sale of all or substantially all of the Company's capital stock, properties and assets to any other person, in each case where the stockholders of the Company immediately prior to such merger, consolidation or sale of assets own (directly or indirectly) less than 50% of the voting securities of the surviving entity or purchaser of assets in such transaction (collectively, a "Merger"), except to the extent assumed by the successor corporation (or parent thereof) in connection with such Merger. In the event that any outstanding warrants to purchase equity securities of the Company are assumed, this Warrant shall also be similarly assumed.

The Company shall notify the Holder at least fifteen (15) calendar days prior to any proposed Merger, and if the Company fails to deliver such notice, then notwithstanding anything to the contrary in this Warrant, the rights to purchase the Company's Common Stock (or the shares of stock and other securities and property receivable upon such Merger by a holder of Common Stock (the *"Other Consideration"*)) shall not expire. The Holder may exercise the Warrant contingent upon the closing of the Merger. If the Merger does not close within 60 days after notice, any contingent exercise shall be void.

11. Certificate of Adjustment. Whenever the Purchase Price is adjusted, as herein provided, the Company shall promptly deliver to the Holder a certificate of the Company's Chief Financial Officer setting forth the Purchase Price after such adjustment and setting forth a brief statement of the facts requiring such adjustment.

12. Notices of Record Date, Etc. In the event of:

(a) any taking by the Company of a record of the holders of any class of securities for the purpose of determining the holders thereof who are entitled to receive any dividend or other distribution, or any right to subscribe for, purchase, sell or otherwise acquire or dispose of any shares of stock of any class or any other securities or property, or to receive any other right;

(b) any reclassification of the capital stock of the Company, capital reorganization of the Company, consolidation or merger involving the Company, or sale or conveyance of all or substantially all of its assets; or

(c) any voluntary or involuntary dissolution, liquidation or winding-up of the Company;

then in each such event the Company will provide or cause to be provided to the Holder a written notice thereof. Such notice shall be provided at least fifteen (15) calendar days prior to the date specified in such notice on which any such action is to be taken.

13. Representations, Warranties and Covenants. This Warrant is issued and delivered by the Company and accepted by each Holder on the basis of the following representations, warranties and covenants made by the Company:

(a) The Company has all necessary authority to issue, execute and deliver this Warrant and to perform its obligations hereunder. This Warrant has been duly authorized issued, executed and delivered by the Company and is the valid and binding obligation of the Company, enforceable in accordance with its terms, except as enforceability may be limited by bankruptcy, insolvency, reorganization or other similar laws of general application affecting the enforcement of Holders rights or by general equity principals or public policy concerns.

(b) The shares of Common Stock issuable upon the exercise of this Warrant have been duly authorized and reserved for issuance by the Company and, when issued in accordance with the terms hereof, will be validly issued, fully paid and nonassessable.

(c) The issuance, execution and delivery of this Warrant do not, and the issuance of the shares of Common Stock upon the exercise of this Warrant in accordance with the terms hereof will not, (i) violate or contravene the Company's Amended and Restated Certificate of Incorporation or by-laws, or any law, statute, regulation, rule, judgment or order applicable to the Company, (ii) violate, contravene or result in a breach or default under any material contract, agreement or instrument to which the Company is a party or by which the Company or any of its assets are bound or (iii) require the consent or approval of or the filing of any notice or registration with any person or entity.

(d) The shares of Common Stock issuable upon the exercise of this Warrant shall be listed for quotation on the Nasdaq National Market (or such other quotation or listing system or exchange where the Company's shares of capital stock are then quoted, listed or exchanged for public sale).

14. Amendment and Waiver. The terms of this Warrant may be amended, modified or waived only with the written consent of the party against which enforcement of the same is sought.

15. Representations and Covenants of the Holder. This Common Stock Purchase Warrant has been entered into by the Company in reliance upon the following representations and covenants of the Holder, which by its execution hereof the Holder hereby confirms:

(a) Investment Purpose. The right to acquire Common Stock or the Common Stock issuable upon exercise of the Holder's rights contained herein will be acquired for investment and not with a view to the sale or distribution of any part thereof, and the Holder has no present intention of selling or engaging in any public distribution of the same except pursuant to a registration or exemption.

(b) Accredited Investor. Holder is an "accredited investor" within the meaning of the Securities and Exchange Rule 501 of Regulation D, as presently in effect.

(c) Private Issue. The Holder understands (i) that the Common Stock issuable upon exercise of the Holder's rights contained herein is not registered under the 1933 Act or qualified under applicable state securities laws on the ground that the issuance contemplated by this Warrant will be exempt from the registration and qualifications

requirements thereof and (ii) that the Company's reliance on such exemption is predicated on the representations set forth in this Section 15.

(d) Financial Risk. The Holder has such knowledge and experience in financial and business matters as to be capable of evaluating the merits and risks of its investment and has the ability to bear the economic risks of its investment.

16. Notices, Transfers, Etc.

(a) Any notice or written communication required or permitted to be given to the Holder may be given by certified mall or delivered to the Holder at the address most recently provided by the Holder to the Company.

(b) Subject to compliance with applicable federal and state securities laws, this Warrant may be transferred by the Holder with respect to any or all of the shares purchasable hereunder. Upon surrender of this Warrant to the Company, together with the assignment notice annexed hereto duly executed, for transfer of this Warrant as an entirety by the Holder, the Company shall issue a new warrant of the same denomination to the assignee. Upon surrender of this Warrant to the Company, together with the assignment hereof properly endorsed, by the Holder for transfer with respect to a portion of the shares of Common Stock purchasable hereunder, the Company shall issue a new warrant to the assignee, in such denomination as shall be requested by the Holder hereof, and shall issue to such Holder a new warrant covering the number of shares in respect of which this Warrant shall not have been transferred.

(c) In case this Warrant shall be mutilated, lost, stolen or destroyed, the Company shall issue a new warrant of like tenor and denomination and deliver the same (i) in exchange and substitution for and upon surrender and cancellation of any mutilated Warrant or (ii) in lieu of any Warrant lost, stolen or destroyed, upon receipt of an affidavit of the Holder or other evidence reasonably satisfactory to the Company of the loss, theft or destruction of such Warrant and an indemnification of loss by the Holder in favor of the Company.

Transfer to Comply with the Securities Act of 1933. This Warrant may not be exercised and neither this Warrant nor any of the Shares, nor any interest in either, may be offered, sold, assigned, pledged, hypothecated, encumbered or in any other manner transferred or disposed of, in whole or in part, except in compliance with applicable United States federal and state securities laws and the terms and conditions hereof. Each Warrant shall bear a legend in substantially the same form as the legend set forth on the first page of this Warrant. Each certificate for Shares issued upon exercise of this Warrant, unless at the time of exercise such Shares are acquired pursuant to a registration statement that has been declared effective under the Securities Act of 1933, as amended (the "Securities Act"), and applicable blue sky laws, shall bear a legend substantially in the following form:

THE SECURITIES REPRESENTED HEREBY HAVE NOT BEEN REGISTERED UNDER THE SECURITIES ACT OF 1933, AS AMENDED (THE "ACT"), OR UNDER THE SECURITIES LAWS OF ANY STATE. THESE SECURITIES ARE SUBJECT TO RESTRICTIONS ON

TRANSFERABILITY AND RESALE AND MAY NOT BE TRANSFERRED OR RESOLD EXCEPT AS PERMITTED UNDER THE ACT AND THE APPLICABLE STATE SECURITIES LAWS, PURSUANT TO REGISTRATION OR EXEMPTION THEREFROM. THE ISSUER OF THESE SECURITIES MAY REQUIRE AN OPINION OF COUNSEL IN FORM AND SUBSTANCE SATISFACTORY TO THE ISSUER TO THE EFFECT THAT ANY PROPOSED TRANSFER OR RESALE IS IN COMPLIANCE WITH THE ACT AND ANY APPLICABLE STATE SECURITIES LAWS.

Any certificate for any Shares issued at any time in exchange or substitution for any certificate for any Shares bearing such legend (except a new certificate for any Shares issued after the acquisition of such Shares pursuant to a registration statement that has been declared effective under the Securities Act) shall also bear such legend unless, in the opinion of counsel for the Company, the Shares represented thereby need no longer be subject to the restriction contained herein. The provisions of this Section 18 shall be binding upon all subsequent holders of certificates for Shares bearing the above legend and all subsequent holders of this Warrant, if any.

18. Rights of Holder. Holder shall not, by virtue hereof, be entitled to any rights of a stockholder of the Company, either at law or equity, and the rights of Holder are limited to those expressed in this Warrant. Nothing contained in this Warrant shall be construed as conferring upon Holder hereof the right to vote or to consent or to receive notice as a stockholder of the Company on any matters or with respect to any rights whatsoever as a stockholder of the Company. No dividends or interest shall be payable or accrued in respect of this Warrant or the interest represented hereby or the Shares purchasable hereunder until, and only to the extent that, this Warrant shall have been exercised in accordance with its terms.

19. "Market Stand Off" Agreement Holder hereby agrees not sell, transfer, make any short sale of, grant any option for the purchase of, or enter into any hedging or similar transaction with the same economic effect as a sale of, any Common Stock (or other securities) of the Company held by Holder for a period specified by a representative of the underwriters of Common Stock (or other securities) of the Company not to exceed ninety (90) days following the effective date of a registration statement of the Company filed under the Securities Act; *provided* that all officers and directors of the Company and each holder of that number of shares of Common Stock equal to or greater than the number of Shares then issuable upon exercise of this Warrant enter into similar agreements.

20. No Impairment. The Company will not, by amendment of its Certificate or through any reclassification, capital reorganization, consolidation, merger, sale or conveyance of assets, dissolution, liquidation, issue or sale of securities or any other voluntary action, avoid or seek to avoid the observance of performance of any of the terms of this Warrant, but will at all times in good faith assist in the carrying out of all such terms and in the taking of all such action as may be necessary or appropriate in order to protect the rights of the Holder.

21. Governing Law. The provisions and terms of this Warrant shall be governed by and construed in accordance with the internal laws of the State of California.

22. Successors and Assigns. This Warrant shall be binding upon the Company's successors and assigns and shall inure to the benefit of the Holder's successors, legal representatives and permitted assigns.

23. Business Days. If the last or appointed day for the taking of any action required or the expiration of any rights granted herein shall be a Saturday or Sunday or a legal holiday in California, then such action may be taken or right may be exercised on the next succeeding day which is not a Saturday or Sunday or such a legal holiday.

IN WITNESS WHEREOF, the Company has duly caused this Warrant to be signed by its duly authorized officer and to be dated as of the date first written above.

Company:

RIGEL PHARMACEUTICALS, INC.

By: _____
James M. Gower
Chief Executive Officer

SUBSCRIPTION

To: _____ Date: _____

The undersigned hereby subscribes for _____ shares of Common Stock covered by this Warrant. The certificate(s) for such shares shall be issued in the name of the undersigned or as otherwise indicated below:

_____
Signature

_____
Name for Registration

_____
Mailing Address

NET ISSUE ELECTION NOTICE

To: _____ Date: _____

The undersigned hereby elects under Section 4 to surrender the right to purchase _____ shares of Common Stock pursuant to this Warrant. The certificate(s) for such shares issuable upon such net issue election shall be issued in the name of the undersigned or as otherwise indicated below:

_____
Signature

_____
Name for Registration

_____
Mailing Address

ASSIGNMENT

For value received _____ hereby sells, assigns and transfers unto

_____

_____
[Please print or type the name and address of Assignee]

_____

the within Warrant, and does hereby irrevocably constitute and appoint _____ _____ its attorney to transfer the within Warrant on the books of the within named Company with full power of substitution on the premises.

DATED: _____ _____

IN THE PRESENCE OF:

_____

RIGEL PHARMACEUTICALS, INC.

2000 EQUITY INCENTIVE PLAN

ADOPTED JANUARY 27, 2000
APPROVED BY STOCKHOLDERS MARCH 15, 2000
AMENDED DECEMBER 13, 2002
TERMINATION DATE: JANUARY 26, 2010

1. PURPOSES.

(a) The Plan is an amendment and restatement of, and is intended to supersede and replace, the Company's 1997 Stock Option Plan.

(b) The persons eligible to receive Stock Awards are the Employees, Directors and Consultants of the Company and its Affiliates.

(c) The purpose of the Plan is to provide a means by which eligible recipients of Stock Awards may be given an opportunity to benefit from increases in value of the Common Stock through the granting of the following Stock Awards: (i) Incentive Stock Options, (ii) Nonstatutory Stock Options, (iii) stock bonuses and (iv) rights to acquire restricted stock.

(d) The Company, by means of the Plan, seeks to retain the services of the group of persons eligible to receive Stock Awards, to secure and retain the services of new members of this group and to provide incentives for such persons to exert maximum efforts for the success of the Company and its Affiliates.

2. DEFINITIONS.

(a) ***"Affiliate"*** means any parent corporation or subsidiary corporation of the Company, whether now or hereafter existing, as those terms are defined in Sections 424(e) and (f), respectively, of the Code.

(b) ***"Board"*** means the Board of Directors of the Company.

(c) ***"Code"*** means the Internal Revenue Code of 1986, as amended.

(d) ***"Committee"*** means a committee of one or more members of the Board appointed by the Board in accordance with subsection 3(c).

(e) ***"Common Stock"*** means the common stock of the Company.

(f) ***"Company"*** means Rigel Pharmaceuticals, Inc., a Delaware corporation.

(g) ***"Consultant"*** means any person, including an advisor, (i) engaged by the Company or an Affiliate to render consulting or advisory services and who is compensated for such services or (ii) who is a member of the Board of Directors of an Affiliate. However, the

term "Consultant" shall not include either Directors who are not compensated by the Company for their services as Directors or Directors who are merely paid a director's fee by the Company for their services as Directors.

(h) ***"Continuous Service"*** means that the Participant's service with the Company or an Affiliate, whether as an Employee, Director or Consultant, is not interrupted or terminated. The Participant's Continuous Service shall not be deemed to have terminated merely because of a change in the capacity in which the Participant renders service to the Company or an Affiliate as an Employee, Consultant or Director or a change in the entity for which the Participant renders such service, provided that there is no interruption or termination of the Participant's service. For example, a change in status without interruption from an Employee of the Company to a Consultant of an Affiliate or a Director will not constitute an interruption of Continuous Service. The Board or the chief executive officer of the Company, in that party's sole discretion, may determine whether Continuous Service shall be considered interrupted in the case of any leave of absence approved by that party, including sick leave, military leave or any other personal leave.

(i) ***"Covered Employee"*** means the chief executive officer and the four (4) other highest compensated officers of the Company for whom total compensation is required to be reported to Stockholders under the Exchange Act, as determined for purposes of Section 162(m) of the Code.

(j) ***"Director"*** means a member of the Board of Directors of the Company.

(k) ***"Disability"*** means the permanent and total disability of a person within the meaning of Section 22(e)(3) of the Code.

(l) ***"Employee"*** means any person employed by the Company or an Affiliate. Mere service as a Director or payment of a director's fee by the Company or an Affiliate shall not be sufficient to constitute "employment" by the Company or an Affiliate.

(m) ***"Exchange Act"*** means the Securities Exchange Act of 1934, as amended.

(n) **"*Fair Market Value"*** means, as of any date, the value of the Common Stock determined as follows:

(i) If the Common Stock is listed on any established stock exchange or traded on the Nasdaq National Market or the Nasdaq SmallCap Market, the Fair Market Value of a share of Common Stock shall be the closing sales price for such stock (or the closing bid, if no sales were reported) as quoted on such exchange or market (or the exchange or market with the greatest volume of trading in the Common Stock) on the last market trading day prior to the day of determination, as reported in *The Wall Street Journal* or such other source as the Board deems reliable.

(ii) In the absence of such markets for the Common Stock, the Fair Market Value shall be determined in good faith by the Board.

(o) ***"Incentive Stock Option"*** means an Option intended to qualify as an incentive stock option within the meaning of Section 422 of the Code and the regulations promulgated thereunder.

(p) ***"Non-Employee Director"*** means a Director who either (i) is not a current Employee or Officer of the Company or its parent or a subsidiary, does not receive compensation (directly or indirectly) from the Company or its parent or a subsidiary for services rendered as a consultant or in any capacity other than as a Director (except for an amount as to which disclosure would not be required under Item 404(a) of Regulation S-K promulgated pursuant to the Securities Act ("Regulation S-K")), does not possess an interest in any other transaction as to which disclosure would be required under Item 404(a) of Regulation S-K and is not engaged in a business relationship as to which disclosure would be required under Item 404(b) of Regulation S-K; or (ii) is otherwise considered a "non-employee director" for purposes of Rule 16b-3.

(q) ***"Nonstatutory Stock Option"*** means an Option not intended to qualify as an Incentive Stock Option.

(r) ***"Officer"*** means a person who is an officer of the Company within the meaning of Section 16 of the Exchange Act and the rules and regulations promulgated thereunder.

(s) ***"Option"*** means an Incentive Stock Option or a Nonstatutory Stock Option granted pursuant to the Plan.

(t) ***"Option Agreement"*** means a written agreement between the Company and an Optionholder evidencing the terms and conditions of an individual Option grant. Each Option Agreement shall be subject to the terms and conditions of the Plan.

(u) ***"Optionholder"*** means a person to whom an Option is granted pursuant to the Plan or, if applicable, such other person who holds an outstanding Option.

(v) ***"Outside Director"*** means a Director who either (i) is not a current employee of the Company or an "affiliated corporation" (within the meaning of Treasury Regulations promulgated under Section 162(m) of the Code), is not a former employee of the Company or an "affiliated corporation" receiving compensation for prior services (other than benefits under a tax qualified pension plan), was not an officer of the Company or an "affiliated corporation" at any time and is not currently receiving direct or indirect remuneration from the Company or an "affiliated corporation" for services in any capacity other than as a Director or (ii) is otherwise considered an "outside director" for purposes of Section 162(m) of the Code.

(w) ***"Participant"*** means a person to whom a Stock Award is granted pursuant to the Plan or, if applicable, such other person who holds an outstanding Stock Award.

(x) ***"Plan"*** means this Rigel Pharmaceuticals, Inc. 2000 Equity Incentive Plan.

(y) ***"Rule 16b-3"*** means Rule 16b-3 promulgated under the Exchange Act or any successor to Rule 16b-3, as in effect from time to time.

(z) ***"Securities Act"*** means the Securities Act of 1933, as amended.

(aa) ***"Stock Award"*** means any right granted under the Plan, including an Option, a stock bonus and a right to acquire restricted stock.

(bb) ***"Stock Award Agreement"*** means a written agreement between the Company and a holder of a Stock Award evidencing the terms and conditions of an individual Stock Award grant. Each Stock Award Agreement shall be subject to the terms and conditions of the Plan.

(cc) ***"Ten Percent Stockholder"*** means a person who owns (or is deemed to own pursuant to Section 424(d) of the Code) stock possessing more than ten percent (10%) of the total combined voting power of all classes of stock of the Company or of any of its Affiliates.

3. ADMINISTRATION.

(a) **Administration by Board.** The Board shall administer the Plan unless and until the Board delegates administration to a Committee, as provided in subsection 3(c).

(b) **Powers of Board.** The Board shall have the power, subject to, and within the limitations of, the express provisions of the Plan:

(i) To determine from time to time which of the persons eligible under the Plan shall be granted Stock Awards; when and how each Stock Award shall be granted; what type or combination of types of Stock Award shall be granted; the provisions of each Stock Award granted (which need not be identical), including the time or times when a person shall be permitted to receive Common Stock pursuant to a Stock Award; and the number of shares of Common Stock with respect to which a Stock Award shall be granted to each such person.

(ii) To construe and interpret the Plan and Stock Awards granted under it, and to establish, amend and revoke rules and regulations for its administration. The Board, in the exercise of this power, may correct any defect, omission or inconsistency in the Plan or in any Stock Award Agreement, in a manner and to the extent it shall deem necessary or expedient to make the Plan fully effective.

(iii) To effect, at any time and from time to time, with the consent of any adversely affected Optionholder, (1) the reduction of the exercise price of any outstanding Option under the Plan, (2) the cancellation of any outstanding Option under the Plan and the grant in substitution therefor of (A) a new Option under the Plan covering the same or a different number of shares of Common Stock, (B) a stock bonus, (C) the right to acquire restricted stock, and/or (D) cash, or (3) any other action that is

treated as a repricing under generally accepted accounting principles.

(iv) To amend the Plan or a Stock Award as provided in Section 12.

(v) To terminate or suspend the Plan as provided in Section 13.

(vi) Generally, to exercise such powers and to perform such acts as the Board deems necessary or expedient to promote the best interests of the Company which are not in conflict with the provisions of the Plan.

(c) Delegation to Committee.

(i) General. The Board may delegate administration of the Plan to a Committee or Committees of one (1) or more members of the Board, and the term "Committee" shall apply to any person or persons to whom such authority has been delegated. If administration is delegated to a Committee, the Committee shall have, in connection with the administration of the Plan, the powers theretofore possessed by the Board, including the power to delegate to a subcommittee any of the administrative powers the Committee is authorized to exercise (and references in this Plan to the Board shall thereafter be to the Committee or subcommittee), subject, however, to such resolutions, not inconsistent with the provisions of the Plan, as may be adopted from time to time by the Board. The Board may abolish the Committee at any time and revest in the Board the administration of the Plan.

(ii) Committee Composition when Common Stock is Publicly Traded. At such time as the Common Stock is publicly traded, in the discretion of the Board, a Committee may consist solely of two or more Outside Directors, in accordance with Section 162(m) of the Code, and/or solely of two or more Non-Employee Directors, in accordance with Rule 16b-3. Within the scope of such authority, the Board or the Committee may (1) delegate to a committee of one or more members of the Board who are not Outside Directors the authority to grant Stock Awards to eligible persons who are either (a) not then Covered Employees and are not expected to be Covered Employees at the time of recognition of income resulting from such Stock Award or (b) not persons with respect to whom the Company wishes to comply with Section 162(m) of the Code and/or) (2) delegate to a committee of one or more members of the Board who are not Non-Employee Directors the authority to grant Stock Awards to eligible persons who are not then subject to Section 16 of the Exchange Act.

(d) Effect of Board's Decision. All determinations, interpretations and constructions made by the Board in good faith shall not be subject to review by any person and shall be final, binding and conclusive on all persons.

4. SHARES SUBJECT TO THE PLAN.

(a) Share Reserve. Subject to the provisions of Section 11 relating to adjustments upon changes in Common Stock, the Common Stock that may be issued pursuant to Stock Awards shall not exceed in the aggregate nine million five hundred twenty-five thousand (9,525,000) shares of Common Stock.

(b) Reversion of Shares to the Share Reserve. If any Stock Award shall for any reason expire or otherwise terminate, in whole or in part, without having been exercised in full, the shares of Common Stock not acquired under such Stock Award shall revert to and again become available for issuance under the Plan.

(c) Source of Shares. The shares of Common Stock subject to the Plan may be unissued shares or reacquired shares, bought on the market or otherwise.

5. ELIGIBILITY.

(a) Eligibility for Specific Stock Awards. Incentive Stock Options may be granted only to Employees. Stock Awards other than Incentive Stock Options may be granted to Employees, Directors and Consultants.

(b) Ten Percent Stockholders. A Ten Percent Stockholder shall not be granted an Incentive Stock Option unless the exercise price of such Option is at least one hundred ten percent (110%) of the Fair Market Value of the Common Stock at the date of grant and the Option is not exercisable after the expiration of five (5) years from the date of grant.

(c) Section 162(m) Limitation. Subject to the provisions of Section 11 relating to adjustments upon changes in the shares of Common Stock, no Employee shall be eligible to be granted Options covering more than one million five hundred thousand (1,500,000) shares of Common Stock during any calendar year.

(d) Consultants.

(i) A Consultant shall not be eligible for the grant of a Stock Award if, at the time of grant, a Form S-8 Registration Statement under the Securities Act ("Form S-8") is not available to register either the offer or the sale of the Company's securities to such Consultant because of the nature of the services that the Consultant is providing to the Company, or because the Consultant is not a natural person, or as otherwise provided by the rules governing the use of Form S-8, unless the Company determines both (i) that such grant (A) shall be registered in another manner under the Securities Act (*e.g.,* on a Form S-3 Registration Statement) or (B) does not require registration under the Securities Act in order to comply with the requirements of the Securities Act, if applicable, and (ii) that such grant complies with the securities laws of all other relevant jurisdictions.

(ii) Form S-8 generally is available to consultants and advisors only if (i) they are natural persons; (ii) they provide bona fide services to the issuer, its parents, its majority-owned subsidiaries or majority-owned subsidiaries of the issuer's parent; and (iii) the services are not in connection with the offer or sale of securities in a capital-raising transaction, and do not directly or indirectly promote or maintain a market for the issuer's securities.

6. OPTION PROVISIONS.

Each Option shall be in such form and shall contain such terms and conditions as the Board shall deem appropriate. All Options shall be separately designated Incentive Stock Options or Nonstatutory Stock Options at the time of grant, and, if certificates are issued, a separate certificate or certificates will be issued for shares of Common Stock purchased on exercise of each type of Option. The provisions of separate Options need not be identical, but each Option shall include (through incorporation of provisions hereof by reference in the Option or otherwise) the substance of each of the following provisions:

(a) Term. Subject to the provisions of subsection 5(b) regarding Ten Percent Stockholders, no Incentive Stock Option shall be exercisable after the expiration of ten (10) years from the date it was granted.

(b) Exercise Price of an Incentive Stock Option. Subject to the provisions of subsection 5(b) regarding Ten Percent Stockholders, the exercise price of each Incentive Stock Option shall be not less than one hundred percent (100%) of the Fair Market Value of the Common Stock subject to the Option on the date the Option is granted. Notwithstanding the foregoing, an Incentive Stock Option may be granted with an exercise price lower than that set forth in the preceding sentence if such Option is granted pursuant to an assumption or substitution for another option in a manner satisfying the provisions of Section 424(a) of the Code.

(c) Exercise Price of a Nonstatutory Stock Option. The exercise price of each Nonstatutory Stock Option shall be not less than eighty-five percent (85%) of the Fair Market Value of the Common Stock subject to the Option on the date the Option is granted. Notwithstanding the foregoing, a Nonstatutory Stock Option may be granted with an exercise price lower than that set forth in the preceding sentence if such Option is granted pursuant to an assumption or substitution for another option in a manner satisfying the provisions of Section 424(a) of the Code.

(d) Consideration. The purchase price of Common Stock acquired pursuant to an Option shall be paid, to the extent permitted by applicable statutes and regulations, either (i) in cash at the time the Option is exercised or (ii) at the discretion of the Board (1) by delivery to the Company of other Common Stock, (2) according to a deferred payment or other similar arrangement with the Optionholder or (3) in any other form of legal consideration that may be acceptable to the Board. Unless otherwise specifically provided in the Option, the purchase price of Common Stock acquired pursuant to an Option that is paid by delivery to the Company of other Common Stock acquired, directly or indirectly from the Company, shall be paid only by shares of the Common Stock of the Company that have been held for more than six (6) months (or such longer or shorter period of time required to avoid a charge to the Company's earnings for financial accounting purposes). At any time that the Company is incorporated in Delaware, payment of the Common Stock's "par value," as defined in the Delaware General Corporation Law, shall not be made by deferred payment.

In the case of any deferred payment arrangement, interest shall be compounded at least annually and shall be charged at the minimum rate of interest necessary to avoid the treatment as interest, under any applicable provisions of the Code, of any amounts other than amounts stated to be interest under the deferred payment arrangement.

(e) Transferability of an Incentive Stock Option. An Incentive Stock Option shall not be transferable except by will or by the laws of descent and distribution and shall be exercisable during the lifetime of the Optionholder only by the Optionholder. Notwithstanding the foregoing, the Optionholder may, by delivering written notice to the Company, in a form satisfactory to the Company, designate a third party who, in the event of the death of the Optionholder, shall thereafter be entitled to exercise the Option.

(f) Transferability of a Nonstatutory Stock Option. A Nonstatutory Stock Option shall be transferable to the extent provided in the Option Agreement. If the Nonstatutory Stock Option does not provide for transferability, then the Nonstatutory Stock Option shall not be transferable except by will or by the laws of descent and distribution and shall be exercisable

during the lifetime of the Optionholder only by the Optionholder. Notwithstanding the foregoing, the Optionholder may, by delivering written notice to the Company, in a form satisfactory to the Company, designate a third party who, in the event of the death of the Optionholder, shall thereafter be entitled to exercise the Option.

(g) Vesting Generally. The total number of shares of Common Stock subject to an Option may, but need not, vest and therefore become exercisable in periodic installments that may, but need not, be equal. The Option may be subject to such other terms and conditions on the time or times when it may be exercised (which may be based on performance or other criteria) as the Board may deem appropriate. The vesting provisions of individual Options may vary. The provisions of this subsection 6(g) are subject to any Option provisions governing the minimum number of shares of Common Stock as to which an Option may be exercised.

(h) Termination of Continuous Service. In the event an Optionholder's Continuous Service terminates (other than upon the Optionholder's death or Disability), the Optionholder may exercise his or her Option (to the extent that the Optionholder was entitled to exercise such Option as of the date of termination) but only within such period of time ending on the earlier of (i) the date three (3) months following the termination of the Optionholder's Continuous Service (or such longer or shorter period specified in the Option Agreement), or (ii) the expiration of the term of the Option as set forth in the Option Agreement. If, after termination, the Optionholder does not exercise his or her Option within the time specified in the Option Agreement, the Option shall terminate.

(i) Extension of Termination Date. An Optionholder's Option Agreement may also provide that if the exercise of the Option following the termination of the Optionholder's Continuous Service (other than upon the Optionholder's death or Disability) would be prohibited at any time solely because the issuance of shares of Common Stock would violate the registration requirements under the Securities Act, then the Option shall terminate on the earlier of (i) the expiration of the term of the Option set forth in the Option Agreement or (ii) the expiration of a period of three (3) months after the termination of the Optionholder's Continuous Service during which the exercise of the Option would not be in violation of such registration requirements.

(j) Disability of Optionholder. In the event that an Optionholder's Continuous Service terminates as a result of the Optionholder's Disability, the Optionholder may exercise his or her Option (to the extent that the Optionholder was entitled to exercise such Option as of the date of termination), but only within such period of time ending on the earlier of (i) the date twelve (12) months following such termination (or such longer or shorter period specified in the Option Agreement) or (ii) the expiration of the term of the Option as set forth in the Option Agreement. If, after termination, the Optionholder does not exercise his or her Option within the time specified herein, the Option shall terminate.

(k) Death of Optionholder. In the event (i) an Optionholder's Continuous Service terminates as a result of the Optionholder's death or (ii) the Optionholder dies within the period (if any) specified in the Option Agreement after the termination of the Optionholder's Continuous Service for a reason other than death, then the Option

may be exercised (to the extent the Optionholder was entitled to exercise such Option as of the date of death) by the

Optionholder's estate, by a person who acquired the right to exercise the Option by bequest or inheritance or by a person designated to exercise the Option upon the Optionholder's death pursuant to subsection 6(e) or 6(f), but only within the period ending on the earlier of (1) the date eighteen (18) months following the date of death (or such longer or shorter period specified in the Option Agreement) or (2) the expiration of the term of such Option as set forth in the Option Agreement. If, after death, the Option is not exercised within the time specified herein, the Option shall terminate.

(l) Early Exercise. The Option may, but need not, include a provision whereby the Optionholder may elect at any time before the Optionholder's Continuous Service terminates to exercise the Option as to any part or all of the shares of Common Stock subject to the Option prior to the full vesting of the Option. Any unvested shares of Common Stock so purchased may be subject to a repurchase option in favor of the Company or to any other restriction the Board determines to be appropriate. The Company will not exercise its repurchase option until at least six (6) months (or such longer or shorter period of time required to avoid a charge to earnings for financial accounting purposes) have elapsed following exercise of the Option unless the Board otherwise specifically provides in the Option.

(m) Re-Load Options.

(i) Without in any way limiting the authority of the Board to make or not to make grants of Options hereunder, the Board shall have the authority (but not an obligation) to include as part of any Option Agreement a provision entitling the Optionholder to a further Option (a "Re-Load Option") in the event the Optionholder exercises the Option evidenced by the Option Agreement, in whole or in part, by surrendering other shares of Common Stock in accordance with this Plan and the terms and conditions of the Option Agreement. Unless otherwise specifically provided in the Option, the Optionholder shall not surrender shares of Common Stock acquired, directly or indirectly from the Company, unless such shares have been held for more than six (6) months (or such longer or shorter period of time required to avoid a charge to earnings for financial accounting purposes).

(ii) Any such Re-Load Option shall (1) provide for a number of shares of Common Stock equal to the number of shares of Common Stock surrendered as part or all of the exercise price of such Option; (2) have an expiration date which is the same as the expiration date of the Option the exercise of which gave rise to such Re-Load Option; and (3) have an exercise price which is equal to one hundred percent (100%) of the Fair Market Value of the Common Stock subject to the Re-Load Option on the date of exercise of the original Option. Notwithstanding the foregoing, a Re-Load Option shall be subject to the same exercise price and term provisions heretofore described for Options under the Plan.

(iii) Any such Re-Load Option may be an Incentive Stock Option or a Nonstatutory Stock Option, as the Board may designate at the time of the grant of the original Option; *provided, however,* that the designation of any Re-Load Option as an Incentive Stock Option shall be subject to the one hundred thousand dollar ($100,000) annual limitation on the exercisability of Incentive Stock Options described in subsection 10(d) and in Section 422(d) of the Code. There shall be no Re-Load Options on a Re-Load Option. Any such Re-Load Option shall be subject to the availability of sufficient shares of Common Stock under subsection 4(a)

and the "Section 162(m) Limitation" on the grants of Options under subsection 5(c) and shall be subject to such other terms and conditions as the Board may determine which are not inconsistent with the express provisions of the Plan regarding the terms of Options.

7. PROVISIONS OF STOCK AWARDS OTHER THAN OPTIONS.

(a) Stock Bonus Awards. Each stock bonus agreement shall be in such form and shall contain such terms and conditions as the Board shall deem appropriate. The terms and conditions of stock bonus agreements may change from time to time, and the terms and conditions of separate stock bonus agreements need not be identical, but each stock bonus agreement shall include (through incorporation of provisions hereof by reference in the agreement or otherwise) the substance of each of the following provisions:

(i) Consideration. A stock bonus may be awarded in consideration for past services actually rendered to the Company or an Affiliate for its benefit.

(ii) Vesting. Shares of Common Stock awarded under the stock bonus agreement may, but need not, be subject to a share repurchase option in favor of the Company in accordance with a vesting schedule to be determined by the Board.

(iii) Termination of Participant's Continuous Service. In the event a Participant's Continuous Service terminates, the Company may reacquire any or all of the shares of Common Stock held by the Participant which have not vested as of the date of termination under the terms of the stock bonus agreement.

(iv) Transferability. Rights to acquire shares of Common Stock under the stock bonus agreement shall be transferable by the Participant only upon such terms and conditions as are set forth in the stock bonus agreement, as the Board shall determine in its discretion, so long as Common Stock awarded under the stock bonus agreement remains subject to the terms of the stock bonus agreement.

(b) Restricted Stock Awards. Each restricted stock purchase agreement shall be in such form and shall contain such terms and conditions as the Board shall deem appropriate. The terms and conditions of the restricted stock purchase agreements may change from time to time, and the terms and conditions of separate restricted stock purchase agreements need not be identical, but each restricted stock purchase agreement shall include (through incorporation of provisions hereof by reference in the agreement or otherwise) the substance of each of the following provisions:

(i) Purchase Price. The purchase price under each restricted stock purchase agreement shall be such amount as the Board shall determine and designate in such restricted stock purchase agreement. The purchase price shall not be less than eighty-five percent (85%) of the Common Stock's Fair Market Value on the date such award is made or at the time the purchase is consummated.

(ii) Consideration. The purchase price of Common Stock acquired pursuant to the restricted stock purchase agreement shall be paid either: (i) in cash at the time of purchase; (ii) at the discretion of the Board, according to a deferred payment or other similar

arrangement with the Participant; or (iii) in any other form of legal consideration that may be acceptable to the Board in its discretion*provided, however,* that at any time that the Company is incorporated in Delaware, then payment of the Common Stock's "par value," as defined in the Delaware General Corporation Law, shall not be made by deferred payment.

(iii) Vesting. Shares of Common Stock acquired under the restricted stock purchase agreement may, but need not, be subject to a share repurchase option in favor of the Company in accordance with a vesting schedule to be determined by the Board.

(iv) Termination of Participant's Continuous Service. In the event a Participant's Continuous Service terminates, the Company may repurchase or otherwise reacquire any or all of the shares of Common Stock held by the Participant which have not vested as of the date of termination under the terms of the restricted stock purchase agreement.

(v) Transferability. Rights to acquire shares of Common Stock under the restricted stock purchase agreement shall be transferable by the Participant only upon such terms and conditions as are set forth in the restricted stock purchase agreement, as the Board shall determine in its discretion, so long as Common Stock awarded under the restricted stock purchase agreement remains subject to the terms of the restricted stock purchase agreement.

8. COVENANTS OF THE COMPANY.

(a) Availability of Shares. During the terms of the Stock Awards, the Company shall keep available at all times the number of shares of Common Stock required to satisfy such Stock Awards.

(b) Securities Law Compliance. The Company shall seek to obtain from each regulatory commission or agency having jurisdiction over the Plan such authority as may be required to grant Stock Awards and to issue and sell shares of Common Stock upon exercise of the Stock Awards; *provided, however,* that this undertaking shall not require the Company to register under the Securities Act the Plan, any Stock Award or any Common Stock issued or issuable pursuant to any such Stock Award. If, after reasonable efforts, the Company is unable to obtain from any such regulatory commission or agency the authority which counsel for the Company deems necessary for the lawful issuance and sale of Common Stock under the Plan, the Company shall be relieved from any liability for failure to issue and sell Common Stock upon exercise of such Stock Awards unless and until such authority is obtained.

9. USE OF PROCEEDS FROM STOCK.

Proceeds from the sale of Common Stock pursuant to Stock Awards shall constitute general funds of the Company.

10. MISCELLANEOUS.

(a) Acceleration of Exercisability and Vesting. The Board shall have the power to accelerate the time at which a Stock Award may first be exercised or the time during which a Stock Award or any part thereof will vest in accordance with the Plan, notwithstanding the

provisions in the Stock Award stating the time at which it may first be exercised or the time during which it will vest.

(b) Stockholder Rights. No Participant shall be deemed to be the holder of, or to have any of the rights of a holder with respect to, any shares of Common Stock subject to such Stock Award unless and until such Participant has satisfied all requirements for exercise of the Stock Award pursuant to its terms.

(c) No Employment or other Service Rights. Nothing in the Plan or any instrument executed or Stock Award granted pursuant thereto shall confer upon any Participant any right to continue to serve the Company or an Affiliate in the capacity in effect at the time the Stock Award was granted or shall affect the right of the Company or an Affiliate to terminate (i) the employment of an Employee with or without notice and with or without cause, (ii) the service of a Consultant pursuant to the terms of such Consultant's agreement with the Company or an Affiliate or (iii) the service of a Director pursuant to the Bylaws of the Company or an Affiliate, and any applicable provisions of the corporate law of the state in which the Company or the Affiliate is incorporated, as the case may be.

(d) Incentive Stock Option $100,000 Limitation. To the extent that the aggregate Fair Market Value (determined at the time of grant) of Common Stock with respect to which Incentive Stock Options are exercisable for the first time by any Optionholder during any calendar year (under all plans of the Company and its Affiliates) exceeds one hundred thousand dollars ($100,000), the Options or portions thereof which exceed such limit (according to the order in which they were granted) shall be treated as Nonstatutory Stock Options.

(e) Investment Assurances. The Company may require a Participant, as a condition of exercising or acquiring Common Stock under any Stock Award, (i) to give written assurances satisfactory to the Company as to the Participant's knowledge and experience in financial and business matters and/or to employ a purchaser representative reasonably satisfactory to the Company who is knowledgeable and experienced in financial and business matters and that he or she is capable of evaluating, alone or together with the purchaser representative, the merits and risks of exercising the Stock Award; and (ii) to give written assurances satisfactory to the Company stating that the Participant is acquiring Common Stock subject to the Stock Award for the Participant's own account and not with any present intention of selling or otherwise distributing the Common Stock. The foregoing requirements, and any assurances given pursuant to such requirements, shall be inoperative if (1) the issuance of the shares of Common Stock upon the exercise or acquisition of Common Stock under the Stock Award has been registered under a then currently effective registration statement under the Securities Act or (2) as to any particular requirement, a determination is made by counsel for the Company that such requirement need not be met in the circumstances under the then applicable securities laws. The Company may, upon advice of counsel to the Company, place legends on stock certificates issued under the Plan as such counsel deems necessary or appropriate in order to comply with applicable securities laws, including, but not limited to, legends restricting the transfer of the Common Stock.

(f) Withholding Obligations. To the extent provided by the terms of a Stock Award Agreement, the Participant may satisfy any federal, state or local tax withholding obligation

relating to the exercise or acquisition of Common Stock under a Stock Award by any of the following means (in addition to the Company's right to withhold from any compensation paid to the Participant by the Company) or by a combination of such means: (i) tendering a cash payment; (ii) authorizing the Company to withhold shares of Common Stock from the shares of Common Stock otherwise issuable to the Participant as a result of the exercise or acquisition of Common Stock under the Stock Award, *provided, however,* that no shares of Common Stock are withheld with a value exceeding the minimum amount of tax required to be withheld by law; or (iii) delivering to the Company owned and unencumbered shares of Common Stock of the Company that have been held for more than six (6) months (or such longer or shorter period of time required to avoid a charge to the Company's earnings for financial accounting purposes).

11. ADJUSTMENTS UPON CHANGES IN STOCK.

(a) Capitalization Adjustments. If any change is made in the Common Stock subject to the Plan, or subject to any Stock Award, without the receipt of consideration by the Company (through merger, consolidation, reorganization, recapitalization, reincorporation, stock dividend, dividend in property other than cash, stock split, liquidating dividend, combination of shares, exchange of shares, change in corporate structure or other transaction not involving the receipt of consideration by the Company), the Plan will be appropriately adjusted in the class(es) and maximum number of securities subject to the Plan pursuant to subsection 4(a) and the maximum number of securities subject to award to any person pursuant to subsection 5(c), and the outstanding Stock Awards will be appropriately adjusted in the class(es) and number of securities and price per share of Common Stock subject to such outstanding Stock Awards. The Board shall make such adjustments, and its determination shall be final, binding and conclusive. (The conversion of any convertible securities of the Company shall not be treated as a transaction "without receipt of consideration" by the Company.)

(b) Dissolution or Liquidation. In the event of a dissolution or liquidation of the Company, then all outstanding Stock Awards shall terminate immediately prior to such event. Notwithstanding the foregoing, Options granted under the 1997 Stock Option Plan shall be subject to Section 11(c) below in the event of a dissolution or liquidation of the Company.

(c) Change in Control. In the event of (i) a sale, lease or other disposition of all or substantially all of the securities or assets of the Company, (ii) a merger or consolidation in which the Company is not the surviving corporation or (iii) a reverse merger in which the Company is the surviving corporation but the shares of Common Stock outstanding immediately preceding the merger are converted by virtue of the merger into other property, whether in the form of securities, cash or otherwise, then any surviving corporation or acquiring corporation may assume any Stock Awards outstanding under the Plan or may substitute similar stock awards (including an award to acquire the same consideration paid to the Stockholders in the transaction described in this subsection 11(c)) for those outstanding under the Plan. In the event any surviving corporation or acquiring corporation does not assume such Stock Awards or substitute similar stock awards for those outstanding under the Plan, then with respect to Stock Awards held by Participants whose Continuous Service has not terminated, the vesting of such Stock Awards (and, if applicable, the time during which such Stock Awards may be exercised) shall be accelerated in full, and the Stock Awards shall terminate if not exercised (if applicable)

at or prior to such event. With respect to any other Stock Awards outstanding under the Plan, such Stock Awards shall terminate if not exercised (if applicable) prior to such event.

12. AMENDMENT OF THE PLAN AND STOCK AWARDS.

(a) Amendment of Plan. The Board at any time, and from time to time, may amend the Plan. However, except as provided in Section 11 relating to adjustments upon changes in Common Stock, no amendment shall be effective unless approved by the Stockholders of the Company to the extent Stockholder approval is necessary to satisfy the requirements of Section 422 of the Code, Rule 16b-3 or any Nasdaq or securities exchange listing requirements.

(b) Stockholder Approval. The Board may, in its sole discretion, submit any other amendment to the Plan for Stockholder approval, including, but not limited to, amendments to the Plan intended to satisfy the requirements of Section 162(m) of the Code and the regulations thereunder regarding the exclusion of performance-based compensation from the limit on corporate deductibility of compensation paid to certain executive officers.

(c) Contemplated Amendments. It is expressly contemplated that the Board may amend the Plan in any respect the Board deems necessary or advisable to provide eligible Employees with the maximum benefits provided or to be provided under the provisions of the Code and the regulations promulgated thereunder relating to Incentive Stock Options and/or to bring the Plan and/or Incentive Stock Options granted under it into compliance therewith.

(d) No Impairment of Rights. Rights under any Stock Award granted before amendment of the Plan shall not be impaired by any amendment of the Plan unless (i) the Company requests the consent of the Participant and (ii) the Participant consents in writing.

(e) Amendment of Stock Awards. The Board at any time, and from time to time, may amend the terms of any one or more Stock Awards; *provided, however,* that the rights under any Stock Award shall not be impaired by any such amendment unless (i) the Company requests the consent of the Participant and (ii) the Participant consents in writing.

13. TERMINATION OR SUSPENSION OF THE PLAN.

(a) Plan Term. The Board may suspend or terminate the Plan at any time. Unless sooner terminated, the Plan shall terminate on the day before the tenth (10th) anniversary of the date the Plan is approved by the stockholders of the Company. No Stock Awards may be granted under the Plan while the Plan is suspended or after it is terminated.

(b) No Impairment of Rights. Suspension or termination of the Plan shall not impair rights and obligations under any Stock Award granted while the Plan is in effect except with the written consent of the Participant.

14. EFFECTIVE DATE OF PLAN.

The Plan shall become effective upon its adoption by the Board, but no Stock Award shall be exercised (or, in the case of a stock bonus, shall be granted) unless and until the Plan has

been approved by the Stockholders of the Company, which approval shall be within twelve (12) months before or after the date the Plan is adopted by the Board.

15. CHOICE OF LAW.

The law of the State of Delaware shall govern all questions concerning the construction, validity and interpretation of this Plan, without regard to such state's conflict of laws rules.

Exhibit 10.20

RIGEL PHARMACEUTICALS, INC.

2001 NON-OFFICER EQUITY INCENTIVE PLAN

ADOPTED JULY 19, 2001
AMENDED DECEMBER 13, 2002
STOCKHOLDER APPROVAL NOT REQUIRED

1. PURPOSES.

(a) Eligible Stock Award Recipients. The persons eligible to receive Stock Awards are the Employees (other than Officers) and Consultants of the Company and its Affiliates.

(b) Available Stock Awards. The purpose of the Plan is to provide a means by which eligible recipients of Stock Awards may be given an opportunity to benefit from increases in value of the Common Stock through the granting of the following Stock Awards: (i) Nonstatutory Stock Options, (ii) stock bonus awards and (iii) rights to acquire restricted stock.

(c) General Purpose. The Company, by means of the Plan, seeks to retain the services of the group of persons eligible to receive Stock Awards, to secure and retain the services of new members of this group and to provide incentives for such persons to exert maximum efforts for the success of the Company and its Affiliates.

2. DEFINITIONS.

(a) ***"Affiliate"*** means any parent corporation or subsidiary corporation of the Company, whether now or hereafter existing, as those terms are defined in Sections 424(e) and (f), respectively, of the Code.

(b) ***"Board"*** means the Board of Directors of the Company.

(c) ***"Code"*** means the Internal Revenue Code of 1986, as amended.

(d) ***"Committee"*** means a committee of one or more members of the Board appointed by the Board in accordance with Section 3(c).

(e) ***"Common Stock"*** means the common stock of the Company.

(f) ***"Company"*** means Rigel Pharmaceuticals, Inc., a Delaware corporation.

(g) ***"Consultant"*** means any person, including an advisor, engaged by the Company or an Affiliate to render consulting or advisory services and who is compensated for such services. However, the term "Consultant" shall not include either Directors who are not compensated by the Company for their services as Directors or Directors who are merely paid a director's fee by the Company for their services as Directors.

(h) ***"Continuous Service"*** means that the Participant's service with the Company or an Affiliate, whether as an Employee, Director or Consultant, is not interrupted or terminated. The Participant's Continuous Service shall not be deemed to have terminated merely because of a change in the capacity in which the Participant renders service to the Company or an Affiliate as an Employee, Consultant or Director or a change in the entity for which the Participant renders such service, provided that there is no interruption or termination of the Participant's Continuous Service. For example, a change in status from an Employee of the Company to a Consultant of an Affiliate or a Director will not constitute an interruption of Continuous Service. The Board or the chief executive officer of the Company, in that party's sole discretion, may determine whether Continuous Service shall be considered interrupted in the case of any leave of absence approved by that party, including sick leave, military leave or any other personal leave.

(i) ***"Director"*** means a member of the Board of Directors of the Company.

(j) ***"Disability"*** means the inability of a person, in the opinion of a qualified physician acceptable to the Company, to perform the major duties of such person's position with the Company or with an Affiliate because of the sickness or injury of such person.

(k) ***"Employee"*** means any person employed by the Company or an Affiliate. Mere service as a Director or payment of a director's fee by the Company or an Affiliate shall not be sufficient to constitute "employment" by the Company or an Affiliate.

(l) ***"Exchange Act"*** means the Securities Exchange Act of 1934, as amended.

(m) ***"Fair Market Value"*** means, as of any date, the value of the Common Stock determined as follows:

(i) If the Common Stock is listed on any established stock exchange or traded on the Nasdaq National Market or the Nasdaq SmallCap Market, the Fair Market Value of a share of Common Stock shall be the closing sales price for such stock (or the closing bid if no sales were reported) as quoted on such exchange or market (or the exchange or market with the greatest volume of trading in the Common Stock) on the day before the date of grant (the "determination date", or if the determination date is not a market trading day, then the last market trading day prior to the determination, as reported in *The Wall Street Journal* or such other source as the Board deems reliable.

(ii) In the absence of such markets for the Common Stock, the Fair Market Value shall be determined in good faith by the Board.

(n) ***"Non-Employee Director"*** means a Director who either (i) is not a current Employee or Officer of the Company or its parent or a subsidiary, does not receive compensation (directly or indirectly) from the Company or its parent or a subsidiary for services rendered as a consultant or in any capacity other than as a Director (except for an amount as to which disclosure would not be required under Item 404(a) of Regulation S-K promulgated under the federal securities laws ("Regulation S-K")),

does not possess an interest in any other transaction as to which disclosure would be required under Item 404(a) of Regulation S-K and is not engaged in a business relationship as to which disclosure would be required under Item 404(b) of

Regulation S-K; or (ii) is otherwise considered a "non-employee director" for purposes of Rule 16b-3.

(o) ***"Nonstatutory Stock Option"*** means an Option not intended to qualify as an "incentive stock option" within the meaning of Section 422 of the Code and the regulations promulgated thereunder.

(p) ***"Officer"*** means a person who possesses the authority of an "officer" as that term is used in Rule 4460(i)(1)(A) of the Rules of the National Association of Securities Dealers, Inc. For purposes of the Plan, a person employed by the Company in the position of "Vice President" or higher shall be classified as an "Officer" unless the Board or Committee expressly finds that such person does not possess the authority of an "officer" as that term is used in Rule 4460(i)(1)(A) of the Rules of the National Association of Securities Dealers, Inc.

(q) ***"Option"*** means a Nonstatutory Stock Option granted pursuant to the Plan.

(r) ***"Option Agreement"*** means a written agreement between the Company and an Optionholder evidencing the terms and conditions of an individual Option grant. Each Option Agreement shall be subject to the terms and conditions of the Plan.

(s) ***"Optionholder"*** means a person to whom an Option is granted pursuant to the Plan or, if applicable, such other person who holds an outstanding Option.

(t) ***"Participant"*** means a person to whom a Stock Award is granted pursuant to the Plan or, if applicable, such other person who holds an outstanding Stock Award.

(u) ***"Plan"*** means this Rigel Pharmaceuticals, Inc. 2001 Non-Officer Equity Incentive Plan.

(v) ***"Rule 16b-3"*** means Rule 16b-3 promulgated under the Exchange Act or any successor to Rule 16b-3, as in effect from time to time.

(w) ***"Securities Act"*** means the Securities Act of 1933, as amended.

(x) ***"Stock Award"*** means any right granted under the Plan, including an Option, a restricted stock purchase award and a stock bonus award.

(y) ***"Stock Award Agreement"*** means a written agreement between the Company and a holder of a Stock Award evidencing the terms and conditions of an individual Stock Award grant. Each Stock Award Agreement shall be subject to the terms and conditions of the Plan.

3. ADMINISTRATION.

(a) **Administration by Board.** The Board shall administer the Plan unless and until the Board delegates administration to a Committee, as provided in Section 3(c).

(b) **Powers of Board.** The Board shall have the power, subject to, and within the limitations of, the express provisions of the Plan:

(i) To determine from time to time which of the persons eligible under the Plan shall be granted Stock Awards; when and how each Stock Award shall be granted; what type or combination of types of Stock Award shall be granted; the provisions of each Stock Award granted, including the time or times when a person shall be permitted to receive Common Stock pursuant to a Stock Award; and the number of shares of Common Stock with respect to which a Stock Award shall be granted to each such person.

(ii) To construe and interpret the Plan and Stock Awards granted under it, and to establish, amend and revoke rules and regulations for its administration. The Board, in the exercise of this power, may correct any defect, omission or inconsistency in the Plan or in any Stock Award Agreement, in a manner and to the extent it shall deem necessary or expedient to make the Plan fully effective.

(iii) To effect, at any time and from time to time, with the consent of any adversely affected Optionholder, (1) the reduction of the exercise price of any outstanding Option under the Plan, (2) the cancellation of any outstanding Option under the Plan and the grant in substitution therefor of (A) a new Option under the Plan covering the same or a different number of shares of Common Stock, (B) a stock bonus, (C) the right to acquire restricted stock, and/or (D) cash, or (3) any other action that is treated as a repricing under generally accepted accounting principles.

(iv) To amend the Plan or a Stock Award as provided in Section 12.

(v) Generally, to exercise such powers and to perform such acts as the Board deems necessary or expedient to promote the best interests of the Company which are not in conflict with the provisions of the Plan.

(c) **Delegation to Committee.**

(i) **General.** The Board may delegate administration of the Plan to a Committee or Committees of one (1) or more members of the Board, and the term "Committee" shall apply to any person or persons to whom such authority has been delegated. If administration is delegated to a Committee, the Committee shall have, in connection with the administration of the Plan, the powers theretofore possessed by the Board, including the power to delegate to a subcommittee any of the administrative powers the Committee is authorized to exercise (and references in this Plan to the Board shall thereafter be to the Committee or subcommittee), subject, however, to such

resolutions, not inconsistent with the provisions of the Plan, as may be adopted from time to time by the Board. The Board may abolish the Committee at any time and revest in the Board the administration of the Plan.

(ii) Committee Composition when Common Stock is Publicly Traded. At such time as the Common Stock is publicly traded, in the discretion of the Board, a Committee may consist solely of two or more Non-Employee Directors, in accordance with Rule 16b-3. Within the scope of such authority, the Board or the Committee may delegate to a committee of one or more members of the Board who are not Non-Employee Directors the authority to grant Stock Awards to eligible persons who are not then subject to Section 16 of the Exchange Act.

(d) Effect of Board's Decision. All determinations, interpretations and constructions made by the Board in good faith shall not be subject to review by any person and shall be final, binding and conclusive on all persons.

4. SHARES SUBJECT TO THE PLAN.

(a) Share Reserve. Subject to the provisions of Section 11 relating to adjustments upon changes in Common Stock, the Common Stock that may be issued pursuant to Stock Awards shall not exceed in the aggregate three million five hundred thousand (3,500,000) shares of Common Stock.

(b) Reversion of Shares to the Share Reserve. If any Nonstatutory Stock Option shall for any reason expire or otherwise terminate, in whole or in part, without having been exercised in full, the shares of Common Stock not acquired under such Nonstatutory Stock Option shall revert to and again become available for issuance under the Plan.

(c) Source of Shares. The shares of Common Stock subject to the Plan may be unissued shares or reacquired shares, bought on the market or otherwise.

5. ELIGIBILITY.

(a) Eligibility for Specific Stock Awards. Stock Awards may be granted to Employees, who are not Officers, and Consultants;*provided, however,* that Officers who are not previously employed by the Company may be granted Stock Awards as an inducement essential to such individuals entering into employment contracts with the Company.

(b) Consultants.

(i) A Consultant shall not be eligible for the grant of a Stock Award if, at the time of grant, a Form S-8 Registration Statement under the Securities Act ("Form S-8") is not available to register either the offer or the sale of the Company's securities to such Consultant because of the nature of the services that the Consultant is providing to the Company, or because the Consultant is not a natural person, or as otherwise provided by the rules governing the use of Form S-8, unless the Company determines both (i) that such grant (A) shall be registered in another manner under the Securities Act (*e.g.,* on a Form S-3 Registration Statement) or (B) does not require registration under the Securities Act in order to comply with the requirements of the Securities Act, if applicable, and (ii) that such grant complies with the securities laws of all other relevant jurisdictions.

(ii) Form S-8 generally is available to consultants and advisors only if (i) they are natural persons; (ii) they provide bona fide services to the issuer, its parents, its majority-owned subsidiaries or majority-owned subsidiaries of the issuer's parent; and (iii) the services are not in connection with the offer or sale of securities in a capital-raising transaction, and do not directly or indirectly promote or maintain a market for the issuer's securities.

6. OPTION PROVISIONS.

Each Option shall be in such form and shall contain such terms and conditions as the Board shall deem appropriate. The provisions of separate Options shall include (through incorporation of provisions hereof by reference in the Option or otherwise) the substance of each of the following provisions:

(a) Term. The term of an Option shall not exceed 10 years, either at the time of grant of the Option or as the Option may be amended thereafter.

(b) Exercise Price of a Nonstatutory Stock Option. The exercise price of each Nonstatutory Stock Option shall be not less than the Fair Market Value of the Common Stock subject to the Option on the date the Option is granted.

(c) Consideration. The purchase price of Common Stock acquired pursuant to an Option shall be paid, to the extent permitted by applicable statutes and regulations, either (i) in cash or by check at the time the Option is exercised or (ii) at the discretion of the Board at the time of the grant of the Option or at any time prior to the time of exercise in the case of a Nonstatutory Stock Option (1) by delivery to the Company of other Common Stock, (2) according to a deferred payment or other similar arrangement with the Optionholder or (3) in any other form of legal consideration that may be acceptable to the Board. Unless otherwise specifically provided in the Option, the purchase price of Common Stock acquired pursuant to an Option that is paid by delivery to the Company of other Common Stock acquired, directly or indirectly from the Company, shall be paid only by shares of the Common Stock of the Company that have been held for more than six (6) months (or such longer or shorter period of time required to avoid a charge to earnings for financial accounting purposes). At any time that the Company is incorporated in Delaware, payment of the Common Stock's "par value," as defined in the Delaware General Corporation Law, shall not be made by deferred payment.

In the case of any deferred payment arrangement, interest shall be compounded at least annually and shall be charged at the market rate of interest necessary to avoid a charge to earnings for financial accounting purposes.

(d) Transferability of a Nonstatutory Stock Option. A Nonstatutory Stock Option shall not be transferable except by will or by the laws of descent and distribution and shall be exercisable during the lifetime of the Optionholder only by the Optionholder. Notwithstanding the foregoing, the Optionholder may, by delivering written notice to the Company, in a form satisfactory to the Company, designate a third party who, in the event of the death of the Optionholder, shall thereafter be entitled to

exercise the Option.

(e) Vesting Generally. Each Option shall be evidenced by an Option Agreement executed by the Company and the Optionholder. The total number of shares of Common Stock subject to an Option may vest and therefore become exercisable as set-forth in the Option Agreement. The Option may be subject to such other terms and conditions on the time or times when it may be exercised (which may be based on performance or other criteria) as the Board may deem appropriate. The provisions of this Section 6(e) are subject to any Option provisions

governing the minimum number of shares of Common Stock as to which an Option may be exercised.

(f) Termination of Continuous Service. In the event an Optionholder's Continuous Service terminates for any reason other than upon the Optionholder's death or Disability, the Optionholder may exercise his or her Option (to the extent that the Optionholder was entitled to exercise such Option as of the date of termination or as otherwise permitted by the Company) but only within such period of time ending on the earlier of (i) the three (3) months following such termination (or such longer or shorter period specified in the Option Agreement), or (ii) the expiration of the term of the Option as set forth in the Option Agreement. If, after termination, the Optionholder does not exercise his or her Option within the time specified in the Option Agreement, the Option shall terminate.

(g) Extension of Termination Date. An Optionholder's Option Agreement may also provide that if the exercise of the Option following the termination of the Optionholder's Continuous Service (other than upon the Optionholder's death or Disability) would be prohibited at any time solely because the issuance of shares of Common Stock would violate the registration requirements under the Securities Act or similar requirements of applicable law of another jurisdiction to which the Option is subject, then the Option shall terminate on the earlier of (i) the expiration of the term of the Option set forth in the Option Agreement, or (ii) the expiration of a period of three (3) months after the termination of the Optionholder's Continuous Service during which the exercise of the Option would not be in violation of such registration requirements or similar requirements.

(h) Disability of Optionholder. In the event that an Optionholder's Continuous Service terminates as a result of the Optionholder's Disability, the Optionholder may exercise his or her Option (to the extent that the Optionholder was entitled to exercise such Option as of the date of termination or as otherwise permitted by the Company), but only within such period of time ending on the earlier of (i) the twelve (12) months following such termination (or such longer or shorter period specified in the Option Agreement) or (ii) the expiration of the term of the Option as set forth in the Option Agreement. If, after termination, the Optionholder does not exercise his or her Option within the time specified herein, the Option shall terminate.

(i) Death of Optionholder. In the event (i) an Optionholder's Continuous Service terminates as a result of the Optionholder's death or (ii) the Optionholder dies within the period (if any) specified in the Option Agreement after the termination of the Optionholder's Continuous Service for a reason other than death, then the Option may be exercised (to the extent the Optionholder was entitled to exercise such Option as of the date of death or as otherwise permitted by the Company) by the Optionholder's estate, by a person who acquired the right to exercise the Option by bequest or inheritance or by a person designated to exercise the Option upon the Optionholder's death pursuant to Section 6(d), but only within the period ending on the earlier of (1) the date eighteen (18) moths following the date of death (or such longer or shorter period specified in the Option Agreement) or (2) the expiration of the term of such Option as set forth in the Option Agreement. If, after death, the Option is not exercised within the time specified herein, the Option shall terminate.

(j) Early Exercise. The Option may include a provision whereby the Optionholder may elect at any time before the Optionholder's Continuous Service terminates to exercise the Option as to any part or all of the shares of Common Stock subject to the Option prior to the full vesting of the Option. Any unvested shares of Common Stock so purchased may be subject to a repurchase option in favor of the Company or to any other restriction the Board determines to be appropriate.

7. PROVISIONS OF STOCK AWARDS OTHER THAN OPTIONS.

(a) Stock Bonus Awards. Each stock bonus agreement shall be in such form and shall contain such terms and conditions as the Board shall deem appropriate. The terms and conditions of stock bonus agreements may change from time to time, and the terms and conditions of separate stock bonus agreements shall include (through incorporation of provisions hereof by reference in the agreement or otherwise) the substance of each of the following provisions:

(i) Consideration. A stock bonus award may be awarded in consideration for past services actually rendered to the Company or an Affiliate for its benefit.

(ii) Vesting. Shares of Common Stock awarded under the stock bonus agreement may be subject to a share repurchase option in favor of the Company in accordance with a vesting schedule to be determined by the Board.

(iii) Termination of Participant's Continuous Service. In the event a Participant's Continuous Service terminates, the Company shall automatically reacquire any or all of the shares of Common Stock held by the Participant which have not vested as of the date of termination under the terms of the stock bonus agreement.

(iv) Transferability. Rights to acquire shares of Common Stock under the stock bonus agreement shall be transferable by the Participant only upon such terms and conditions as are set forth in the stock bonus agreement, as the Board shall determine in its discretion, so long as Common Stock awarded under the stock bonus agreement remains subject to the terms of the stock bonus agreement.

(b) Restricted Stock Purchase Awards. Each restricted stock purchase agreement shall be in such form and shall contain such terms and conditions as the Board shall deem appropriate. The terms and conditions of the restricted stock purchase agreements may change from time to time, and the terms and conditions of separate restricted stock purchase agreements need not be identical, but each restricted stock purchase agreement shall include (through incorporation of provisions hereof by reference in the agreement or otherwise) the substance of each of the following provisions:

(i) Purchase Price. The purchase price under each restricted stock purchase agreement shall be such amount as the Board shall determine and designate in such restricted stock purchase agreement.

(ii) Consideration. The purchase price of Common Stock acquired pursuant to the restricted stock purchase agreement shall be paid either: (i) in cash at the time of

purchase; (ii) at the discretion of the Board, according to a deferred payment or other similar arrangement with the Participant; or (iii) in any other form of legal consideration that may be acceptable to the Board in its discretion; provided, however, that at any time that the Company is incorporated in Delaware, then payment of the Common Stock's "par value," as defined in the Delaware General Corporation Law, shall not be made by deferred payment.

(iii) Vesting. Shares of Common Stock acquired under the restricted stock purchase agreement may be subject to a share repurchase option in favor of the Company in accordance with a vesting schedule to be determined by the Board.

(iv) Termination of Participant's Continuous Service. In the event a Participant's Continuous Service terminates, the Company may repurchase or otherwise reacquire any or all of the shares of Common Stock held by the Participant which have not vested as of the date of termination under the terms of the restricted stock purchase agreement.

(v) Transferability. Rights to acquire shares of Common Stock under the restricted stock purchase agreement shall be transferable by the Participant only upon such terms and conditions as are set forth in the restricted stock purchase agreement, as the Board shall determine in its discretion, so long as Common Stock awarded under the restricted stock purchase agreement remains subject to the terms of the restricted stock purchase agreement.

8. COVENANTS OF THE COMPANY.

(a) Availability of Shares. During the terms of the Stock Awards, the Company shall keep available at all times the number of shares of Common Stock required to satisfy such Stock Awards.

(b) Securities Law Compliance. The Company shall seek to obtain from each regulatory commission or agency having jurisdiction over the Plan such authority as may be required to grant Stock Awards and to issue and sell shares of Common Stock upon exercise of the Stock Awards; provided, however, that this undertaking shall not require the Company to register under the Securities Act the Plan, any Stock Award or any Common Stock issued or issuable pursuant to any such Stock Award. If, after reasonable efforts, the Company is unable to obtain from any such regulatory commission or agency the authority which counsel for the Company deems necessary for the lawful issuance and sale of Common Stock under the Plan, the Company shall be relieved from any liability for failure to grant Stock Awards in compliance with applicable law or to issue and sell Common Stock upon exercise of such Stock Awards unless and until such authority is obtained.

9. USE OF PROCEEDS FROM STOCK.

Proceeds from the sale of Common Stock pursuant to Stock Awards shall constitute general funds of the Company.

10. MISCELLANEOUS.

(a) Stockholder Rights. No Participant shall be deemed to be the holder of, or to have any of the rights of a holder with respect to, any shares of Common Stock subject to such

Stock Award unless and until such Participant has satisfied all requirements for exercise of the Stock Award pursuant to its terms.

(b) No Employment or other Service Rights. Nothing in the Plan or any instrument executed or Stock Award granted pursuant thereto shall confer upon any Participant any right to continue to serve the Company or an Affiliate in the capacity in effect at the time the Stock Award was granted or shall affect the right of the Company or an Affiliate to terminate (i) the employment of an Employee with or without notice and with or without cause, (ii) the service of a Consultant pursuant to the terms of such Consultant's agreement with the Company or an Affiliate or (iii) the service of a Director pursuant to the Bylaws of the Company or an Affiliate, and any applicable provisions of the corporate law of the state in which the Company or the Affiliate is incorporated, as the case may be.

(c) Investment Assurances. The Company may require a Participant, as a condition of exercising or acquiring Common Stock under any Stock Award, (i) to give written assurances satisfactory to the Company as to the Participant's knowledge and experience in financial and business matters and/or to employ a purchaser representative reasonably satisfactory to the Company who is knowledgeable and experienced in financial and business matters and that he or she is capable of evaluating, alone or together with the purchaser representative, the merits and risks of exercising the Stock Award; and (ii) to give written assurances satisfactory to the Company stating that the Participant is acquiring Common Stock subject to the Stock Award for the Participant's own account and not with any present intention of selling or otherwise distributing the Common Stock. The foregoing requirements, and any assurances given pursuant to such requirements, shall be inoperative if (1) the issuance of the shares of Common Stock upon the exercise or acquisition of Common Stock under the Stock Award has been registered under a then currently effective registration statement under the Securities Act or (2) as to any particular requirement, a determination is made by counsel for the Company that such requirement need not be met in the circumstances under the then applicable securities laws. The Company may, upon advice of counsel to the Company, place legends on stock certificates issued under the Plan as such counsel deems necessary or appropriate in order to comply with applicable securities laws, including, but not limited to, legends restricting the transfer of the Common Stock.

(d) Withholding Obligations. To the extent provided by the terms of a Stock Award Agreement, the Participant may satisfy any federal, state or local tax withholding obligation relating to the exercise or acquisition of Common Stock under a Stock Award by any of the following means (in addition to the Company's right to withhold from any compensation paid to the Participant by the Company) or by a combination of such means: (i) tendering a cash payment; (ii) authorizing the Company to withhold shares of Common Stock from the shares of Common Stock otherwise issuable to the Participant as a result of the exercise or acquisition of Common Stock under the Stock Award, provided, however, that no shares of Common Stock are withheld with a value exceeding the minimum amount of tax required to be withheld by law; or (iii) delivering to the Company owned and unencumbered shares of Common Stock.

11. ADJUSTMENTS UPON CHANGES IN STOCK.

(a) Capitalization Adjustments. If any change is made in the Common Stock subject to the Plan, or subject to any Stock Award, without the receipt of consideration by the Company (through merger, consolidation, reorganization, recapitalization, reincorporation, stock dividend, dividend in property other than cash, stock split, liquidating dividend, combination of shares, exchange of shares, change in corporate structure or other transaction not involving the receipt of consideration by the Company), the Plan will be appropriately adjusted in the type, class(es) and maximum number of securities subject to the Plan pursuant to Section 4(a), and the outstanding Stock Awards will be appropriately adjusted in the type, class(es) and number of securities and price per share of securities subject to such outstanding Stock Awards. The Board shall make such adjustments, and its determination shall be final, binding and conclusive. (The conversion of any convertible securities of the Company shall not be treated as a transaction "without receipt of consideration" by the Company.)

(b) Dissolution or Liquidation. In the event of a dissolution or liquidation of the Company, then all outstanding Stock Awards shall terminate immediately prior to such event.

(c) Asset Sale, Merger, Consolidation or Reverse Merger. In the event of (i) a sale, exchange, lease or other disposition of all or substantially all of the assets of the Company, (ii) a merger or consolidation in which the Company is not the surviving corporation or (iii) a reverse merger in which the Company is the surviving corporation but the shares of Common Stock outstanding immediately preceding the merger are converted by virtue of the merger into other property, whether in the form of securities, cash or otherwise (individually, a "Corporate Transaction"), then any surviving corporation or acquiring corporation shall assume or continue any Stock Awards outstanding under the Plan or shall substitute similar stock awards (including an award to acquire the same consideration paid to the stockholders in the Corporate Transaction) for those outstanding under the Plan. In the event any surviving corporation or acquiring corporation refuses to assume or continue such Stock Awards or to substitute similar stock awards for those outstanding under the Plan, then with respect to Stock Awards held by Participants whose Continuous Service has not terminated, the vesting of such Stock Awards (and, if applicable, the time during which such Stock Awards may be exercised) shall be accelerated in full, and the Stock Awards shall terminate if not exercised (if applicable) at or prior to the Corporate Transaction. With respect to any other Stock Awards outstanding under the Plan, such Stock Awards shall terminate if not exercised (if applicable) prior to the Corporate Transaction.

12. AMENDMENT OF THE PLAN AND STOCK AWARDS.

(a) Amendment of Plan. The Board at any time, and from time to time, may amend the Plan. However, except as provided in Section 11 relating to adjustments upon changes in stock, no amendment shall be effective unless approved by the stockholders of the Company to the extent stockholder approval is necessary for the Plan to satisfy any Nasdaq or securities exchange listing requirements. The Board may in its sole discretion submit such amendment to the Plan for stockholder approval.

(b) No Impairment of Rights. Rights under any Stock Award granted before amendment of the Plan shall not be materially impaired by any amendment of the Plan unless (i) the Company requests the consent of the Participant and (ii) the Participant consents in writing.

(c) Amendment of Stock Awards. The Board at any time, and from time to time, may amend the terms of any one or more Stock Awards; provided, however, that the rights under any Stock Award shall not be materially impaired by any such amendment unless (i) the Company requests the consent of the Participant and (ii) the Participant consents in writing.

13. TERMINATION OR SUSPENSION OF THE PLAN.

(a) Plan Term. The Board may suspend or terminate the Plan at any time. No Stock Awards may be granted under the Plan while the Plan is suspended or after it is terminated.

(b) No Impairment of Rights. Suspension or termination of the Plan shall not impair rights and obligations under any Stock Award granted while the Plan is in effect except with the written consent of the Participant.

14. EFFECTIVE DATE OF PLAN.

The Plan shall become effective immediately upon its adoption by the Board.

15. CHOICE OF LAW.

The law of the State of California shall govern all questions concerning the construction, validity and interpretation of this Plan, without regard to such state's conflict of laws rules.

[*] = CERTAIN CONFIDENTIAL INFORMATION CONTAINED IN THIS DOCUMENT, MARKED BY BRACKETS, HAS BEEN OMITTED AND FILED SEPARATELY WITH THE SECURITIES AND EXCHANGE COMMISSION PURSUANT TO RULE 24B-2 OF THE SECURITIES EXCHANGE ACT OF 1934, AS AMENDED.

Exhibit 10.26

AMENDMENT NO. ONE
TO BUILD-TO-SUIT LEASE

THIS AMENDMENT NO. ONE ("Amendment") is made and entered into as of October 18, 2002 by and between **SLOUGH BTC, LLC**, a Delaware limited liability company ("Landlord") and **RIGEL PHARMACEUTICALS, INC.**, a Delaware corporation ("Tenant").

RECITALS

A. Landlord and Tenant are partners to that certain Build-To-Suit Lease dated as of May 16, 2001 ("Lease") pursuant to which Landlord shall lease to Tenant, and Tenant shall lease from Landlord up to approximately 146,910 square feet.

B. The parties wish to amend the Lease to provide, *inter alia*, (i) an increase in the Tenant Improvement Allowance to be provided by Landlord, (ii) the establishment of the Phase I Rent Commencement Date and the Phase II Rent Commencement Date (which shall be deemed to occur at the same time and are hereinafter collectively called the "Rent Commencement Date"), (iii) a rent deferral payment to be made in Month 25 of the Lease term, and (iv) an adjustment in minimum rental to reflect the increased Tenant Improvement Allowance and the rent deferral, all subject to the terms and conditions set forth herein.

C. Unless otherwise defined herein, all capitalized terms have the meanings assigned to them in the Lease.

THEREFORE, the parties agrees as follows:

1. Increase in Tenant Improvement Allowance. The Tenant Improvement Allowance, as defined in Paragraph 4(b) of the Work Letter attached to the Lease as Exhibit C, is hereby increased by $[*] per square foot (the "Additional Tenant Improvement Allowance"). Notwithstanding the provisions of such Paragraph 4(b), Tenant shall not be required to match such Additional Tenant Improvement Allowance in the fifteen percent (15%) ratio stated in the Lease. In the event Tenant does not use the entire Additional Tenant Improvement Allowance towards the Cost of Improvements for the Tenant Improvements, then Tenant may apply any unused Additional Tenant Improvement Allowance to reimburse Tenant for its contribution to the Cost of Improvements for the Tenant Improvements, including without limitation to its fifteen (15%) matching contribution to the initial Tenant Improvement Allowance. Tenant may seek such reimbursement by providing to Landlord evidence of Tenant's payment of such contribution in form reasonably satisfactory to Landlord. Landlord shall remit such reimbursement to Tenant within ten (10) business days following such request. In no event shall the Additional Tenant Improvement Allowance be eligible to be applied toward furniture or other personal property of Tenant.

2. Rent Commencement Date. The Rent Commencement Date shall be February 1, 2003, except that if Tenant takes occupancy of and commences operation of its business in any portion of the Phase I Building or the Phase II Building prior to February 1, 2003, then the Rent Commencement Date shall be the date of such occupancy and commencement of business; *provided*, however, that if the Rent Commencement Date occurs prior to February 1, 2003, Tenant shall have no obligation to make payments of minimum rent under the Lease until the payment that becomes due February 1, 2003 for the month of February, 2003, but all other obligations of Tenant under the Lease (including, but not limited to, the payment of Tenant's Operating Expense Share) shall commence as of the Rent Commencement Date and the term of the Lease shall commence as of the Rent Commencement Date. The foregoing shall not prohibit the Tenant from access to the building prior to the Rent Commencement Date for the purposes of building start-up (including, but not limited to, start-up of building systems, network/phone setup, lab/equipment setup, furniture setup and vivarium decontamination) nor affect or diminish Landlord's obligation to complete Landlord's Work in accordance with the provisions of the Lease.

3. Rent Deferral. In consideration of Landlord's agreement to the provisions of this Amendment, Tenant shall make a lump-sum rent deferral payment to Landlord in the amount of $[*], which payment shall be due on the first day of Month 25 of the Lease (counting from the Rent Commencement Date), as shown in the schedule of minimum rental set forth on **Exhibit 1** to this Amendment.

4. Minimum Rental. In consideration for the increase in the Tenant Improvement Allowance and the deferral of the Rent Commencement Date and/or of Tenant's minimum rent obligation as set forth above, the schedules of minimum rental set forth in Paragraph 3.1(a) and 3.1(b) of the Lease are hereby combined, amended and restated as set forth on **Exhibit 1** to this Amendment. Such schedule remains subject to the provisions of Paragraph 3.1(e) of the Lease.

5. Prepayment of Minimum Rental. Tenant may at any time prepay the minimum rental reflected as Tranche 2 and/or Tranche 3 on **Exhibit 1**, but only by prepaying all of Tranche 2 or Tranche 3 alone or all of both Tranches. In the event of any such prepayment on or before the first day of Month 25 of the Lease (counting from the Rent Commencement Date), the amount necessary to prepay each respective Tranche shall be equal to the portion of the Additional Tenant Improvement Allowance originally allocable to that Tranche (which portion is assumed to be $[*] per Tranche for purposes of **Exhibit 1**) plus an imputed return calculated as if the originally allocable portion had accrued interest from the Rent Commencement Date to the date of prepayment at the rate of [*] % per annum compounded annually. In the event of any such prepayment after the first day of Month 25 of the Lease, the amount necessary to prepay each respective Tranche shall be equal to the unamortized balance of the portion of the Additional Tenant Improvement Allowance originally allocable to that Tranche.

6. Warrant. As additional consideration for the increase in the Tenant Improvement Allowance and the deferral of rent, Tenant agrees (a) to grant, concurrent with the execution of this Amendment, to Landlord or Landlord's designees (which may be any members, partners, shareholders or affiliates of Landlord or any affiliates of any such members, partners, shareholders or affiliates of Landlord) warrants registered in the name of Landlord or such Landlord designees for the acquisition of an aggregate of 500,000 shares of Tenant's common

stock, which warrants shall be in the form attached hereto as **Exhibit 2**, shall have an expiration date five (5) years after the date of issuance and shall have an exercise price per share equal to one hundred fifteen percent (115%) of the closing market price per share of Tenant's common stock on the date this Amendment is mutually executed; and (b) to amend and reissue, concurrent with the execution of this Amendment, the existing warrant (Warrant No. CS-4) dated May 16, 2001 in favor of Kwacker Limited, for 150,000 shares of Tenant's common stock, in such a manner that Sections 7 and 10 of such existing warrant shall be identical to Section 7 and 10 of the form attached hereto as **Exhibit 2** (except that the expiration date of the existing warrant as set forth in Section 7 thereof shall remain May 16, 2006).

7. No Further Modifications. Unless otherwise define herein, the terms and provisions of the Lease shall remain unmodified and in full force and effect.

IN WITNESS WHEREOF, the parties have executed this Amendment No. One as of the date first set forth above.

LANDLORD:

SLOUGH BTC, LLC,
a Delaware limited liability company

By: **SLOUGH ESTATES USA, INC.,**
a Delaware corporation, Its Manager

By: /s/ William Rogalla

Its: Vice President

TENANT:

RIGEL PHARMACEUTICALS, INC.
a Delaware corporation

By: /s/ James M. Gower

Its: CEO

By: /s/ James H. Welch

Its: CFO

EXHIBIT 1

MINIMUM RENTAL

[*]

EXHIBIT 2

FORM OF WARRANT

See Exhibit 4.7

EXHIBIT 3

FORM OF WARRANT

See Exhibit 4.10

[*] = CERTAIN CONFIDENTIAL INFORMATION CONTAINED IN THIS DOCUMENT, MARKED BY BRACKETS, HAS BEEN OMITTED AND FILED SEPARATELY WITH THE SECURITIES AND EXCHANGE COMMISSION PURSUANT TO RULE 24B-2 OF THE SECURITIES EXCHANGE ACT OF 1934, AS AMENDED.

MASTER EQUIPMENT LEASE AGREEMENT
Agreement No. 167040101 Dated: December 23, 2002

LESSOR: **LIGHTHOUSE CAPITAL PARTNERS IV, L.P.**, a Delaware limited partnership ("*Lessor*"), 500 Drakes Landing Road, Greenbrae, California 94904-3011.

LESSEE: **RIGEL PHARMACEUTICALS, INC.**, a Delaware corporation ("*Lessee*"),

ADDRESS: 240 East Grand Avenue, South San Francisco, California 94080.

IN CONSIDERATION of the mutual covenants contained herein, the parties agree as follows:

1. LEASE. Lessor leases to Lessee and Lessee leases from Lessor the personal property described in each Equipment Schedule executed pursuant hereto, subject to the terms and conditions of this Master Equipment Lease Agreement ("*Master Lease*") and the applicable Lease Line Schedule (defined below). The "*Equipment*" (as defined in the Lease Line Schedule) is being leased for commercial or business purposes only, and not for personal, home, or family purposes. The parties agree that each Lease is a "finance lease" under the Uniform Commercial Code (as in effect in the State of California during the term of the Lease and referred to hereafter as the "*UCC*").

2. LEASE LINE SCHEDULE. "*Lease Line Schedule*" means a Lease Line Schedule in the form of ***Exhibit A***, signed by Lessor and Lessee and incorporating by reference the terms and provisions of this Master Lease. In the event of a conflict, the terms of the Lease Line Schedule shall prevail over the Master Lease.

3. EQUIPMENT SCHEDULES. "*Equipment Schedule*" means an Equipment Schedule in the form of ***Exhibit B***, signed by Lessor and Lessee and incorporating, by reference, the terms and provisions of this Master Lease and the applicable Lease Line Schedule. Each Equipment Schedule shall constitute a separate and independent lease (a "*Lease*"); the original of such Lease shall consist of the signed Equipment Schedule and a copy of the Master Lease and applicable Lease Line Schedule. Capitalized terms used, but not defined, in this Master Lease have the meanings given to such terms in the applicable Lease Line Schedule or Equipment Schedule, as the case may be.

4. TERM AND RENTALS.

(a) Acceptance. The Lease shall commence with respect to Equipment described on the Equipment Schedule upon the Acceptance Date. The "*Acceptance Date*" shall be the date upon which Lessee executes a Delivery and Acceptance Certificate in the form of ***Exhibit C***.

(b) Term and Payment of Rent. The lease term for the Equipment shall be the "*Lease Term*" set forth in the Equipment Schedule which shall commence on the "*Commencement Date*" (as defined in the Lease Line Schedule). Lessee agrees to pay to Lessor the "*Rental Payments*" for the Lease Term, in the amounts and at the times set forth in the Equipment Schedule.

(c) Interim Period. If the Acceptance Date does not fall on the Commencement Date, then Lessee agrees to pay to Lessor "*Interim Rent*" for the period commencing on the Acceptance Date through and including the day preceding the Commencement Date (the "*Interim Period*"). The Interim Rent payment for the Interim Period shall accrue at the "Interim Rate" (as defined in the Lease Line Schedule) and shall be due and payable in full on the Commencement Date.

(d) Lease Termination. Lessee may terminate the Lease at the expiration of the Lease Term or any renewal term (the "*Lease Termination*") by submitting to Lessor a Notice of Election in the form of ***Exhibit D***. If a Notice of Election is not submitted by Lessee to Lessor during the "*Advance Notice Period*" (as defined in the Lease Line Schedule), then the Lease Term or any renewal Term will be automatically extended for an additional period equal to the "*Automatic Extension Period*" (as defined in the Lease Line Schedule). The Lease will continue to automatically extend until Lessee submits to Lessor a Notice of Election. The Lease may only be terminated as expressly provided in this Section, in the applicable Lease Line Schedule or in the applicable Equipment Schedule.

Lessee agrees to continue paying rent for the Equipment in the amount of the Rental Payment set forth in the Equipment Schedule until the later of (i) the expiration of the Lease Term, any renewal term and any Automatic Extension Period and (ii) either (A) the purchase option price is paid pursuant to **Section 6(a)**, or (B) a mutually agreed renewal of the Lease takes effect pursuant to **Section 6(b)**, or (C) the Equipment is returned in the manner and condition prescribed in **Section 6(c)**, in each case after delivery of a Notice of Election.

(e) Net Lease. Each Equipment Schedule shall be a net lease, and Lessee's obligation to pay all rent and other sums thereunder shall be absolute and unconditional, and shall not be subject to any abatement, reduction, set-off, defense, counterclaims, interruption, deferment or recoupment, for any reason whatsoever.

5. LATE FEE. Lessee shall pay a late charge on any rent payments or other sums due hereunder which are past due, in the amount specified in the Lease Line Schedule, payable on demand. In addition, interest shall accrue daily at the "*Default Rate*" (as defined in the Lease Line Schedule), or if such rate exceeds the maximum rate allowed by law, then at such maximum rate, and shall be payable on demand.

6. LEASE TERMINATION OPTIONS. Upon Lease Termination, Lessee will have the option to purchase the Equipment, renew the term of the Lease, or return the Equipment to Lessor, as set forth below. Lessee shall specify its election of a Lease Termination Option in the Notice of Election.

(a) Purchase Option. If Lessee exercises the option to purchase, then, provided no monetary Event of Default has occurred and is then continuing, Lessee shall at the expiration of the Lease Term, renewal term or extension, as the case may be, purchase the Equipment. The purchase price shall be the Equipment's then fair market value ("*FMV*"). FMV, as applied to a purchase option, shall be determined by Lessor based on the price a willing buyer would pay and a willing seller would accept (neither buyer nor seller being under compulsion to act) for the Equipment as installed and in use, giving due consideration to its condition, utility, revenue-producing capability, and replacement costs. If Lessee fails to agree with Lessor's good faith determination of the FMV, Lessee shall provide Lessor with a written request for a determination of the FMV with or prior to payment of Lessor's invoice. Within ten (10) days after such request Lessor and Lessee shall agree on an appraiser to determine the FMV or, lacking such agreement, shall each tender the name of an appraiser. The appraiser(s) shall, within thirty (30) days, either agree on the FMV or select a third appraiser, to form a committee to determine the FMV. Determination by the appraiser(s) shall be final and binding on both parties. Within fifteen (15) days after such determination, Lessee shall pay the FMV. Each party shall bear the fees and expenses of any appraiser which it names and share equally the fees and expenses of any appraiser(s) jointly selected. The purchase option price shall be paid not later than the last day of the Lease Term.

(b) Renewal. If Lessee exercises the option to renew this Lease, such renewal shall be upon the terms and conditions of this Master Lease and the applicable Lease Line Schedule, for a rental period and rental amount to be agreed upon by Lessee and Lessor.

(c) Return. If the Notice of Election specifies return of the Equipment, Lessee at its own risk and expense (i) will immediately return the Equipment to Lessor in the same condition as when delivered, ordinary wear and tear excepted, at such location as Lessor shall designate, provided that Lessee's expense shall be limited to the cost of returning the Equipment to Lessor's address as set forth on page 1 to the Master Lease; and (ii) will, on request from Lessor, use its best efforts to obtain from the Equipment supplier (or other maintenance service supplier approved by Lessor) with respect to Equipment for which a service contract is required under the Lease Line Schedule, a certificate stating that the Equipment qualifies for continued maintenance service at the standard rates and terms then in effect.

7. USE; MAINTENANCE.

(a) Lessee, at its expense, shall make all necessary site preparations and cause the Equipment to be operated in accordance with any applicable operating manuals and manufacturer's instructions. Notwithstanding any transfer or assignment by Lessor and provided no Event of Default has occurred and is continuing, Lessee shall have the right to quietly possess and use the Equipment as provided herein without interference by Lessor, its assigns or any other third party claiming through or under Lessor.

(b) Lessee shall effect and bear the expense of all necessary repair, maintenance, operation and replacements required to be made to maintain the Equipment in good condition, reasonable wear and tear excepted, and to comply with all material domestic and international laws to which the use and operation of the Equipment may be or become subject. All replacement Equipment attached to or incorporated into the Equipment financed hereunder and parts furnished in connection with such maintenance or repair shall immediately become the property of Lessor and part of the Equipment for all purposes hereof. All such maintenance, repair and replacement services shall be immediately paid for and discharged by Lessee with the result that no lien under any applicable laws will attach to the Equipment as a result of the performance of such services or the provision of any such material.

8. INSURANCE. Lessee shall obtain and maintain for the Lease Term (and any renewal term or extension), at its own expense, (a) "all risk" insurance against loss or damage to the Equipment, (b) commercial general liability insurance (including contractual liability, products liability and completed operations coverage) reasonably satisfactory to Lessor, and (c) such other insurance against such other risks of loss and with such terms, as shall in each case be reasonably satisfactory to or reasonably required by Lessor (as to carriers, amounts and otherwise). The amount of the "all risk" insurance shall be greater than or equal to the Stipulated Loss Value (as defined in **Section 9** below) of all Equipment outstanding under the Lease Line Schedule, and must otherwise be reasonably satisfactory to Lessor as of each anniversary date of this Lease. Any increase in the amount of such insurance coverage, other than "all risk", reasonably requested by Lessor and in amounts which are customary in Lessee's industry shall be put into effect on the next succeeding renewal date of such insurance.

Each "all risk" policy shall: (i) name Lessor as sole loss payee with respect to the Equipment, (ii) provide for each insurer's waiver of its right of subrogation against Lessor and Lessee, and (iii) provide that such insurance shall not be invalidated by any action of, or breach of warranty by, Lessee of a provision of any of its insurance policies, and shall waive set-off, counterclaim or offset against Lessor.

Each liability policy shall name Lessor as an additional insured and provide that such insurance shall have cross-liability and severability of interest endorsements (which shall not increase the aggregate policy limits of Lessee's insurance).

All insurance policies shall provide that Lessee's insurance shall be primary without a right of contribution of Lessor's insurance, if any, or any obligation on the part of Lessor to pay premiums of Lessee, and shall contain a clause requiring the insurer to give Lessor at least 30 days' prior written notice of its cancellation (other than cancellation for non-payment for which 10 days' notice shall be sufficient). Lessee shall on or prior to the date of Equipment Schedule No. 1 and prior to each policy renewal, furnish to Lessor certificates of insurance or other evidence satisfactory to Lessor that such insurance coverage is in effect. Lessee further agrees to give Lessor prompt notice of any damage to, or loss of, the Equipment, or any part thereof.

9. LOSS OR DAMAGE. If any items of Equipment shall become lost, stolen, destroyed, or damaged beyond repair for any reason, or in the event of condemnation, confiscation, seizure or requisition of title to or use of such items (collectively, an "*Event of Loss*"), Lessee shall promptly pay to Lessor the applicable Stipulated Loss Value of the Equipment subject to the Event of Loss. Upon payment by Lessee of the Stipulated Loss Value, Lessor will transfer to Lessee, "AS IS, WHERE IS, WITHOUT RECOURSE, REPRESENTATION OR WARRANTY," all of Lessor's right, title and interest, if any, in such items of Equipment. The "*Stipulated Loss Value*" payable by Lessee under this Lease shall be an amount equal to the product of (a) Lessor's Cost of the affected Equipment and (b) the percentage set forth in the table attached to the applicable Lease Line Schedule as ***Annex A*** opposite the Rental Payment number next following the Event of Loss. Stipulated Loss Values and Rental Payments shall not be prorated.

10. TITLE, INSPECTION AND LOCATION.

(a) Title. Lessor and Lessee confirm their intent that title to the Equipment shall remain in Lessor (or its successors and assigns) exclusively. If requested by Lessor, Lessee will affix plates or markings on the Equipment and on any operating manuals and manufacturer's instructions indicating the interests of Lessor and its assigns therein, and Lessee will not allow any other indicia of ownership or other interest in the Equipment to be placed on the Equipment. Lessee shall not sell, assign, grant a security interest in, sublet, pledge, hypothecate or otherwise encumber or suffer a lien upon or against this Lease or the Equipment.

(b) Inspection. Lessor (through any of its officers, employees or agents) shall have the right to inspect the Equipment during regular business hours, with reasonable notice, and in compliance with Lessee's reasonable security procedures; provided, that such inspections will be conducted no more often then once every six (6) months unless an Event of Default, or event which, with notice or lapse of time or both, would become an Event of Default, has occurred and is continuing.

(c) Location. In the case of Equipment other than mobile Equipment, Lessee may move such Equipment from the installation address shown on the Equipment Schedule (or any other location for which Lessee has complied with this provision) only if (i) the new location is within the continental United States, and (ii) Lessee gives at least 30 days' prior written notice of the relocation and provides UCC-1 financing statements, landlord waivers or such other documentation as Lessor reasonably requests to protect its interest in the Equipment.

(d) Lessee shall keep copies of all operating manuals and manufacturer's instructions with respect to the Equipment in good condition at the locations specified in **Section 10(c)**.

11. LESSEE'S REPRESENTATIONS, WARRANTIES AND WAIVERS. Upon execution of the Master Lease and each Equipment Schedule, Lessee warrants and represents the following:

(a) Lessee is a corporation duly organized, validly existing and in good standing under the laws of its state of incorporation. Lessee has full power and

authority and all necessary licenses and permits to carry on its business as presently conducted, to own or hold under lease its properties and to enter into this Master Lease, the Lease Line Schedule and each Equipment Schedule and to perform its obligations thereunder; and Lessee is duly qualified to do business as a foreign corporation and is in good standing in each jurisdiction in which the character of its properties or the nature of its business or the performance of its obligations under this Master Lease, the Lease Line Schedule and any Equipment Schedule requires such qualification, except for such jurisdictions in which failure to qualify would not have a material adverse effect on Lessee.

(b) The execution and delivery by Lessee of this Master Lease, the Lease Line Schedule and each Equipment Schedule and the performance by Lessee of its obligations thereunder have been duly authorized by all necessary corporate action on the part of Lessee; and do not and will not contravene the provisions of, or constitute a default (either with or without notice or lapse of time, or both) under, or result in the creation of any lien upon, the Equipment or any property of Lessee under any material indenture, mortgage, contract or other instrument to which Lessee is a party or by which Lessee or its properties is bound.

(c) No consent or approval of, giving of notice to, registration with, or taking of any other action by, any state, federal, foreign or other governmental commission, agency or regulatory authority or any other person or entity is required for the consummation or performance by Lessee of the transactions contemplated under this Master Lease, the Lease Line Schedule and each Equipment Schedule.

(d) This Master Lease, the Lease Line Schedule and each Equipment Schedule, when executed by Lessee, constitute legal, valid and binding agreements of Lessee enforceable against Lessee in accordance with their terms, except as limited by general equity principles, public policy concerns and any bankruptcy, insolvency, reorganization, or other similar laws of general application affecting the enforcement of creditor or Lessor rights.

(e) Except as set forth on the Disclosure Schedule attached hereto as**Schedule I**, there are no actions, suits or proceedings pending or, to the best of Lessee's knowledge, threatened against or affecting Lessee or any property of Lessee in any court, before any arbitrator of any kind or before or by any federal state, municipal or other government department, commission, board, bureau, agency or instrumentality (collectively "*Governmental Body*"), which, if adversely determined, would materially adversely affect the business, financial condition, assets, or operations of Lessee, or materially adversely affect the ability of Lessee to perform its obligations under this Master Lease, the Lease Line Schedule and each Equipment Schedule; and Lessee is not in default with respect to any order of any court, arbitrator or Governmental Body or with respect to any material loan agreement, debt instrument or contract with a supplier or customer of Lessee, except as disclosed in writing to Lessor.

(f) To the extent permitted by applicable law, Lessee waives any and all rights and remedies to: (i) cancel this Lease; (ii) repudiate this Lease; (iii) reject the Equipment after delivery to Lessor of a Delivery and Acceptance Certificate; (iv) revoke acceptance of the Equipment after delivery to Lessor of a Delivery and

Acceptance Certificate; (v) recover damages from Lessor for any breaches of warranty or for any other reason; (vi) claim a security interest in the Equipment in Lessee's possession or control for any reason; (vii) deduct from Rental Payments all or any part of any claimed damages resulting from Lessor's default, if any, under this Lease; (viii) accept partial delivery of the Equipment; (ix) "cover" under this Lease by making any purchase or lease of or contract to purchase or lease equipment in substitution for Equipment designated in the Lease; (x) recover any direct, general, special, incidental, indirect, exemplary or consequential damages, for any reason whatsoever other than resulting from Lessor's gross negligence or willful misconduct; and (xi) obtain specific performance as to Lessor, replevin, detinue, sequestration, claim and delivery or the like for any Equipment identified to this Lease. To the extent permitted by applicable law, Lessee also waives any rights now or hereafter conferred by statute or otherwise which may require Lessor to sell, lease or otherwise use any Equipment in mitigation of Lessor's damages or which may otherwise limit or modify any of Lessor's rights or remedies.

12. ASSIGNMENT BY LESSOR. LESSEE ACKNOWLEDGES THAT LESSOR MAY SELL, ASSIGN, GRANT A SECURITY INTEREST IN, OR OTHERWISE TRANSFER ALL OR ANY PART OF ITS RIGHTS, TITLE AND INTEREST IN THIS LEASE AND THE EQUIPMENT WITHOUT NOTICE TO OR CONSENT OF LESSEE, *PROVIDED, HOWEVER*, THAT SUCH SALE, ASSIGNMENT, OR OTHER TRANSFER SHALL NOT BE TO A COMPETITOR OR AFFILIATE OF A COMPETITOR OF LESSEE. Upon Lessor's written notice to Lessee that this Lease, or the right to the Rental Payments hereunder, have been assigned, Lessee shall, if requested, pay directly to Lessor's assignee without abatement, deduction or set-off all amounts which become due hereunder. Lessee waives and agrees it will not assert against Lessor's assignee any counterclaim or set-off in any action for rent under the Lease. Upon the assignment of this Lease, Lessor's assignee shall have and be entitled to exercise any and all rights and remedies (but none of the obligations) of Lessor hereunder, and all references herein to Lessor shall include Lessor's assignee. Lessee acknowledges that any assignment or transfer by Lessor does not materially change Lessee's duties or obligations under this Lease nor materially increase the burdens or risks imposed on Lessee.

13. ASSIGNMENT BY LESSEE. LESSEE MAY NOT, WITHOUT LESSOR'S PRIOR WRITTEN CONSENT, (i) ASSIGN THIS LEASE, WHETHER BY OPERATION OF LAW OR OTHERWISE, OR SUBLEASE THE EQUIPMENT OR ANY PART THEREOF OR (ii) ASSIGN, GRANT A SECURITY INTEREST IN, OR OTHERWISE TRANSFER ALL OR ANY PART OF ITS RIGHTS, TITLE AND INTEREST IN AND TO THIS LEASE OR THE EQUIPMENT. Notwithstanding the foregoing, in the event of a merger, sale of substantially all of the assets or other reorganization involving Lessee in which the shareholders of Lessee immediately prior to such transaction own less than 50% of the voting securities of the surviving entity or purchaser of assets (or its parent) in such transaction, Lessor shall not withhold its consent to the assignment of this Lease to the successor entity if each of the following conditions precedent is satisfied:

(i) the successor entity as of the date of such assignment meets Lessor's then current credit standards, as determined by Lessor in Lessor's sole discretion;

(ii) Lessee gives Lessor at least ten (10) days prior written notice of such merger, sale of assets or other reorganization;

(iii) such merger, sale of assets or other reorganization does not adversely affect the rights of lessor;

(iv) the corporation that results from such merger or other reorganization or which purchases the assets in the case of a sale of assets (the "*Surviving Corporation*") shall have executed and delivered to Lessor an agreement in form and substance reasonably satisfactory to Lessor, containing an assumption by Surviving Corporation of the due and punctual performance and observance of each covenant and condition of Lessee in the Master lease, Lease Line Schedule and Equipment Schedules (the "*Lease Documents*") and making representations and warranties with respect to the Surviving Corporation similar in scope and substance to the representations and warranties made by Lessee in the Lease Documents;

(v) the Surviving Corporation executes any precautionary financing statements or amendments thereto reasonably requested by Lessor; and

(vi) immediately after giving effect of such merger, sale of assets or other reorganization, no Event of Default or, event which with the lapse of time or giving of notice or both, would result in an Event of Default shall have occurred and be continuing.

In the event Lessee makes an assignment, sublease or other transfer (to which Lessor has consented), Lessee shall not thereby be relieved of its duties and obligations hereunder, for which it shall remain fully responsible and liable (independent of its assignee).

14. TAXES.

(a) Lessee shall comply with all applicable federal, state, local, foreign and international laws, regulations and orders relating to this Lease. Lessee assumes liability for, and shall pay when due or prior to any penalty being assessed, and on a net after-tax basis shall indemnify and defend Lessor against, all federal, state, local, foreign and international fees, taxes and government charges (including, without limitation, interest and penalties) of any nature imposed upon or in any way relating to Lessor, Lessee, any item of Equipment or this Lease, except federal, state and local taxes on or measured by Lessor's net income (other than any such tax which is in substitution for or relieves Lessee from the payment of taxes it would otherwise be obligated to pay to or reimburse Lessor for as herein provided). Lessee shall at its expense file when due with the appropriate authorities any and all tax and similar returns and reports required to be filed with respect thereto or, if requested by Lessor after the occurrence and during the continuance of an Event of Default and provided that Lessee is not in good faith contesting the payments of amount owing in connection with such returns and reports, notify Lessor of all such requirements and furnish Lessor with all information required for Lessor to effect such filings, which filings shall also be at Lessee's expense. Any fees, taxes or other charges paid by Lessor upon failure of Lessee to make such payments shall at Lessor's option become immediately due from Lessee to Lessor.

(b) This Lease has been entered into on the assumption that Lessor shall be entitled to all deductions, credits, and other tax benefits as are provided in the Internal Revenue Code of 1986, including amendments as may occur (the "Code"), to an owner of property including, without limitation, depreciation deductions and interest deductions with respect to any debts incurred to finance the purchase of the Equipment. If, as a result of any acts, omissions or misrepresentations by Lessee, Lessor's projected after-tax economic return resulting from ownership and lease of the Equipment is reduced, then Lessee's Rental Payments shall be increased in an amount (based on Lessor's reasonable calculations) sufficient to provide the same net after-tax economic return as if such acts or omissions had not occurred. Appropriate increases shall also be made in the applicable Stipulated Loss Values for this Lease. In the event the Equipment is sold by Lessor to another party, the net after-tax economic returns considered shall be those of such other party.

15. EQUIPMENT WARRANTIES. Lessee acknowledges that (i) Lessee has selected the supplier of the Equipment, (ii) Lessor acquired the goods or the right to possession and use of the goods in connection with the Lease, and (iii) Lessee received a copy of the contract by which Lessor acquired the Equipment or the right to possession and use of the Equipment before signing the Lease. LESSOR MAKES NO EXPRESS OR IMPLIED WARRANTIES INCLUDING THOSE OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR USE WITH RESPECT TO THE EQUIPMENT AND DISCLAIMS THE SAME. Lessor shall have no liability for any damages, whether direct, indirect, general, special, incidental, exemplary or consequential, incurred by Lessee as a result of any defect or malfunction of the Equipment. Lessee shall look solely to the Equipment supplier for any and all claims related to the Equipment. Lessor assigns to Lessee, for and during the Lease Term, any warranty on the Equipment provided by the supplier. Lessor and Lessee agree that all limitations on remedies and liability contained in this Lease represent a reasonable allocation of risks that is part of the fundamental bargain between the parties.

16. EVENTS OF DEFAULT. An Event of Default shall occur if Lessee (i) fails to pay any Rental Payment or other payment required under the Lease when due and such failure continues for a period of five (5) days after written notice from Lessor; or (ii) fails to perform or observe any other covenant, condition or agreement to be performed or observed by it or breaches any provision contained in the Lease or in any other document furnished to Lessor in connection herewith, and such failure or breach continues for a period of thirty (30) days after written notice from Lessor; or (iii) except as permitted by **Section 13** hereof, without Lessor's consent, attempts to assign this Lease or sell, transfer, encumber, part with possession, or sublet any item of Equipment; or (iv) makes any representation or warranty herein or in any document furnished by Lessee in connection herewith, which shall have

been materially false or inaccurate when made or at the time to which such representation or warranty relates; or (v) shall commit an act of bankruptcy or become insolvent or bankrupt or make an assignment for the benefit of creditors or consent to the appointment of a Trustee or Receiver or either shall be appointed for Lessee or for a substantial part of its property without its consent, or bankruptcy reorganization, or insolvency proceedings shall be instituted by or against Lessee, and, if instituted against Lessee, shall not be vacated or dismissed within sixty (60) days. Any Event of Default shall be deemed material and a substantial impairment of Lessor's interests for the purposes of this Lease, the UCC, and any other applicable law.

17. REMEDIES. Upon the occurrences of any Events of Default and at any time thereafter, provided such Event of Default is then continuing, Lessor may, in its discretion, do any one or more of the following:

(a) cancel any or all Leases which reference this Master Lease or the Lease Line Schedule, upon notice to Lessee;

(b) recover any accrued and unpaid Rental Payments and other amounts which are due and owing under the Leases so canceled on the Rental Payment Date immediately preceding the date on which Lessor obtains possession of the Equipment (or such earlier date as judgment is entered in favor of Lessor) (the "Determination Date"), plus interest at the Default Rate;

(c) with or without canceling this Lease, recover such Stipulated Loss Value as of the Rental Payment Date immediately preceding the Determination Date;

(d) recover any amounts due under any indemnity then determinable, plus interest at the Default Rate;

(e) require that Lessee provide the return and certification of the Equipment in accordance with**Section 6(c)** hereof;

(f) without a breach of the peace, enter the premises where such Equipment is located and take immediate possession of and remove the same, all without liability to Lessor or its agents for such entry except for their gross negligence or willful misconduct;

(g) sell any or all of the Equipment at public or private sale, or otherwise dispose of, hold, use, operate, lease to others or keep idle such Equipment, all free and clear of any rights of Lessee, provided that Lessor shall apply the proceeds to the obligations owing from Lessee to Lessor under the Lease; and

(h) exercise any other right or remedy which may be available to it under the UCC or other applicable law including the right to recover damages for the breach hereof.

In addition, Lessee shall be liable for, and reimburse Lessor for, all reasonable legal fees and all commercially reasonable costs and expenses incurred by Lessor as a result of the foregoing defaults or the exercise of Lessor's remedies, including without limitation recovering possession of the Equipment, selling or leasing the Equipment (including broker's and sales representative's fees and commissions), and placing any Equipment in the condition and obtaining the certificate required by **Section 6(c)** hereof. No remedy referred to in this Section is intended to be exclusive, but each shall be cumulative and in addition to any other remedy referred to above or otherwise available to Lessor at law or in equity. No express or implied waiver by Lessor of any Event of Default shall constitute a waiver of any other Event of Default by Lessor, or a waiver of any of Lessor's rights.

18. INDEMNIFICATION. Lessee assumes liability for, and shall pay when due, and shall indemnify, reimburse and hold each Indemnified Person (defined below) harmless from and against all Claims (defined below), directly or indirectly relating to or arising out of the acquisition, use, manufacture, purchase, shipment, transportation, delivery, installation, lease or sublease, ownership, operation, possession, control, storage, return or condition of any item of Equipment (regardless of whether such item of Equipment is at the time in the possession of Lessee), the falsity of any non-tax representation or warranty of Lessee or Lessee's failure to comply with the terms of the Lease during the Lease Term, provided that Lessee shall not be required to indemnify Lessor for Claims arising from an act or omission of Lessor with respect to the Equipment after Lessor has taken possession of such

Equipment under **Section 6(c)**. The foregoing indemnity shall cover, without limitation, (i) any Claim in connection with a design or other defect (latent or patent) in any item of Equipment, (ii) any Claim for infringement of any patent, copyright, trademark or other intellectual property right, or (iii) any Claim for negligence or strict or absolute liability in tort; *provided, however,* that Lessee shall not indemnify Lessor for any liability to the extent it is incurred by Lessor as a direct result of Lessor's gross negligence or willful misconduct.

"*Claim*" means all liabilities, losses, damages, actions, suits, demands, claims of any kind and nature (including, without limitation, claims relating to environmental discharge, cleanup or compliance), and all costs and expenses whatsoever to the extent they may be incurred or suffered by an Indemnified Person in connection therewith (including, without limitation, reasonable attorneys' fees and expenses), fines, penalties (and other charges of applicable governmental authorities), licensing fees relating to any item of Equipment, damage to or loss of use of property (including, without limitation, consequential or special damages to third parties or damages to Lessee's property), or bodily injury to or death of any person (including, without limitation, any agent or employee of Lessee).

"*Indemnified Person*" means Lessor (including without limitation, each of its partners) and each of their respective successors, assigns, agents, officers, directors, shareholders, partners, servants, agents and employees.

Such indemnities shall continue in full force and effect, notwithstanding the expiration or termination of this Lease. Upon Lessor's written demand, Lessee shall assume and diligently conduct, at its sole cost and expense, the entire defense of any Indemnified Person against any indemnified Claim described in this **Section 18**. Lessee shall not settle or compromise any Claim against or involving Lessor without first obtaining Lessor's written consent thereto, which consent shall not be unreasonably withheld. Lessee shall give Lessor prompt notice of any occurrence, event or condition in connection with which Lessor may be entitled to indemnification hereunder. The provisions of this **Section 18** are in addition to, and not in limitation of, the provisions of **Section 14(b)**.

19. NOTICES. Any notices or demands required or permitted hereunder shall be given to the parties in writing and by personal delivery, regular or certified mail, facsimile or telegram at the address set forth in the Lease Line Schedule or to such other address as the parties may hereafter substitute by written notice given in the manner prescribed in this Section. Such notices or demands shall be deemed given upon receipt in the case of personal delivery and upon mailing or transmission in the case of mail, facsimile or telegram. Lessee agrees to provide Lessor with twenty (20) days' prior written notice of (a) any merger or consolidation with or into any other business organization, (b) any sale, lease or other disposition of substantially all of the assets not in the ordinary course of business, and (c) except to the extent that a confidentiality agreement restricts such notice, any other material change in Lessee's financial structure or ownership.

20. FURTHER ASSURANCES. Lessee will promptly execute and deliver to Lessor such further reasonable documents and take such further reasonable action as Lessor may request in order to more effectively carry out the intent and purpose of this Lease or an assignment of Lessor's interest herein.

21. MISCELLANEOUS. This Lease shall be binding upon and inure to the benefit of the parties hereto, their permitted successors and assigns. Any provision of the Lease which is unenforceable in any jurisdiction shall, as to such jurisdiction, be ineffective to the extent of such prohibition or unenforceability without invalidating the remaining provisions hereof; and any such prohibition or unenforceability in any jurisdiction shall not invalidate or render unenforceable such provision in any other jurisdiction; *provided, however*, that to the extent that the provisions of any such applicable law can be waived, they are waived by Lessee. Time is of the essence with respect to the Lease. The captions set forth herein are for convenience only and shall not define or limit any of the terms hereof. **THIS LEASE SHALL IN ALL RESPECTS BE GOVERNED BY, AND CONSTRUED IN ACCORDANCE WITH, THE LAWS OF THE STATE OF CALIFORNIA, WITHOUT REFERENCE TO CONFLICT OF LAWS PRINCIPLES. LESSOR AND LESSEE WAIVE ALL RIGHTS TO TRIAL BY JURY IN ANY LITIGATION ARISING FROM THIS LEASE. THIS LEASE SHALL BECOME EFFECTIVE AND BINDING ON THE PARTIES, THEIR RESPECTIVE SUCCESSORS AND PERMITTED ASSIGNS, AND SHALL BE DEEMED EXECUTED AND PERFORMED IN THE STATE OF CALIFORNIA, WHEN THE RELATED EQUIPMENT SCHEDULE IS ACCEPTED BY LESSOR. LESSEE CONSENTS TO THE NON-EXCLUSIVE JURISDICTION OF THE STATE COURTS OF CALIFORNIA FOR THE RESOLUTION OF ANY DISPUTES HEREUNDER.**

22. AMENDMENTS, MODIFICATIONS, WAIVERS. NONE OF THE PROVISIONS OF THIS LEASE MAY BE AMENDED, MODIFIED OR WAIVED EXCEPT IN A WRITING SIGNED BY LESSOR AND LESSEE.

INITIALS /s/ JW (LESSEE)

INITIALS /s/ DR (LESSOR)

LESSEE:

RIGEL PHARMACEUTICALS, INC.

By: /s/ James Welch

Name: James Welch

Title: Chief Financial Officer

LESSOR:

LIGHTHOUSE CAPITAL PARTNERS IV, L.P.

By: **LIGHTHOUSE MANAGEMENT PARTNERS IV, L.L.C.**, its general partner

By: /s/ Denis Ryan

Name: Denis Ryan

Title: Chief Operating Officer

SCHEDULE I

DISCLOSURE SCHEDULE

NEGATIVE PLEDGE AGREEMENT

THIS NEGATIVE PLEDGE AGREEMENT is made as of December 23, 2002, by and between **RIGEL PHARMACEUTICALS, INC.** ("*Lessee*") and **LIGHTHOUSE CAPITAL PARTNERS IV, L.P.** ("*Lessor*").

In connection with the Lease Documents being concurrently executed between Lessee and Lessor, Lessee agrees as follows:

Lessee shall not sell, transfer, assign, mortgage, pledge, lease, grant a security interest in, or encumber any of lessee's intellectual property, including, without limitation, the following:

(a) Any and all copyright rights, copyright applications, copyright registration and like protection in each work or authorship and derivative work thereof, whether published or unpublished and whether or not the same also constitutes a trade secret, now or hereafter existing, created, acquired or held (collectively, the "*Copyrights*");

(b) Any and all trade secrets, and any and all intellectual property rights in computer software and computer software products now or hereafter existing, created, acquired or held;

(c) Any and all design rights which may be available to Lessee now or hereafter existing, created, acquired or held;

(d) All patents, patent applications and like protections, including, without limitation, improvements, divisions, continuations, renewals, reissues, extensions and continuations-in-part of the same, including, without limitation, the patents and patent applications (collectively, the "*Patents*");

(e) Any trademark and servicemark rights, whether registered or not, applications to register and registrations of the same and like protections, and the entire goodwill of the business of Lessee connected with and symbolized by such trademarks (collectively, the "*Trademarks*");

(f) Any and all claims for damages by way of past, present and future infringements of any of the rights included above, with the right, but not the obligation, to sue for an collect such damages for said use or infringement of the intellectual property rights identified above;

(g) All licenses or other rights to use any of the Copyrights, Patents or Trademarks and all license fees and royalties arising from such use to the extent permitted by such license or rights;

(h) All amendments, extensions, renewals and extensions of any of the Copyrights, Patents or Trademarks; and

(i) All proceeds and products of the foregoing, including, without limitation, all payments under insurance or any indemnity or warranty payable in respect of any of the foregoing.

Notwithstanding the foregoing, the Lessee may (1) grant licenses and enter into similar arrangements for the use of its intellectual property in the ordinary course of business, and (2) enter into collaborations and scientific arrangements with respect to its intellectual property in the ordinary course of business.

It shall be an event of default under the lease documents between lessee and lessor if there is a breach of any term of this negative pledge agreement.

Capitalized items used herein without definition shall have the same meanings as set forth in the lease documents referred to above.

LESSEE:

RIGEL PHARMACEUTICALS, INC.

By: /s/ James Welch

Name: James Welch

Title: CFO

LESSOR:

LIGHTHOUSE CAPITAL PARTNERS IV, L.P.

By: **LIGHTHOUSE MANAGEMENT PARTNERS IV, L.L.C.**, its general partner

By: /s/ Denis Ryan

Name: Denis Ryan

Title: Chief Operating Officer

EXHIBIT B

EQUIPMENT SCHEDULE NO. 01, dated _____("*Equipment Schedule*") to
LEASE LINE SCHEDULE NO. 01, dated December 23, 2002 ("*Lease Line Schedule*"), to
MASTER EQUIPMENT LEASE AGREEMENT NO. 167040101, dated December 23, 2002 ("*Master Lease*"),
by and between **LIGHTHOUSE CAPITAL PARTNERS IV, L.P.** ("*Lessor*") and **RIGEL PHARMACEUTICALS, INC.**, a Delaware corporation ("*Lessee*").

(All capitalized terms not otherwise defined herein shall have the meanings given to such terms in the Master Lease.)

Total Lessor's Cost:	The total Lessor's Cost under this Equipment Schedule shall be an amount equal to the sum of the Lessor's Cost under each Delivery and Acceptance Certificate executed by Lessee between the date of this Equipment Schedule and ten days prior to the Commencement Date, and which refers to this Equipment Schedule.
Lease Term:	36 Months
Commencement Date:	
Interim Rent:	On or about the Commencement Date, Lessor shall send Lessee a "Summary of Equipment Schedule" in the form of **Annex A** hereto, specifying, among other things, the applicable Interim Rent; *provided*, *however*, that any failure by Lessor to send Lessee a Summary Equipment Schedule shall not relieve Lessee of its obligation to pay rent hereunder.
Rental Factor:	The Rental Factor shall be set forth in the Summary of Equipment Schedule.
Rental Payments:	The amount of the monthly Rental Payments, calculated in accordance with the Lease Line Schedule and payable monthly in advance, shall be set forth in the Summary of Equipment Schedule. Payments shall be made to Lessor's address set forth in the Lease Line Schedule.
Rental Payment Dates:	First day of each calendar month.
Equipment Description:	The Equipment shall be described in each Delivery and Acceptance Certificate executed by Lessee between the date of this Equipment Schedule and the Commencement Date, and which refers to this Equipment Schedule. Delivery and Acceptance Certificates under this Equipment Schedule must be received by Lessor no later than five business days prior to the Commencement Date.
Equipment Location:	240 East Grand Avenue, South San Francisco, CA 94080
Terms and Conditions:	The terms and conditions of the above-referenced Master Lease and Lease Line Schedule are incorporated herein. In addition, the following attachments apply to this Equipment Schedule only: None.

No Default:	No Event of Default or event which, with notice or lapse of time or both, would become an Event of Default, has occurred and is continuing.

LESSEE:

RIGEL PHARMACEUTICALS, INC.

By: _____

Name: James Welch

Title: Chief Financial Officer

LESSOR:

LIGHTHOUSE CAPITAL PARTNERS IV, L.P.

By: **LIGHTHOUSE MANAGEMENT PARTNERS IV, L.L.C.**, its general partner

By: _____

Name: _____

Title: _____

ANNEX A

SUMMARY OF EQUIPMENT SCHEDULE NO. 01 to
LEASE LINE SCHEDULE NO. 01, dated December 23, 2002, to
MASTER EQUIPMENT LEASE AGREEMENT NO. 167040101, dated December 23, 2002 ("*Master Lease*") by and between **LIGHTHOUSE CAPITAL PARTNERS IV, L.P.** ("*Lessor*") and **RIGEL PHARMACEUTICALS, INC.**, a Delaware corporation ("*Lessee*").

(All capitalized terms not otherwise defined herein shall have the meanings given to such terms in the Master Lease.)

Total Lessor's Cost:	$ _____
Total Interim Rent:	$ _____
Rental Factor:	3.2%
Rental Payments:	36 Payments of $_____ each, payable monthly in advance

Amount of Advance Rent applied to this Equipment Schedule: $_____N/A_____

LIGHTHOUSE CAPITAL PARTNERS IV, L.P.

By: **LIGHTHOUSE MANAGEMENT PARTNERS IV, L.L.C.**, its general partner

By: **EXHIBIT ONLY**

Name: _____

Title: _____

ANNEX B

SOFTWARE RIDER

THIS SOFTWARE RIDER (this "Rider") is made a part of Lease Line Schedule No. 01 (the ("*Lease Line Schedule*") dated December 23, 2002, by and between **LIGHTHOUSE CAPITAL PARTNERS IV, L.P.**, a Delaware limited partnership ("*Lessor*") and **RIGEL PHARMACEUTICALS, INC.**, a Delaware corporation ("*Lessee*").

All capitalized terms used and not otherwise defined herein are defined in the Lease Line Schedule.

In the event any computer software (as described in any applicable Equipment Schedule and collectively with all manuals, updates, revisions, program and data files, and documentation relating thereto or used or usable in connection therewith, the "Software"), is purchased or licensed pursuant to the Lease Line Schedule, then, in addition to all other terms and conditions of the Master Lease and the Lease Line Schedule, all of which are incorporated herein by this reference:

1. **Software as General Intangibles**. All Software shall be "Equipment" as defined under the Lease Line Schedule. Lessee hereby grants to Lessor as collateral security for Lessee's payment and performance of all Lessee's obligations of payment and performance under this Rider, the Lease Line Schedule, the Master Lease, and every other present or future Equipment Schedule or other agreement between Lessee and Lessor, a security interest in all of its right, title and interest in and to the Software, including without limitation general intangibles, licenses, and intellectual property rights with respect thereto, and all substitutions, modifications, replacements, additions, accessions, proceeds, and products of to or for any of the foregoing.

2. **Exclusion of Warranties**. Without limiting the generality of all exclusions of warranty set forth in the Lease Line Schedule and Master Lease, Lessor makes no and specifically excludes any representation or warranty relating to any Software, including without limitation any warranty of title, validity or enforceability of license, noninfringement, availability or quality of vendor support, or fitness for any particular purpose.

3. **License Assignment Agreement**. In the case of Software with a Lessor's Cost in excess of $100,000, Lessee shall use its best efforts to ensure the receipt by Lessor of a License Assignment Agreement in form and substance satisfactory to Lessor and as set forth on **Exhibit 1** hereto (the "*Software License Assignment Agreement*") as an express condition precedent to the advance by Lessor of any funds to any party with respect to the Software. Breach by Lessee of any material term or condition of any license agreement governing the right to use any Software which is not cured within the applicable grace period shall be an Event of Default under the Master Lease.

4. **Applicability of Lease**. The Master Lease, Lease Line Schedule, Equipment Schedule, Software License Assignment Agreement, and this Rider, and all documents entered into in connection therewith, govern Lessee's obligations of payment and performance to Lessor with respect to the Software, whether or not the Software represents goods capable of being leased pursuant to the UCC.

5. **License Performance**. Lessee agrees that in addition to Lessor's remedies following an Event of Default and during its continuance, Lessor may upon notice to Lessee requiring the same cause Lessee to cease all use of the Software and to assemble and deliver to Lessor the same in electronic or other form. Lessee shall remit to Lessor upon demand any amounts due and payable with respect to the licensing of any Software or the assignment thereof. Lessee agrees that monetary damages are

not a sufficient remedy and will not adequately compensate Lessor for Lessee's breach of this Section, and that Lessor shall be entitled to seek specific performance or other injunctive or equitable relief.

6. **Integration**. This Rider represents the entirety of the understanding between the parties with respect to its subject matter, and may only be modified by a written instrument signed by the party to be charged. All rights and remedies of Lessor herein are in addition to, and not in limitation of, the rights and remedies of Lessor under the Lease.

LESSEE:

RIGEL PHARMACEUTICALS, INC.

By: /s/ James Welch

Name: James Welch

Title: Chief Financial Officer

LESSOR:

LIGHTHOUSE CAPITAL PARTNERS IV, L.P.

By: **LIGHTHOUSE MANAGEMENT PARTNERS IV, L.L.C.**, its general partner

By: /s/ Denis Ryan

Name: Denis Ryan

Title: Chief Operating Officer

ANNEX B-1
EXHIBIT 1
SOFTWARE LICENSE ASSIGNMENT AGREEMENT

This SOFTWARE LICENSE ASSIGNMENT AGREEMENT (this "*Agreement*") is entered into _____, _____, by and between _____ ("*Vendor*"), **LIGHTHOUSE CAPITAL PARTNERS II, L.P.,** a Delaware limited partnership ("*Lessor*") and **RIGEL PHARMACEUTICALS, INC.,** a Delaware corporation ("*Lessee*"), with respect to certain items of computer software purchased or licensed from Vendor as more specifically described in attachments hereto (the "*Software*") in connection with that certain Equipment Schedule No. 01 between Lessee and Lessor (collectively with all documents entered into in connection therewith, the "*Lease*") dated December __, 2002.

1. **Acknowledgment of License**. The parties acknowledge that the right to use the Software is being acquired pursuant to a software license agreement (the "*License*") between Vendor and Lessee, and agree as follows:

(a) Lessee reaffirms all of its rights and obligations under the License and under the Lease. Lessor is not a party to the License, but is an express third party beneficiary thereof.

(b) Lessee assigns to Lessor all of its rights and benefits, but Lessee retains all the obligations and burdens, under the License. Vendor consents to such assignment.

(c) Lessor sublicenses back to Lessee, such sublicense terminating once an Event of Default has occurred and is continuing under the Lease, the rights and benefits under the License.

2. **Assignment**. Lessor may upon notice to Vendor succeed to all of Lessee's right, title and interest in and to the License, and may sell or assign the same to any person, without the imposition of any transfer fee payable to Vendor, effective upon such person's execution of the License, who shall upon such execution succeed to the obligations and burdens under such license.

3. **No Commitment**. This is not a commitment by Lessor to purchase or finance any other items of software or hardware other than the Software.

4. **Integration**. This Agreement represents the entirety of the understanding between the parties with respect to its subject matter, and may only be modified by a written instrument signed by the party to be charged.

("Vendor")

By: _____

Name: _____

Title: _____

LIGHTHOUSE CAPITAL PARTNERS IV, L.P.

By: **LIGHTHOUSE MANAGEMENT PARTNERS IV, L.L.C.**, its general partner

RIGEL PHARMACEUTICALS, INC.

By: _____

Name: _____

By: **EXHIBIT ONLY**

Name:

Title:

Title:

EXHIBIT A

LEASE LINE SCHEDULE NO. 01, dated December 23, 2002("*Lease Line Schedule*"),
to
MASTER EQUIPMENT LEASE AGREEMENT NO. 167040101, dated December 23, 2002 ("*Master Lease*"),
by and between
LIGHTHOUSE CAPITAL PARTNERS IV, L.P., a Delaware limited partnership ("*Lessor*") and **RIGEL PHARMACEUTICALS, INC.**, a Delaware corporation ("*Lessee*").

(All capitalized terms not otherwise defined herein shall have the meanings given to such terms in the Master Lease.)

IN CONSIDERATION of the mutual covenants contained herein, the parties agree as follows:

Lease Line. The total Lessor's Cost of all units of Equipment under all Equipment Schedules pursuant to this Lease Line Schedule shall not exceed $2,000,000.00 (the "*Commitment*"). **"Lessor's Cost"** means, with respect to a unit of Equipment, the total cost to Lessor of purchasing such unit, as indicated on the applicable Equipment Schedule. Lessor's obligation to fund Equipment Schedules under the Commitment shall terminate on December 22, 2003 (the "*Commitment Termination Date*"). The minimum Lessor's Cost for each Delivery & Acceptance Certificate shall be $10,000.00.

Rental Factor. The Rental Factor for each Equipment Schedule will be 3.2% of scheduled Lessor's Cost per month, payable monthly in advance. The Rental Payment under a particular Equipment Schedule shall be an amount equal to the product of (a) the Rental Factor and (b) the aggregate Lessor's Cost of Equipment subject to such Equipment Schedule.

Interim Rent. The Daily Interim Rent factor for each Equipment Schedule shall equal 0.0274%.

Advance Rent. Not Applicable

Commitment Fee. Upon execution of the lease proposal dated November 7, 2002, Lessee paid to Lessor a commitment fee in the amount of Ten Thousand Dollars ($10,000.00) ("*Commitment Fee*"). This Commitment Fee shall be applied to Expenses (as defined below), Interim Rent, the first month's rent and every subsequent rent payment due from Lessee to Lessor under each Equipment Schedule until fully applied. In the event this transaction is not approved by Lessor, the Commitment Fee will be returned in its entirety to Lessee.

Expenses. Lessee agrees to reimburse Lessor for reasonable expenses incurred in connection with the negotiation and documentation of this transaction, promptly upon receipt of an invoice.

Eligible Equipment. All equipment to be financed under an Equipment Schedule shall be Eligible Equipment. "*Eligible Equipment*" means the following types of equipment to the extent acceptable to Lessor:

Various new and used computers, peripherals, analytical and test equipment, laboratory equipment and furniture, office furniture and equipment and other equipment as mutually agreed to by Lessee and Lessor, together with all replacements, parts, cables, repairs, additions and accessories incorporated therein or affixed thereto and all operating manuals and manufacturer's instructions (collectively hereinafter called the "*Equipment*"). Software, leasehold improvements, freight, installation, sales tax and other soft costs acceptable to Lessor ("*Soft Costs*") shall not exceed Five Hundred Thousand Dollars ($500,000.00). Such replacements, parts, cables, repairs, additions and accessories shall (whether or not purchased by Lessor) be considered part of the Equipment for all purposes and, when installed in or attached to the Equipment (unless otherwise agreed), be or become the property of the Lessor. Except as otherwise specifically provided or the context so requires, the term "*Equipment*" includes operating system or other bundled software which is delivered on or with the Equipment or is included on the Equipment Schedules. Notwithstanding the foregoing and with respect to Equipment Schedule No. 01 only, Lessor agrees to finance Eligible Equipment delivered to Lessee between August 1, 2002 and a date that is ninety (90) days prior to the Commencement Date for such Eligible Equipment at an amount equal to (a) Lessor's Cost minus (b) Lessor's Cost divided by the Lease Term multiplied by (c) the number of thirty (30) day periods elapsed since the date of delivery of such Eligible Equipment.

Commencement Date. The "Commencement Date" for each Equipment Schedule shall be the first day of the calendar month following the Acceptance Date for the items of Equipment subject to such Equipment Schedule.

Lease Termination Options. Upon Lease Termination (as defined in the Master Lease), Lessee will have, with respect to all but not less than all of the Equipment governed by this Lease Line Schedule, the option to (a) purchase the Equipment for the lesser of its then fair market value or ten (10%) of Lessor's Cost, (b) renew the Lease or (c) return the Equipment to Lessor as provided in **Section 6** of the Master Lease. Notwithstanding the foregoing and with respect to Equipment Schedule No. 01 only, Lessee shall not have the option described above, but instead shall be obligated to pay upon Lease Termination a fixed payment equal to ten percent (10.0%) of Lessor's Cost with respect to Equipment Schedule No. 01.

Advance Notice Period. The "*Advance Notice Period*" shall be at least ninety (90) days, but not more than 180 days, prior to Lease Termination (as defined in the Master Lease) of Equipment Schedule No. 01 to this Lease Line Schedule.

Automatic Extension Period. The "*Automatic Extension Period*" shall equal three (3) months and affects each Equipment Schedule under this Lease Line Schedule.

Insurance. The amount of commercial general liability insurance (other than products liability coverage and completed operations insurance) required under the

Master Lease shall be at least $2,000,000 per occurrence. The amount of the products liability and completed operations insurance under the Master Lease shall be at least $2,000,000 per occurrence.

Financial Statements. Lessee shall deliver to Lessor: (a) as soon as available, but in any event within forty-five (45) days after the end of each calendar quarter, a company prepared balance sheet, income statement and cash flow statement covering Lessee's operations during such period, certified by an officer of Lessee reasonably acceptable to Lessor; (b) as soon as available, but in any event within ninety (90) days after the end of Lessee's fiscal year, audited financial statements of Lessee prepared in accordance with generally accepted accounting principles, consistently applied, together with an unqualified opinion on such financial statements of an independent certified public accounting firm reasonably acceptable to Lessor; (c) immediately upon receipt of notice thereof, a report of any material legal actions pending or threatened against Lessee involving amounts greater than $200,000; and (d) such other financial information as Lessor may reasonably request from time to time.

Maintenance Service Contracts. Lessee shall obtain and keep in effect at all times during the Lease Term (and any renewal or extension thereof), maintenance service contracts covering any Equipment with (i) a Lessor's Cost in excess of $100,000 and/or (ii) Equipment for which maintenance service contracts are customarily available with the Equipment supplier or with other customary suppliers of maintenance services for such Equipment.

Installation, Handling and Delivery Charges. Any handling and delivery charge to cover all Equipment transportation, rigging, drayage, packing, installation and handling to and from vendor's plant and upon return to Lessor's designated location shall be paid by Lessee.

Miscellaneous taxes. Without limitation of the provisions of the Master Lease, Lessee agrees to pay and to indemnify Lessor for any sales or use tax and any property tax in connection with the sale, lease or use of the Equipment other than an assignment of the Lease by Lessor.

Late Fee. Lessee shall pay a late charge on any rent payments or other sums due hereunder which are past due more than ten (10) days, in an amount equal to 2% of the past due amount, payable on demand.

Default Rate. The Default Rate of interest on late payments shall be eighteen percent (18%) per annum.

Notices. All notices shall be addressed as follows:

If to Lessor:	**If to Lessee:**
Lighthouse Capital Partners IV, L.P. 500 Drake's Landing Greenbrae, CA 94904-3011 Attn.: Contract Administration Phone: (415) 464-5900 Fax: (415) 925-3387	Rigel Pharmaceuticals, Inc. 240 East Grand Avenue South San Francisco, CA 94080 Attn.: Chief Financial Officer Phone: (650) 624-1176 Fax: (650) 642-1101

Conditions to the First Equipment Schedule. On or prior to the date of execution of the first Equipment Schedule under this Lease Line Schedule, Lessor shall have received in form and substance satisfactory to Lessor, each of the following:

1. A Warrant substantially in the form of ***Exhibit H*** to the Master Lease.

2. Copies, certified by the Secretary or Assistant Secretary or Chief Financial Officer of Lessee, of: (i) the Certificate of Incorporation and By-Laws of Lessee (as amended to the date of the Lease) and (ii) the resolutions adopted by Lessee's board of directors authorizing the execution and delivery of this Lease, the Lease Line Schedule, the Equipment Schedules, the Warrant and the other documents referred in this Lease Line Schedule and the performance by Lessee of its obligations in such documents.

3. A Good Standing Certificate (including franchise tax status) with respect to Lessee from Lessee's state of incorporation, dated a date reasonably close to the date of acceptance of the Lease by Lessor.

4. A Software Rider substantially in the form of ***Annex B*** to this Lease Line Schedule.

5. Evidence of the insurance coverage required by **Section 8** of the Master Lease.

6. All necessary consents of shareholders and other third parties with respect to the subject matter of the Master Lease, the Lease Line Schedule, the Equipment Schedules and the Warrant.

Conditions to all fundings under all Equipment Schedules. On or prior to each funding under each Equipment Schedule under this Lease Line Schedule, each of the following conditions shall have been satisfied:

1. The Commitment Termination Date shall not have passed.

2. No Event of Default or event which, with notice or lapse of time or both, would become an Event of Default, has occurred and is continuing.

3. Lessor shall have received a Software Licenses Assignment Agreement in substantially the form of ***Annex B-1*** to this Lease Line Schedule with respect to each Vendor of software with a Lessor's Cost in excess of $100,000 to be financed under this Lease Line Schedule.

4. Lessor shall have received all necessary or desirable estoppel certificates and UCC filings, releases or terminations.

5. Lessor shall use its best efforts to obtain a landlord waiver and consent in substantially the form of ***Exhibit E*** to the Master Lease with respect to each equipment location.

6. Lessor shall have received a Negative Pledge Agreement in substantially the form of ***Exhibit J*** to the Master Lease.

7. There shall not have occurred (i) any material adverse change to the general affairs, management, results of operations, condition (financial or otherwise) or prospects of Lessee, whether or not arising from transactions in the ordinary course of business, or (ii) any material adverse deviation by Lessee from the business plan of Lessee presented to and not disapproved by Lessor, since the date of the Master Lease.

8. Lessee shall have delivered to Lessor an Equipment Schedule covering the appropriate funding period.

9. Not less than fifteen business days prior to the desired funding date, Lessee shall have delivered to Lessor original invoices (each of which shall have a minimum value of Five Hundred Dollars ($500)), canceled checks or other proof of payment. On or prior to the Commencement Date for a particular Equipment Schedule, Lessee shall provide a Bill of Sale, a Delivery and Acceptance Certificate, and any UCC filings or other documents or notices deemed necessary by Lessor in its sole reasonable discretion..

10. All terms and conditions in the Equipment Schedule shall have been satisfied by the Acceptance Date for the Equipment under such Equipment Schedule.

All other documents as Lessor shall have reasonably requested.

LESSEE:

RIGEL PHARMACEUTICALS, INC.

By: /s/ James Welch

Name: James Welch

Title: Chief Financial Officer

LESSOR:

LIGHTHOUSE CAPITAL PARTNERS IV, L.P.

By: **LIGHTHOUSE MANAGEMENT PARTNERS IV, L.L.C.**, its general partner

By: /s/ Denis Ryan

Name: Denis Ryan

Title: Chief Operating Officer

Annex A — Stipulated Loss Value Table

ANNEX A

STIPULATED LOSS VALUE TABLE
TO
LEASE LINE SCHEDULE NO. 01, dated December 23, 2002, to
MASTER EQUIPMENT LEASE AGREEMENT NO. 167040101, dated December 23, 2002 ("*Master Lease*"), by and between **LIGHTHOUSE CAPITAL PARTNERS IV, L.P.**, a Delaware limited partnership ("*Lessor*"), and **RIGEL PHARMACEUTICALS, INC.**, a Delaware corporation ("*Lessee*").

(All capitalized terms not otherwise defined herein shall have the meanings given to such terms in the Master Lease.)

In the case of an Event of Loss, the Stipulated Loss Value for each item of leased Equipment is the Lessor's Cost for the item multiplied by Stipulated Loss Value Percentage for the Rent Payment Number following the month of the Event of Loss.

Rent Payment Number	Stipulated Loss Value Percentage	Rent Payment Number	Stipulated Loss Value Percentage
1	112.00%	19	59.54%
2	109.09%	20	56.63%
3	106.17%	21	53.71%
4	103.26%	22	50.80%
5	100.34%	23	47.89%
6	97.43%	24	44.97%
7	94.51%	25	42.06%
8	91.60%	26	39.14%
9	88.69%	27	36.23%
10	85.77%	28	33.31%
11	82.86%	29	30.40%
12	79.94%	30	27.49%
13	77.03%	31	24.57%
14	74.11%	32	21.66%
15	71.20%	33	18.74%
16	68.29%	34	15.83%
17	65.37%	35	12.91%
18	62.46%	36 and thereafter	10.00%

Lessee: _____ Lessor: _____

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Exhibit 23.1

CONSENT OF ERNST & YOUNG LLP, INDEPENDENT AUDITORS

We consent to the incorporation by reference in the Registration Statements (Forms S-3 No. 333-74906 and No. 333-87276) of Rigel Pharmaceuticals, Inc. and in the related Prospectuses, and in the Registration Statements (Forms S-8 No. 333-51184 and No. 333-72492) pertaining to the 2000 Equity Incentive Plan, 2000 Employee Stock Purchase Plan, 2000 Non-Employee Directors' Stock Option Plan and 2001 Non-Officer Equity Incentive Plan of Rigel Pharmaceuticals, Inc., of our report dated January 24, 2003, except for Note 9 as to which the date is January 31, 2003, with respect to the financial statements of Rigel Pharmaceuticals, Inc., included in this Annual Report (Form 10-K) for the year ended December 31, 2002.

/s/ ERNST & YOUNG LLP

Palo Alto, California
March 27, 2003

QuickLinks

Exhibit 99.1

CERTIFICATION (1)

Pursuant to Section 906 of the Sarbanes-Oxley Act of 2002 (18 U.S.C.§ 1350, as adopted), James M. Gower, Chief Executive Officer of Rigel Pharmaceuticals, Inc. (the "Company"), and James H. Welch, Chief Financial Officer of the Company, each hereby certify that, to the best of their knowledge:

1. The Company's Annual Report on Form 10-K for the period ended December 31, 2002, to which this Certification is attached as Exhibit 99.1 (the "Annual Report") fully complies with the requirements of section 13(a) or section 15(d) of the Securities Exchange Act of 1934, and

2. The information contained in the Annual Report fairly presents, in all material respects, the financial condition and results of operations of the Company.

In Witness Whereof, the undersigned have set their hands hereto as of the 31st day of March, 2003.

/s/ JAMES M. GOWER
James M. Gower
Chief Executive Officer

/s/ JAMES H. WELCH
James H. Welch
Chief Financial Officer

(1) A signed original of this written statement required by Section 906 has been provided to Rigel and will be retained by Rigel and furnished to the Securities and Exchange Commission or its staff upon request. This certification "accompanies" the Form 10-K to which it relates, is not deemed filed with the SEC and is not to be incorporated by reference into any of Rigel's filings under the Securities Act of 1933, as amended, or the Securities Exchange Act of 1934, as amended (whether made before or after the date of this Form 10-K), irrespective of any general incorporation language contained in such filing.