REGISTRATION NO. 333-45864

SECURITIES AND EXCHANGE COMMISSION WASHINGTON, D.C. 20549

AMENDMENT NO. 3 TO

FORM S-1

REGISTRATION STATEMENT

UNDER

THE SECURITIES ACT OF 1933 ______

RIGEL PHARMACEUTICALS, INC.

(Exact name of registrant as specified in its charter)

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<S> DELAWARE <C>

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(State or other jurisdiction of

8731 (Primary Standard Industrial

94-3248524 (I.R.S. Employer Identification No.)

incorporation oronganization) Classification Code Number)

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240 EAST GRAND AVENUE

SOUTH SAN FRANCISCO, CALIFORNIA 94080

(650) 624-1100

(Address, including zip code, and telephone number, including area code, of registrant's principal executive offices)

JAMES M. GOWER

PRESIDENT AND CHIEF EXECUTIVE OFFICER RIGEL PHARMACEUTICALS, INC. 240 EAST GRAND AVENUE SOUTH SAN FRANCISCO, CALIFORNIA 94080 (650) 624-1100

(Name, address, including zip code, and telephone number, including area code, of agent for service)

COPIES TO:

<TABLE>

<S>

ROBERT L. JONES, ESQ. SUZANNE SAWOCHKA HOOPER, ESQ. COOLEY GODWARD LLP FIVE PALO ALTO SQUARE 3000 EL CAMINO REAL PALO ALTO, CA 94306-2155

(650) 843-5000

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GREGORY C. SMITH, ESQ. ANDREA L. NICOLAS, ESQ. SCOTT JOACHIM, ESQ. SKADDEN, ARPS, SLATE, MEAGHER & FLOM, LLP 525 UNIVERSITY AVENUE, SUITE 220 PALO ALTO, CA 94301 (650) 470-4500

APPROXIMATE DATE OF COMMENCEMENT OF PROPOSED SALE TO THE PUBLIC: AS SOON AS PRACTICABLE AFTER THE REGISTRATION STATEMENT BECOMES EFFECTIVE.

If any of the securities being registered on this Form are to be offered on a delayed or continuous basis pursuant to Rule 415 under the Securities Act of 1933, as amended (the "Securities Act"), check the following box. / /

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

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

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

If delivery of the Prospectus is expected to be made pursuant to Rule 434, please check the following box./ $/\,$

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

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

Registration No. 333-45864

PROSPECTUS (SUBJECT TO COMPLETION)

ISSUED NOVEMBER 17, 2000

9,000,000 SHARES

[RIGEL LOGO] COMMON STOCK

RIGEL PHARMACEUTICALS, INC. IS OFFERING SHARES OF ITS COMMON STOCK. THIS IS OUR INITIAL PUBLIC OFFERING, AND NO ESTABLISHED PUBLIC MARKET CURRENTLY EXISTS FOR OUR COMMON STOCK. WE ANTICIPATE THAT THE INITIAL PUBLIC OFFERING PRICE WILL BE BETWEEN \$8 AND \$10.

OUR COMMON STOCK HAS BEEN APPROVED FOR QUOTATION ON THE NASDAQ NATIONAL MARKET UNDER THE SYMBOL "RIGL."

INVESTING IN THE COMMON STOCK INVOLVES RISKS. SEE "RISK FACTORS" BEGINNING ON PAGE 5.

PRICE \$ A SHARE

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RIGEL PHARMACEUTICALS, INC. HAS GRANTED THE UNDERWRITERS AN OPTION TO PURCHASE UP TO AN ADDITIONAL 1,350,000 SHARES OF OUR COMMON STOCK TO COVER

THE SECURITIES AND EXCHANGE COMMISSION AND STATE SECURITIES REGULATORS HAVE NOT APPROVED OR DISAPPROVED THESE SECURITIES, OR DETERMINED IF THIS PROSPECTUS IS TRUTHFUL OR COMPLETE. ANY REPRESENTATION TO THE CONTRARY IS A CRIMINAL OFFENSE.

MORGAN STANLEY & CO. INCORPORATED EXPECTS TO DELIVER THE SHARES TO PURCHASERS ON

MORGAN STANLEY DEAN WITTER

LEHMAN BROTHERS

ROBERTSON STEPHENS

, 2000

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ABOUT THIS PROSPECTUS

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

UNTIL , 2000 (25 DAYS AFTER THE DATE OF THIS PROSPECTUS), ALL DEALERS SELLING SHARES, WHETHER OR NOT PARTICIPATING IN THIS OFFERING, MAY BE REQUIRED TO DELIVER A PROSPECTUS. THIS IS IN ADDITION TO THE DEALERS' OBLIGATION TO DELIVER A PROSPECTUS WHEN ACTING AS UNDERWRITERS AND WITH RESPECT TO THEIR UNSOLD ALLOTMENTS OR SUBSCRIPTIONS.

"Rigel" and the Rigel logo are trademarks of Rigel Pharmaceuticals, Inc. Other trademarks and trade names appearing in this prospectus are the property of their holders.

Rigel was incorporated in Delaware on June 14, 1996. Our principal executive offices are located at 240 East Grand Avenue, South San Francisco, California 94080. Our telephone number is (650) 624-1100. Our website is http://www.rigel.com. The information found on our website is not intended to be a part of this prospectus.

i PROSPECTUS SUMMARY

THIS SUMMARY HIGHLIGHTS INFORMATION CONTAINED ELSEWHERE IN THIS PROSPECTUS. THIS SUMMARY MAY NOT CONTAIN ALL OF THE INFORMATION THAT YOU SHOULD CONSIDER BEFORE DECIDING TO INVEST IN OUR COMMON STOCK. WE URGE YOU TO READ THIS ENTIRE PROSPECTUS CAREFULLY, INCLUDING THE "RISK FACTORS" SECTION AND OUR FINANCIAL STATEMENTS AND THE NOTES TO THESE STATEMENTS.

OUR BUSINESS

We use post-genomics combinatorial biology technology to discover novel drug targets. Post-genomics combinatorial biology technology is designed to identify molecules which play an important role in regulating a human cell's response to disease by testing a very large number of proteins in a very large number of cells to determine which proteins will change the cell's response to the disease. Our technology provides a new and rapid way to find those protein molecules and to confirm or validate the role of those molecules in disease without first knowing the identity or sequence of the genes involved. We can identify those protein molecules that may be drug targets by creating a disease-like setting that enables us to detect a change in the cellular response. By creating a map of these protein molecules and their interactions in cells that are involved in a disease process, we can select for drug development protein targets that are specific to the diseases we study and reduce the probability of developing drugs with significant side effects. After selecting these targets, we continue drug development with the goal of developing small molecule drugs. Small molecule drugs are chemical compounds which provide the advantage that they can generally be administered orally. In our first three and one-half years of research, we have succeeded in identifying 23 new drug targets in nine of our ten programs and have generated compounds in six of our programs, including compounds which are candidates for preclinical testing in two of these programs. Our technology is applicable across a broad range of diseases and disorders. We currently have programs in asthma/allergy, autoimmunity, transplant rejection, rheumatoid arthritis, inflammatory bowel disease, cancerous tumor growth and hepatitis C. We have a collaboration with Pfizer Inc. and multi-year collaborations with Cell Genesys, Inc., Janssen Pharmaceutica N.V. and Novartis Pharma AG. In addition, we have collaborated with Neurocrine Biosciences, Inc. in order to obtain rights to a library of small chemical compounds. We believe that our innovative technology and corporate collaborations enable us to create value through the discovery of novel drug targets.

THE PROBLEM

Pharmaceutical companies face enormous pressure to develop new drugs and are actively seeking to develop drugs that act on previously unknown targets within cells. Despite revolutionary advances made in molecular biology and genomics, until recently only approximately 500 out of thousands of possible drug targets have been identified, and there has been no efficient way to identify additional appropriate targets for drug development. Efforts to identify the sequence of the complete set of human genes have generated huge amounts of fundamentally important genetic information, and these efforts have provided useful information about which particular genes are associated with particular disease conditions. However, there has been limited progress using this information to identify drug targets quickly and systematically. The result is a shortage of validated drug targets and limited tools to determine which new targets have clinical promise.

OUR SOLUTION

Our drug target discovery process bypasses the need to know the identity or sequence of the genes. We have developed two core technologies which we believe enhance our ability to simultaneously identify and initially validate new drug targets for further development.

Our retroviral technology introduces up to 100 million different peptides or proteins into an equal number of normal or diseased cells and stimulates the cells to induce a disease-like behavioral response. These cells are then sorted at a rate of up to 60,000 cells per 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 a protein that interacts with a protein target in a way that causes a cell to change its behavior from diseased back to normal. We believe we can identify the relatively few targets useful for identifying new drugs and initially validate them in the context of a disease-specific cellular response.

Our pathway mapping technology enables us to map interactions between proteins, identify specific proteins which bind with other proteins and select targets for drug development that are specific to the disease

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we are seeking to affect, avoiding targets that have a role in other diseases or cells. As a result of mapping the interactions of proteins in cells, we establish comprehensive sets of these interactions, referred to as pathways, which carry the information or signals necessary to regulate both diseased and normal cells.

We believe that our technologies have a number of advantages over traditional and genomics-based drug discovery approaches, including:

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better informed target selection;

-- rapid validation of protein targets;

- more efficient compound screening; and

OUR STRATEGY

Our strategy is to develop a large portfolio of drug candidates, out-license drug candidates at a relatively late stage of development and focus on diseases that represent large unmet medical needs. Also, we plan to focus on developing small molecule drugs delivered to protein targets within cells and to establish strategic collaborations with pharmaceutical and biotechnology companies to enhance product development and commercialization. We structure our collaboration agreements to permit multiple collaborations in each disease area by focusing the scope of our agreements on disease pathways and targets.

PRODUCT DEVELOPMENT PROGRAMS

We currently have six product development programs in immune disorders, three in cancer and one in infectious diseases:

TMMUNE DISORDERS

ASTHMA/ALLERGY. IgE is a class of antibody which plays an important role in the activation of the body's immune system. We have identified compounds that inhibit IgE's role in the secretion of inflammatory factors from mast cells. This program has entered preclinical studies in animal models. In our second program we have identified a novel drug target that regulates the production of IgE in B cells and a compound in this program.

AUTOIMMUNITY AND TRANSPLANT REJECTION. These programs seek selective and specific immune system therapeutics which do not negatively affect the protective activities of the immune system. We have identified novel drug targets in T cells and B cells and have initiated high throughput screening.

RHEUMATOID ARTHRITIS AND INFLAMMATORY BOWEL DISEASE. We are characterizing and developing specific inhibitors of protein-degrading enzymes, named E-3 ubiquitin ligases, and have identified several compounds. We also seek to block the inflammatory signals associated with tumor necrosis factor-alpha pathway, a proven link in the inflammatory process. We have identified and validated several novel members of this signaling pathway.

CANCER

TUMOR GROWTH. We have identified and validated two targets, one of which has entered small molecule compound screening in our program for cell cycle checkpoint control, a process which regulates cell proliferation. We have also identified a preclinical candidate compound which is a potent and non-toxic inhibitor of E-3 ubiquitin ligases. In addition, we have identified drug targets in the pathway associated with angiogenesis, a process of blood vessel formation.

INFECTIOUS DISEASES

HEPATITIS C. We have initiated a viral research program based upon technology acquired from Questcor Pharmaceuticals, Inc. in September 2000. In this program, we are seeking to block the IRES translation mechanism of the hepatitis C virus. This program has identified and validated targets, high throughput screens and initial compounds.

2 THE OFFERING

<table> <s> Common stock offered by us</s></table>	<c> 9,000,000 shares</c>
Common stock to be outstanding after the offering	39,628,596 shares
Over-allotment option	1,350,000 shares
Use of proceeds	For research and development activities, for financing possible acquisitions and investments in technology, for possibly expanding our facilities as well as for working capital and general corporate purposes.
Dividend policy	We do not intend to pay dividends on our common stock.
Nasdaq National Market symbol	

 RIGL |after the offering is based on 29,517,485 shares outstanding at September 30, 2000. This number:

- includes 24,836,343 shares of common stock issuable upon conversion of all preferred stock outstanding at September 30, 2000;
- includes 1,111,111 shares of common stock to be sold in a private placement to Novartis concurrent with the closing of this initial public offering;
- excludes 5,725,828 shares of our common stock issuable upon the exercise of options outstanding as of September 30, 2000, at a weighted average exercise price of \$2.36 per share;
- excludes 540,038 shares of our common stock issuable upon the exercise of warrants as of September 30, 2000, at a weighted average exercise price of \$1.16 per share; and
- excludes 1,625,530 additional shares of our common stock available for future grant as of September 30, 2000; an additional 400,000 shares made available under our employee stock purchase plan; and 300,000 shares of our common stock made available under our non-employee directors' stock option plan.

Except as otherwise indicated, information in this prospectus:

- assumes the automatic conversion of all outstanding shares of our preferred stock into common stock on a one-to-one basis;
- excludes 1,350,000 shares issuable upon the exercise of the underwriters' over-allotment option; and
- assumes the sale of 1,111,111 shares of common stock in a private placement to Novartis concurrent with the closing of this initial public offering at an assumed price of \$9.00 per share.

3 SUMMARY FINANCIAL DATA

The following tables summarize our financial data. The pro forma information contained in the statements of operations data and the balance sheet data gives effect to the automatic conversion of all convertible preferred stock into common stock upon the completion of this offering. The pro forma as adjusted balance sheet data reflects the pro forma balance sheet data at September 30, 2000 adjusted for the sale of 9,000,000 shares of our common stock in this offering at an assumed price to the public of \$9.00 per share, after deducting the estimated underwriting discounts, commissions and estimated offering expenses payable by us, and the sale of 1,111,111 shares of common stock in a private placement to Novartis concurrent with the closing of this initial public offering at an assumed price of \$9.00 per share.

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	INCEPTION (JUNE 14, 1996) THROUGH DECEMBER 31,	YEARS E	NDED DECEME	BER 31,		THS ENDED BER 30,
	1996	1997	1998		1999	2000
	(UNAUDITED)	(IN THOUSANDS	EVCEDE DE	ED CHARE AMO	•	DITED)
<pre><s> STATEMENTS OF OPERATIONS DATA:</s></pre>	<c></c>	<c></c>	<c></c>	C>	<c></c>	<c></c>
Contract revenues from collaborations Total operating expenses	\$ 133			\$ 8,984 21,064		\$ 10,008 29,619
Loss from operations Interest income (expense), net	(133)			(12,080)		(19,611) 18
Net loss Deemed dividend to Series E preferred stockholders	(133)	(5,516)			(7 , 929)	(19,593) (10,133)
Net loss allocable to common stockholders	\$ (133) ======	\$(5,516) ======	\$(10,604) ======	\$(12,366) ======	\$(7 , 929)	\$(29 , 726)
Net loss per common share, basic and diluted	\$ (.12) =====	\$ (2.20) =====	\$ (4.01) ======	\$ (4.39)	\$ (2.87) ======	\$ (6.92) ======
Weighted average shares used in computing net loss per common share, basic and diluted	1,089	2,512	2,643	2,818 \$ (.52)	2,764	4,297 \$ (1.04)

PERIOD FROM

28,709

Weighted average shares used in computing pro forma net loss per common share, basic and diluted.................</TABLE>

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23,996

AS OF SEPTEMBER 30, 2000

(UNAUDITED) (IN THOUSANDS)

			PRO FORMA
	ACTUAL	PRO FORMA	AS ADJUSTED
BALANCE SHEET DATA			
<\$>	<c></c>	<c></c>	<c></c>
Cash, cash equivalents and available-for-sale securities	\$ 10,970	\$ 10 , 970	\$ 95,300
Working capital	4,844	4,844	89,174
Total assets	21,454	21,454	105,784
Capital lease obligations, less current portion	5 , 390	5 , 390	5,390
Deferred stock compensation	(7 , 249)	(7,249)	(7,249)
Accumulated deficit	(48, 212)	(48,212)	(48,212)
Total stockholders' equity	7 , 379	7,379	91,709

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4 RISK FACTORS

THE SHARES OF COMMON STOCK THAT WE ARE OFFERING THROUGH THIS PROSPECTUS INVOLVE A SUBSTANTIAL RISK OF LOSS. BEFORE MAKING AN INVESTMENT IN THE COMMON STOCK, YOU SHOULD CAREFULLY READ THIS ENTIRE PROSPECTUS AND SHOULD GIVE PARTICULAR ATTENTION TO THE FOLLOWING RISK FACTORS. THE RISKS THAT WE NOW FORESEE MIGHT AFFECT US TO A GREATER OR DIFFERENT DEGREE THAN WE CURRENTLY EXPECT. THERE ARE A NUMBER OF IMPORTANT FACTORS THAT COULD CAUSE OUR ACTUAL RESULTS TO DIFFER MATERIALLY FROM THOSE INDICATED BY THE FORWARD-LOOKING STATEMENTS CONTAINED IN THIS PROSPECTUS. THESE FACTORS INCLUDE, WITHOUT LIMITATION, THE RISK FACTORS LISTED BELOW AND OTHER FACTORS PRESENTED THROUGHOUT THIS PROSPECTUS.

RISKS RELATED TO 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, we have not been profitable and have generated operating losses since we were incorporated in June 1996. Currently, our revenues are generated solely from research payments from our collaboration agreements and licenses and are insufficient to generate profitable operations. As of September 30, 2000, we had an accumulated deficit of approximately \$48.2 million. We expect to incur losses for at least the next several years and expect that these losses will actually increase as we expand our research and development activities, incur significant clinical and testing costs and possibly expand our facilities. Moreover, our losses are expected to continue even if our current research projects are able to successfully identify potential drug targets. If the time required to generate revenues and achieve profitability is longer than anticipated or if we are unable to obtain necessary capital, we may not be able to fund and continue our operations.

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. To date, all of our revenue has been related to the research phase of each of our collaborative agreements, which revenue is for specified periods and 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 contingent funding 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. Under many agreements, 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.

Our business plan contemplates that we will need to generate meaningful revenues from royalties and licensing agreements. To date, we have not yet received any revenue from royalties for the sale of commercial 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.

We are unable to predict when, or if, we will become profitable and even if we are able to achieve profitability at any point in time, we do not know if our operations will be able to maintain profitability during any future periods.

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THERE IS A HIGH RISK THAT EARLY-STAGE DRUG DISCOVERY AND DEVELOPMENT MIGHT NOT SUCCESSFULLY GENERATE GOOD DRUG CANDIDATES.

At the present time, our operations are in the early stages of drug identification and development. To date, we have only identified a few potential drug compounds, all of which are still in very early stages of development and have not yet been put into preclinical or clinical testing. It is statistically unlikely that the few 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 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 and competition, and additional costs and expenses that may exceed current estimates.

WE MIGHT NOT BE ABLE TO COMMERCIALIZE OUR DRUG CANDIDATES SUCCESSFULLY IF PROBLEMS ARISE IN THE 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 and we do not know whether we, or any of our collaborative partners, will be permitted to undertake clinical trials of any potential products. 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 promising results in earlier trials. Moreover, if and 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. There is also a risk that competitors and third parties may develop similar or superior products or have proprietary rights that preclude us from ultimately marketing our products, as well as the potential risk that our products may not be accepted by the marketplace.

IF OUR CURRENT CORPORATE COLLABORATIONS OR LICENSE AGREEMENTS ARE UNSUCCESSFUL OR IF CONFLICTS DEVELOP WITH THESE RELATIONSHIPS, 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 manufacturing, sales and marketing, and for licenses to technology rights. To date, we have entered into five such arrangements with corporate collaborators; however, we do not know if such third parties will dedicate sufficient resources or if any such 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, we may not receive any future milestone payments and 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, our two-year collaboration with Pfizer is scheduled to expire in January 2001, and we do not expect that this collaboration will be renewed. More generally, our corporate collaboration agreements may terminate before the full term of the collaborations or 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.

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

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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.

third parties. If any of our corporate collaborators were to breach or terminate their 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. 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.

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, or whether current or any future collaborative arrangements will ultimately be successful. 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. 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.

WE WILL NEED ADDITIONAL CAPITAL IN THE FUTURE TO SUFFICIENTLY FUND OUR OPERATIONS AND RESEARCH.

We will require additional financing in the future to fund our operations. Our operations require significant additional funding in large part due to our research and development expenses, future preclinical and clinical-testing costs, the possibility of expanding our facilities and the absence of any meaningful revenues over 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.

We believe that the net proceeds from this offering, together with the proceeds from the concurrent private placement with Novartis, will be sufficient to support our current operating plan through at least the next 24 months. Nonetheless, our future funding requirements will depend on many factors, including, but not limited to:

- any changes in the breadth of our research and development programs;
- the results of research and development, preclinical studies and clinical trials conducted by us or our collaborative partners or licensees, if any;
- the acquisition or licensing of technologies or compounds, if any;

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- our ability to maintain and establish new corporate relationships and research collaborations;
- our ability to manage growth;
- competing technological and market developments;
- the time and costs involved in filing, prosecuting, defending and enforcing patent and intellectual property claims;
- the receipt of contingent licensing or milestone fees from our current or future collaborative and license arrangements, if established; and
- the timing of regulatory approvals.

To the extent we raise additional capital by issuing equity securities, our stockholders may 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. If adequate funds are not available, we will not be able to continue developing our products.

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. One patent has been issued to us as of the date of this prospectus, and we have numerous applications awaiting approval. In the future, our patent position might be highly uncertain and involve complex legal and factual questions. No consistent policy regarding the breadth of claims allowed in biotechnology patents has emerged to date. Accordingly, we cannot predict the breadth of claims allowed in our or other companies' patents.

The degree of future protection for our proprietary rights is uncertain and 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;
- 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 which 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

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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.

For additional information concerning our intellectual property, see "Business--Intellectual Property."

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 on 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. 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

- subject us to potential liability for damages;
- consume a substantial portion of our managerial and financial resources;
- result in litigation or administrative proceedings which may be costly, whether we win or lose.

M&E Biotech A/S, a Danish biotechnology company, has received patent protection in European countries for a process similar to certain aspects of our technologies. M&E has notified us of its belief that we have infringed, and are contributorily infringing, certain claims of that European patent. We are currently reviewing their patent file and evaluating the appropriate course of action. If legal action were initiated on this patent, it could be lengthy, costly and require significant management time and other resources which could adversely affect the pursuit of scientific and business goals. In addition, any such legal action could result in the award of damages or a court order preventing us from using the technology covered by the M&E patent. Currently, we are not in discussions with M&E with respect to a license of its patented technology. In addition, any license or other transfer of rights to the patent by M&E to a third party could adversely impact our ability to obtain a license to the patent. In the event we desire to seek a license to the patent, we may not be able to obtain a license on acceptable terms. Furthermore, such failure might adversely impact our collaborations with European partners or may materially adversely affect our business in the jurisdictions that may be covered by the patent protection. We are also aware that M&E has sought patent protection in Australia and the U.S., and has the option to seek patent protection in other parts of the world. If M&E were to receive such patent protection, it might conflict with or overlap with the patent rights we are pursuing. We currently do not, and do not plan to, operate in any country outside the United States.

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We are aware of the existence of a United States patent directed towards a general cloning system. It is possible that this patent could be construed to cover certain aspects of our technologies. If legal action were initiated on this patent, it could have the effects discussed above.

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.

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 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, we, or our collaborative partners, will need to submit and receive approval from the FDA of an Investigational New Drug application, or IND. 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.

For additional information concerning the regulatory approval process, see "Business--Government Regulation."

WE MAY ENCOUNTER DIFFICULTIES IN MANAGING OUR GROWTH AND THESE DIFFICULTIES COULD INCREASE OUR LOSSES.

We have experienced a period of rapid and substantial growth that has placed and will continue to place a strain on our human and capital resources. The number of our employees increased from 31 at December 31, 1997 to 102 at September 30, 2000. Our ability to manage our operations and growth effectively requires us to continue to use funds to improve our operational, financial and management controls, reporting systems and procedures and to attract and retain sufficient numbers of talented employees. If we are unable to manage this growth effectively, our losses will increase.

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.

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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 which are being developed by us or which 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 approvals for drug candidates more rapidly than us or our strategic partners. 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 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 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.

Being a small company with only 102 employees as of September 30, 2000, 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 and other scientists. If we lose the services of any of our personnel, including, in particular, Donald Payan, our research and development efforts could be seriously and adversely affected. Although we generally have not experienced problems retaining key employees, our employees can terminate their employment with us at any time. We also expect to encounter increasing difficulty in attracting enough qualified personnel as our operations expand and the demand for these professionals increases, and this difficulty could impede significantly the achievement of our research and development objectives.

WE DEPEND ON OUR SCIENTIFIC ADVISORS FOR THE SUCCESS AND CONTINUATION OF OUR RESEARCH EFFORTS.

We are dependent on the members of our Scientific Advisory Board (SAB) and Clinical Advisory Board (CAB) who conduct research and provide us with access to technology developed by them. The potential success of our drug discovery programs depends in part on continued collaborations with these advisors. We and various members of our management and research staff rely heavily on members of the SAB and CAB for expertise in screening research. 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. All members of the SAB and CAB have entered into scientific advisory agreements with us. These agreements provide for indefinite terms of service on the SAB and CAB and are generally terminable at any time by written notice by either us or the advisor. Certain members of the SAB and CAB also have entered into separate consulting agreements with us. We do not know if we will be able to

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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 any 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

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.

RISKS RELATED TO THIS OFFERING

WE MAY ALLOCATE THE NET PROCEEDS FROM THIS OFFERING IN WAYS THAT YOU AND OTHER STOCKHOLDERS MAY NOT APPROVE.

Management will have significant flexibility in applying the net proceeds of this offering and could use these proceeds for purposes other than those contemplated at the time of the offering.

IF OUR OFFICERS, DIRECTORS AND LARGEST STOCKHOLDERS CHOOSE TO ACT TOGETHER, THEY MAY BE ABLE TO CONTROL OUR MANAGEMENT AND OPERATIONS, ACTING IN THEIR BEST INTERESTS AND NOT NECESSARILY THOSE OF OTHER STOCKHOLDERS.

Following completion of the public offering and the concurrent private placement with Novartis, our directors, executive officers and principal stockholders and their affiliates will beneficially own approximately 27.6% of our common stock, based on their beneficial ownership as of September 30, 2000. Accordingly, they collectively will have the ability to determine the election of all of our directors and to determine 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.

THERE MAY NOT BE AN ACTIVE, LIQUID TRADING MARKET FOR OUR COMMON STOCK.

An active trading market for our common stock may not develop following this offering. You may not be able to sell your stock quickly or at the market price if trading in our stock is not active. The initial public offering price will be determined by negotiations between us and the representatives of the underwriters based upon a number of factors. The initial public offering price may not be indicative of prices that will prevail in the trading market.

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OUR STOCK PRICE MAY BE VOLATILE AND YOUR INVESTMENT IN OUR STOCK COULD DECLINE IN VALUE.

Prior to this offering, there has been no public market for our common stock, and an active public market for our common stock may not develop or be sustained after the offering. The initial public offering price will be determined by negotiations between the representatives of the underwriters and us and may not be indicative of future market prices. Among the factors to be considered in determining the initial public offering price of the common stock, in addition to prevailing market conditions, will be:

- estimates of our business potential and earnings prospects;
- an assessment of our management; and
- the consideration of the above factors in relation to market valuations of companies in related businesses.

The market prices for securities of biotechnology companies in general 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:

- 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; or
- period-to-period fluctuations in financial results.

IF OUR STOCKHOLDERS SELL SUBSTANTIAL AMOUNTS OF OUR COMMON STOCK AFTER THE PUBLIC OFFERING, THE MARKET PRICE OF OUR COMMON STOCK MAY FALL.

If our stockholders sell substantial amounts of our common stock, including shares issued upon the exercise of outstanding options and warrants, the market price of our common stock may fall. These sales also might make it more difficult for us to sell equity or equity-related securities in the future at a time and price that we deem appropriate. After completion of the public offering and the concurrent private placement to Novartis, we will have 39,628,596 outstanding shares of common stock, which assumes no exercise of outstanding options or warrants after September 30, 2000 and no exercise of the underwriters' over-allotment option.

We intend to file a registration statement on Form S-8 covering an aggregate of 8,051,358 shares issuable upon exercise of options to purchase common stock and common stock reserved for issuance under our stock plans after the effective date of the registration statement of which this prospectus is a part.

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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 may discourage, delay or prevent a third party from acquiring us.

THE PUBLIC OFFERING AND THE CONCURRENT PRIVATE PLACEMENT WILL CAUSE DILUTION IN NET TANGIBLE BOOK VALUE.

Purchasers in the public offering will experience immediate and substantial dilution in the net tangible book value of the common stock from the initial public offering price. Additional dilution is likely to occur upon exercise of options and warrants granted by us.

15 SPECIAL NOTE REGARDING FORWARD-LOOKING STATEMENTS

You should rely only on the information contained in this prospectus. We have not authorized anyone to provide you with information different from that contained in this prospectus. This prospectus is not an offer to sell or a solicitation of an offer to buy our common stock in any jurisdiction where it is unlawful. The information contained in this prospectus is accurate only as of the date of this prospectus, regardless of the time of delivery of this prospectus or of any sale of common stock. This preliminary prospectus is subject to completion prior to this offering.

Some of the statements under the captions "Prospectus Summary," "Risk Factors," "Use of Proceeds," "Management's Discussion and Analysis of Financial Condition and Results of Operations" and "Business" and elsewhere in this prospectus are forward-looking statements. These forward-looking statements include, but are not limited to, statements about our plans, objectives, expectations and intentions and other statements contained in the prospectus

that are not historical facts. When used in this prospectus, the words "anticipates," "believes," "continue," "could," "estimates," "expects,"
"intends," "may," "plans," "seeks," "should," "will" or "would" or the negative of these terms or similar expressions are generally intended to identify forward-looking statements. Because these forward-looking statements involve risks and uncertainties, there are important factors that could cause actual results to differ materially from those expressed or implied by these forward-looking statements, including our plans, objectives, expectations and intentions and other factors discussed under "Risk Factors."

USE OF PROCEEDS

We estimate that the net proceeds from the sale of the 9,000,000 shares of common stock that we are selling in the public offering will be approximately \$74.3 million, or approximately \$85.6 million if the underwriters' over-allotment option is exercised in full, based on an assumed initial public offering price of \$9.00 per share and after deducting the estimated underwriting discount, commissions and estimated offering expenses payable by us. In addition, we expect to receive proceeds of approximately \$10.0 million from the private placement of our common stock with Novartis concurrent with the closing of this offering.

We intend to use approximately 65% of the net proceeds for continued research and development activities, approximately 20% for general corporate purposes, approximately 15% for working capital and capital leasing obligations and the balance, if any, for financing possible acquisitions and investments in technology and for our facilities. We may also use a portion of the net proceeds to acquire or invest in businesses, products and technologies that are complementary to our own, although no acquisitions are planned or being negotiated as of the date of this prospectus, and no portion of the net proceeds has been allocated for any specific acquisition. Pending these uses, the net proceeds will be invested in investment-grade, interest-bearing securities.

The principal purposes of this offering are to increase our capitalization and financial flexibility, to provide a public market for our common stock and to facilitate access to public equity markets. As of the date of this prospectus, we cannot specify with certainty all of the particular uses for the net proceeds we will have upon completion of the public offering and the concurrent private placement. Accordingly, our management will have broad discretion in the application of net proceeds.

DIVIDEND POLICY

We have never declared or paid any cash dividends on our capital stock. Delaware law and our certificate of incorporation do not require our board of directors to declare dividends on our common stock. We currently intend to retain earnings, if any, to support the development of our business and do not anticipate paying cash dividends for the foreseeable future.

17 CAPITALIZATION

The following table sets forth our capitalization as of September 30, 2000:

- on an actual basis;
- on a pro forma basis to give effect to the automatic conversion of all outstanding shares of our convertible preferred stock upon the completion of this offering; and
- on a pro forma as adjusted basis to give effect to the sale of 9,000,000shares of common stock by us in this public offering at an assumed price of \$9.00 per share, less the estimated underwriting discounts, commissions and estimated offering expenses payable by us, and the sale of 1,111,111 shares of common stock in a private placement to Novartis concurrent with the closing of this initial public offering at an assumed price of \$9.00 per share.

<TABLE> <CAPTION>

SEPTEMBER 30, 2000

PRO FORMA ACTUAL PRO FORMA AS ADJUSTED

(IN THOUSANDS, EXCEPT SHARE AND PER SHARE DATA)

Stockholders' equity:

Convertible preferred stock, \$.001 par value; 26,750,000 authorized, 24,836,343 shares issued and outstanding, actual; none issued and outstanding pro forma and pro

forma as adjusted	25		
outstanding, pro forma as adjusted (1)	5	30	40
Additional paid-in capital	62,810	62,810	147,130
Deferred stock compensation	(7,249)	(7,249)	(7,249)
Accumulated deficit	(48,212)	(48,212)	(48,212)
Total stockholders' equity	7,379	7,379	91,709
Total capitalization	\$ 12,769	\$ 12,769	\$ 97,099
-		=======	=======

</TABLE>

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(1) Excludes:

- 5,725,828 shares issuable upon the exercise of options outstanding as of September 30, 2000, at a weighted average exercise price of \$2.36 per share;
- 540,038 shares issuable upon the exercise of warrants outstanding as of September 30, 2000, at a weighted average exercise price of \$1.16 per share; and
- 1,625,530 additional shares available for future grant under our equity incentive plan; an additional 400,000 shares made available for future grant under our employee stock purchase plan; and 300,000 shares made available for future grant under our non-employee directors' stock option plan.

18 DILUTION

The pro forma net tangible book value on September 30, 2000, giving effect to the automatic conversion of all shares of preferred stock outstanding as of that date into shares of common stock upon the closing of this public offering was approximately \$7.4 million, or \$.25 per share. Pro forma net tangible book value per share represents the amount of our total tangible assets less total liabilities divided by the number of shares of common stock outstanding. Dilution in pro forma net tangible book value per share represents the difference between the amount per share paid by purchasers of shares of common stock in this offering and the net tangible book value per share of our common stock immediately afterwards. Assuming our sale of 9,000,000 shares of common stock offered by this prospectus at an assumed initial public offering price of \$9.00 per share, after deducting estimated underwriting discounts and commissions and estimated offering expenses, and giving effect to the sale of 1,111,111 shares of common stock to Novartis concurrent with the closing of this initial public offering at an assumed price of \$9.00 per share, our pro forma net tangible book value after this offering would have been approximately \$91.7 million, or \$2.31 per share. This represents an immediate decrease in net tangible book value of \$6.69 per share to new investors purchasing shares of common stock in this offering. The following table illustrates this per share dilution:

<table></table>		
<\$>	<c></c>	<c></c>
Assumed initial public offering price per share Pro forma net tangible book value per share as of		\$ 9.00
September 30, 2000	\$.25	
Increase per share attributable to new investors	2.06	
Pro forma net tangible book value per share after this		
offering		2.31
Dilution per share to new investors		\$ 6.69
(/map.r.p.		=====

</TABLE>

The following table summarizes, on a pro forma basis as of September 30, 2000, the differences between the total consideration paid and the average price per share paid by the existing stockholders and the purchasers of shares of common stock in this initial public offering and the concurrent private placement. We have assumed an initial public offering price of \$9.00 per share and no exercise of the underwriters' over-allotment option, and we have not deducted estimated underwriting discounts and commissions and estimated offering expenses in our calculations.

<TABLE>

	NUMBER	PERCENT	AMOUNT	PERCENT	SHARE
<\$>	<c></c>	<c></c>	<c></c>	<c></c>	<c></c>
Existing investors	29,517,485	74.5%	\$ 43,062,000	32.1%	\$1.46
New investors	10,111,111	25.5	91,000,000	67.9	9.00
Total	39,628,596	100.0%	\$134,062,000	100.0%	
		=====		=====	

</TABLE>

The foregoing discussion and tables assume no exercise of any outstanding stock options or warrants at September 30, 2000. The exercise of all options and warrants outstanding as of September 30, 2000 having an exercise price less than the offering price would increase the dilutive effect to new investors to \$6.73 per share.

19 SELECTED FINANCIAL DATA

The statements of operations data for the years ended December 31, 1997, 1998 and 1999 and the balance sheet data as of December 31, 1998 and 1999 have been derived from our audited financial statements which have been audited by Ernst & Young LLP, our independent auditors and included elsewhere in this prospectus. The audited balance sheet data as of December 31, 1997 has been derived from our audited financial statements not included in this prospectus. The statements of operations data for the nine months ended September 30, 1999 and 2000 and the balance sheet data as of September 30, 2000 have been derived from our unaudited financial statements included elsewhere in this prospectus. The statement of operations data for the period from inception (June 14, 1996) through December 31, 1996 and the balance sheet data as of December 31, 1996 are derived from our unaudited financial statements not included in this prospectus. The unaudited financial statements have been prepared on a basis consistent with our audited financial statements and include all adjustments, consisting only of normal recurring adjustments, we consider necessary for the fair presentation of the information. Historical results are not necessarily indicative of future results. See notes to the financial statements for an explanation of the method used to determine the number of shares used in computing pro forma basic and diluted net loss per share. The following selected financial data should be read in conjunction with the financial statements and the notes to such statements and "Management's Discussion and Analysis of Financial Condition and Results of Operations." The selected financial data in this section is not intended to replace the financial statements.

<TABLE>

<caption> MONTHS ENDED SEPTEMBER 30,</caption>	PERIOD FROM INCEPTION (JUNE 14, 1996) THROUGH DECEMBER 31,	I	CAL YEARS EN		NINE
2000	1996		1998		1999
(UNAUDITED) <s> <c> STATEMENTS OF OPERATIONS DATA:</c></s>	(UNAUDITED)	(IN THOUS?	ANDS, EXCEPT <c></c>	PER SHARE <c></c>	AMOUNTS) <c></c>
Contract revenues from collaborations \$ 10,008 Costs and expenses:	\$	\$	\$ 28	\$ 8,984	\$ 5,898
Research and development (see Note A)		4,568	8,305	17,112	10,615
General and administrative (see Note A)	133	1,033	2,217	3 , 952	3,092
Total costs and expenses	133	5,601	10,522	21,064	13,707
Loss from operations(19,611)	(133)	(5,601)	(10,494)	(12,080)	(7,509)
Interest income (expense), net		85	(110)	(286)	(120)
Net loss	(133)	(5,516)	(10,604)	(12,366)	(7,929)

December of Widehard to Series E preferred stockholders S (133) S (5,516) S (10,604) S (12,366) S (7,929) S (2,720) S (2,720) S (4,01) S (4,39) S (2,87) S (6,92) S (4,01) S (4,39) S (2,87) S (4,01) S (4,39) S (2,87) S (6,92) S (4,01) S (4,39) S (2,87) S (6,92) S (4,01) S (4,39) S (2,87) S (6,92) S (4,01) S (4,39) S (2,87) S (2,87								
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Net loss allocable to common stockholders			_	_				
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20 MANAGEMENT'S DISCUSSION AND ANALYSIS OF FINANCIAL CONDITION AND RESULTS OF OPERATIONS

THE FOLLOWING DISCUSSION AND ANALYSIS SHOULD BE READ WITH OUR FINANCIAL STATEMENTS AND NOTES INCLUDED ELSEWHERE IN THIS PROSPECTUS. THE DISCUSSION IN THIS PROSPECTUS CONTAINS FORWARD-LOOKING STATEMENTS THAT INVOLVE RISKS AND UNCERTAINTIES, SUCH AS STATEMENTS OF OUR PLANS, OBJECTIVES, EXPECTATIONS AND INTENTIONS. THE CAUTIONARY STATEMENTS MADE IN THIS PROSPECTUS SHOULD BE READ AS APPLYING TO ALL RELATED FORWARD-LOOKING STATEMENTS WHEREVER THEY APPEAR IN THIS PROSPECTUS. OUR ACTUAL RESULTS COULD DIFFER MATERIALLY FROM THOSE DISCUSSED HERE. FACTORS THAT COULD CAUSE OR CONTRIBUTE TO THESE DIFFERENCES INCLUDE THOSE DISCUSSED IN "RISK FACTORS," AS WELL AS THOSE DISCUSSED ELSEWHERE IN THIS PROSPECTUS.

OVERVIEW

</TABLE>

We use post-genomics combinatorial biology technology to discover novel drug targets. Our technology provides a new and rapid way to find novel drug targets and to validate the role of those targets in disease. We intend to develop a portfolio of novel drug candidates and commercialize the resulting drug products in partnership with corporate collaborators. We have incurred net losses since inception and expect to incur substantial and increasing losses for the next several years as we expand our research and development activities and move our pre-clinical drug candidates into later stages of development. 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. Including both research funding and equity investments, we received an aggregate of \$6.5 million, \$14.9 million and \$10.4 million in 1998, 1999 and the first nine months of 2000, respectively, from our collaborative partners. As of September 30, 2000, our accumulated deficit was approximately \$48.2 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 three collaborations with major pharmaceutical companies that are currently contributing to our revenues. A summary of these partnerships is as follows:

<TABLE>

PARTNER RESEARCH PROGRAM COMMENCEMENT DATE

<S> <C> Janssen Pharmaceutica Pfizer Asthma/Allergies--IgE Production in B Cells January 31, 1999

Novartis Transplant Rejection--T Cell Activation May 26, 1999

Autoimmunity Disease--B Cell Activation August 1, 1999

Pulmonary Lung Inflammation (conducted at Novartis) January 1, 2000

</TABLE>

Under the terms of the existing collaborations identified above, our partners have agreed to provide future research funding up to approximately \$27.5 million over the next four years, \$18.3 million of which is subject to possible cancellation. 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 addressing several alternatives, including the exploration of new opportunities with existing and new potential collaborators. All of our partnerships to date have generally focused on the early stages of drug discovery, specifically

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target discovery and validation. We expect to continue to engage in collaborations focused on the early stages of drug discovery. In addition, we currently anticipate that we will self-fund some of our own research programs to later stages of development prior to partnering with collaborative partners. Therefore, it is expected that any future collaborative partnerships will have an expanded focus and could include cell pathway mapping, high throughput screening, combinatorial chemistry and/or pre-clinical evaluations. 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 collaboration 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. Specifically, our collaboration with Pfizer is a two-year agreement terminating on January 31, 2001 and our collaboration with Janssen Pharmaceutica is a three-year agreement terminating on December 31, 2001. Our Novartis programs are five-year agreements terminating in 2004 and 2005. Although all of our agreements provide for potential extension, we do not expect that our collaboration with Pfizer will be renewed and we cannot ensure that our collaborative partners will exercise these extension rights. As our collaborations reach termination, our partners and we may evaluate the status of the collaboration and, if appropriate, seek to extend the collaboration agreement or negotiate alternative terms.

We recognize revenues from our research collaboration agreements as earned upon the achievement of performance requirements of the agreements. In addition, these agreements provide for research funding for a specified number of full time researchers working on their associated projects. Payments received that are related to future performance are deferred and recognized as revenue as the related work is performed. As of September 30, 2000, we had deferred revenues of approximately \$3.0 million.

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 our 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 for the nine months ended September 30, 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 the nine months ended September 30, 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 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, have issued Questcor 83,333 shares of Series E preferred stock, and will be responsible for satisfying certain milestones and royalties. We are also committed to invest a total of \$2.0 million in research and development expenses over a two-year period 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 our 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.

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DEFERRED STOCK COMPENSATION

We recorded deferred stock compensation with respect to options granted to employees of approximately \$7.1 million in the year ended December 31, 1999 and \$5.2 million for the nine months ended September 30, 2000, 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 \$1.3 million in 1999, with \$1.0 million recorded as a research and development expense and \$.3 million as a general and administration expense. In the nine months ended September 30, 2000, we amortized deferred stock compensation of \$3.8\$ million, with \$3.0\$ million recorded as research and development expense and \$0.8 million as a general and administration expense. At September 30, 2000, we had a total of \$7.2 million remaining to be amortized over the vesting periods of the stock options. For the year ending December 31, 2000, the total amortization of deferred stock compensation is expected to be approximately \$5.1 million. We also expect to record deferred stock compensation for options granted from July 1, 2000 through September 30, 2000 to new hires who will commence employment with us at a later date. The deferred stock compensation will be recorded based on the fair value of our common stock at the date employment commences and amortized in accordance with our policy.

RESULTS OF OPERATIONS FOR THE NINE MONTHS ENDED SEPTEMBER 30, 1999 AND 2000

REVENUES. Collaborative research and development revenues were \$10.0 million for the nine months ended September 30, 2000, compared with \$5.9 million for the nine months ended September 30, 1999. In the first nine months of 2000, revenues were earned from technology access fees and research support from all collaborations, including Janssen Pharmaceutica, Pfizer and three Novartis projects. Revenues for the first nine months of 1999 consisted primarily of revenues from the Janssen Pharmaceutica and Pfizer collaborations, with Novartis contributing an insignificant amount of revenue since the agreement was signed in late May 1999.

RESEARCH AND DEVELOPMENT EXPENSES. Research and development expenses were \$24.6 million for the nine months ended September 30, 2000, compared with \$10.6 million for the nine months ended September 30, 1999, an increase of \$14.0 million. This increase was primarily attributable to increases in employee costs as our science headcount was 58 at September 30, 1999 and 85 individuals at September 30, 2000 and also the higher occupancy costs associated with the new building in South San Francisco, California, which we occupied from March 1999. In addition, the research and development expenses included \$7.6 million and \$0.5 million in stock compensation expenses in the nine months ended September 30, 2000 and 1999, respectively.

GENERAL AND ADMINISTRATIVE EXPENSES. General and administrative expenses were \$5.0 million for the six months ended September 30, 2000, compared with \$3.1 million for the nine months ended September 30, 1999, an increase of \$1.9 million. This increase was primarily attributable to higher employee and occupancy costs. General and administrative expenses included \$757,000 and

\$113,000 in stock compensation expenses in the nine months ended September 30, 2000 and 1999, respectively.

NET INTEREST INCOME. Net interest income was \$18,000 for the nine months ended September 30, 2000, compared with a net interest expense of \$120,000 for the corresponding period in 1999 due mainly to higher cash balances in 2000 from the sale of the Series E preferred stock.

YEARS ENDED DECEMBER 31, 1999, 1998 AND 1997

REVENUES. Contract revenues from collaborations were \$9.0 million in 1999 compared to \$28,000 in 1998. Revenues in 1998 and 1999 were due to the initiation of three of our corporate collaborations. The

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collaboration with Janssen Pharmaceutica was signed in December 1998 with research support beginning on January 1, 1999 while the Pfizer collaboration was initiated on January 31, 1999. The Novartis collaboration, which was signed on May 26, 1999, consists of five research programs. Of these five programs, one was started on May 26, 1999 with a second program initiated on August 1, 1999. We expect contract revenue from collaborations to be a significant component of our total revenues for the foreseeable future.

RESEARCH AND DEVELOPMENT. Research and development expenses increased to \$17.1 million in 1999 from \$8.3 million in 1998 and \$4.6 million in 1997, an increase of \$8.8 million and \$3.7 million, respectively. These increases are primarily attributable to increases in employee costs as our science headcount increased to 66 individuals from 41 in 1998 and 22 in 1997 and the higher occupancy costs associated with our new building in South San Francisco, California, which we occupied in March 1999. Research and development expenses in 1999 included \$1.0 million related to the amortization of deferred stock compensation in connection with options granted to employees and \$1.3 million related to compensation on options granted to consultants and the issuance of stock for consultant services. We expect research and development expenses to increase in future periods in connection with the addition of new collaborative partner research programs. In addition, we anticipate research and development expenses will increase with the advancement of our non-partnered research programs into later stages of development.

GENERAL AND ADMINISTRATIVE EXPENSES. General and administrative expenses were \$4.0 million in 1999, compared with \$2.2 million in 1998 and \$1.0 million in 1997, an increase of \$1.8 million and \$1.2 million, respectively. These increases were primarily attributable to higher employee costs, infrastructure costs to support the growing research and development activities and increased occupancy costs. The general and administrative expenses in 1999 included \$.3 million related to the amortization of deferred stock in connection with options granted to employees. We expect that general and administrative expenses will increase in the future to support the continued growth of our research and development efforts and to accommodate the new demands associated with operating as a public company.

NET INTEREST EXPENSE. Net interest expense was \$286,000 in 1999, compared with a net interest expense of \$110,000 in 1998 and net interest income of \$85,000 in 1997. Interest income results from our interest bearing balances while interest expense is the result of our debt associated with fixed asset purchases.

LIOUIDITY AND CAPITAL RESOURCES

We have financed our operations from inception primarily through sales of preferred stock, contract payments payable to us under our collaboration agreements and equipment financing arrangements. As of September 30, 2000, we had received \$43.1 million from the sale of equity securities, including \$10.0 million from collaborators, and received \$21.8 million in research funding from collaborators. In addition, as of September 30, 2000, we had financed through leases and loans the purchase of equipment and leasehold improvements totaling approximately \$12.1 million.

As of September 30, 2000, we had \$11.0 million in cash, cash equivalents and available-for-sale securities as compared to \$5.8 million as of December 31, 1999, an increase of \$5.2 million. This increase is derived principally from the sale of our Series E preferred stock, from which we received net proceeds of \$15.2 million, offset by our usage of \$8.4 million for the funding of operations and the investment of \$2.6 million in capital equipment and leasehold improvements. We made \$1.7 million in payments associated with our equipment financing arrangements, offset by the receipt of \$2.1 million from our equipment financing arrangements and the receipt of \$15.7 million in net proceeds from equity securities.

As of September 30, 2000, we had \$8.1 million in capitalized lease obligations in association with our financed purchase of equipment and leasehold improvements. These obligations are secured by the equipment financed, bear interest rates in a range of 7% to 15% and are due in monthly installments

through 2004. Under the terms of our three equipment financing agreements, two of these have balloon payments at the end of each loan term, while the other 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. As of September 30, 2000, we had completely utilized our existing equipment financing agreements and on August 22, 2000, we completed negotiations for a new equipment financing agreement that could provide an incremental \$5.0 million of equipment financing proceeds to be utilized over the next twelve to eighteen months, of which the first equipment financing of \$1.1 million was utilized in August, 2000. Under the terms of this new lease, payments are due in monthly installments over four years and bear interest at a rate of 11%.

On February 3, 2000, we received approximately \$15.1 million, net of issuance costs, in a private placement in which we sold 2,508,330 shares of Series E preferred stock at \$6.00 per share. In addition, in September 2000, we exercised our right within the Novartis collaboration agreement to have Novartis purchase shares of our common stock in a private placement concurrent with this initial public offering at the initial public offering price. We anticipate receiving an additional \$10.0 million in proceeds from the concurrent private placement to Novartis. We believe our existing cash resources, including the proceeds from the private placement, plus the proceeds of this public offering and anticipated proceeds from corporate collaborations will be sufficient to satisfy our anticipated cash requirements through at least 24 months. Our future capital uses and requirements depend on numerous forward-looking factors. These factors include and are not limited to the following:

- our ability to maintain our existing collaboration partnerships;
- our ability to establish and the scope of our new collaborations;
- the progress and number of research programs carried out at Rigel;
- our ability to meet the milestones identified in our collaborative agreements which trigger payments;
- the progress and success of preclinical and clinical trials of our drug candidates:
- 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 the sale of equity securities, strategic collaborations and debt financing. 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.

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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 that we invest in may have market risk. This means that a change in prevailing interest rates may cause the principal 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 principal 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, government and non-government debt securities. In 1998, 1999 and the nine months ended September 30, 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 have no 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.

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OVERVIEW

We use post-genomics combinatorial biology technology to discover novel drug targets. In only three and one-half years of research using our technology, we have succeeded in identifying 23 new drug targets in nine of our ten programs and have generated compounds in six programs, including compounds which are candidates for preclinical testing in two of these programs. We currently have programs in asthma/ allergy, autoimmunity, transplant rejection, rheumatoid arthritis, inflammatory bowel disease, cancerous tumor growth and hepatitis C. We have a collaboration with Pfizer and multi-year collaborations with Cell Genesys, Janssen Pharmaceutica and Novartis. In addition, we have collaborated with Neurocrine in order to obtain rights to a library of small chemical compounds.

BACKGROUND

GENERAL.

We were incorporated in the State of Delaware on June 14, 1996. Our results of operations from June 14, 1996 to December 31, 1996 were immaterial. We matured from a development stage to an operating company in 1998. The company has funded its operations primarily through the sale of private equity securities, payments from corporate collaborators and capital asset lease financings. We have no subsidiaries.

PHARMACEUTICAL INDUSTRY NEED FOR NEW DRUGS AND NOVEL TARGETS

In order to sustain growth, each major pharmaceutical company needs to bring approximately two or more new drugs to market each year. However, it is currently estimated that, using traditional drug discovery and development methodologies, each major pharmaceutical company is bringing to market, on average, less than one new drug per year. As a result, major pharmaceutical companies have a discovery and product pipeline gap. In addition, we believe this demand for new products will be increased by the expiration in coming years of patents on numerous significant revenue-generating drugs.

We believe that several thousand of the more than 100,000 genes in the human genome will provide potential drug targets directed at specific diseases. Despite this potential, researchers have only identified and validated approximately 500 distinct targets for existing drug interventions which serve as the basis for many pharmaceutical products today. We feel that the existing, relatively small, pool of potential targets limits pharmaceutical companies' opportunities to develop new drug candidates to satisfy their growth objectives. Moreover, we believe this situation creates a critical need for tools directed at novel ways to expand the pool of targets by rapidly identifying and successfully validating new targets which lead to new chemical entities.

TRADITIONAL DRUG DISCOVERY

The traditional drug discovery process involves testing or screening compounds in disease models. The process is often undertaken with little knowledge of the intracellular processes underlying the disease or the specific drug target within the cell. Consequently, it is necessary to screen a very large number of arbitrarily-selected compounds in order to obtain a desired change in a disease model. While this approach sometimes successfully produces drugs, it has a number of disadvantages:

- INEFFICIENCY: it is labor intensive, time consuming and inefficient at identifying and validating targets;
- LACK OF PRODUCTIVITY: it results in relatively few new drug candidates, or "hits";
- LACK OF INFORMATION: it produces limited information about the intracellular processes or targets to guide target selection and subsequent drug development; and

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- RISK OF SIDE EFFECTS: it often produces drug candidates with a high risk of serious side effects, including toxicity.

SUBSEQUENT BIOLOGICAL ADVANCES AND GENOMICS

Beginning in the mid 1970s, pharmaceutical companies began to use a growing knowledge of cellular and molecular biology to enlarge their understanding of biochemical interactions within and between cells in order to understand the cellular basis for disease processes. For example, researchers equipped with a more thorough understanding of cellular mechanisms relating to blood pressure regulation were able to identify proteins called angiotensin converting enzymes (ACE) which regulate molecules causing high blood pressure. By identifying

compounds that act as ACE inhibitors, the researchers developed a family of highly specific drugs that lower blood pressure without causing serious side effects.

More recently, pharmaceutical companies have begun to look at the genetic basis for disease. For example, the Human Genome Project was undertaken to identify the DNA sequence of all the genes in the human genome, with the hope that knowledge of the human genome would enable a comprehensive understanding of the molecular causes of all diseases, and therefore provide a source of targets for drug discovery. However, merely developing sequence data with respect to genes does not, on its own, provide information about the cellular function of the proteins encoded by the genes expressed in a particular tissue at a particular time under particular disease circumstances. In addition, it fails to tell us which proteins might make useful targets for compound screening to identify drug candidates to modulate any of these functions. With more than 100,000 genes in the human genome, the number of possible combinations of expressed proteins in a cell and the number of possible interactions of those proteins produce a volume of information which often obscures rather than illuminates the functional role of any particular gene in a disease process.

Later efforts to link genes to disease, or functional genomics, have focused on the genes that are responsible for changes in the behavior of cells under disease conditions. However, the functional connection between particular genes and their expressed proteins on the one hand, and cellular behavior seen in disease conditions on the other hand, has remained unknown in the majority of diseases. For this reason, pharmaceutical companies have sought better means to identify the genes that are important to cellular behavior and to understand their role in causing or preventing disease. Whether through gene sequencing or functional genomics, understanding the functional role of a gene is critical to understanding, identifying and validating a gene's expressed protein as a target for compound screening. We believe that there remains a critical need for research methods that will be able to utilize the information currently available to identify protein targets quickly and systematically, with increased probability of discovering new drug candidates.

ROLE OF TARGET VALIDATION

The identification of intracellular protein targets is an important step in the process of identifying potential drugs. Most drugs are discovered today by screening collections of libraries of chemical compounds against protein targets which are part of signaling, or information-transmitting, pathways within cells. These signaling pathways participate in the regulation of cell behavior in both normal and diseased cells. However, drug discovery and development often occurs without first validating the drug target and mechanism of action. If pharmaceutical companies were to validate a target's role in a disease at an early stage, they would reduce risks involved in the drug development process, such as the pursuit of unsuccessful discovery pathways, regulatory delay and drug side effects.

A target is regarded as validated if a causal link is established between an intracellular protein target and a cellular response important in a disease process. Each drug discovery company has its own standards for deciding whether a target has been sufficiently validated.

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OUR SOLUTION

Our drug target discovery process bypasses the need to know the identity or sequence of the genes. We have developed two core technologies which we believe provide us with an enhanced ability to simultaneously identify and initially validate new drug targets for further development.

Our technologies 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 which 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 which 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 which 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 which 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.

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

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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.

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 which 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.

OUR DISCOVERY PROGRESS: 1997 - 2000

Since 1997, we have detected more than 500 million protein-protein interactions in cells. We have also discovered more than 10,000 signaling pathway members which modify cellular function. We have mapped the protein interactions of over 150 disease modifying protein targets in nine disease relevant pathways. We have identified 23 new targets in our programs suitable for screening compounds for drugs: asthma/ allergy, autoimmunity, transplant rejection, rheumatoid arthritis (both E-3 ubiquitin ligase and tumor necrosis factor (TNF) pathway), inflammatory bowel disease, cancerous tumor growth (both cell cycle inhibition and E-3 ubiquitin ligase) and hepatitis C. We have identified small molecule compounds in six of our programs, including compounds which are candidates for preclinical testing in two of these programs.

[GRAPHIC-RIGEL PROGRESS 1997-2000]

<TABLE>

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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 industry. We have a library of approximately 135,000 synthetic 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.

PROTEOMICS

Our proteomics program is an integral part of our target discovery and validation effort. In contrast to our retroviral and pathway mapping technologies which can be used to find single protein-protein interactions, proteomics techniques can be used to find protein complexes comprised of several protein targets and to study protein-protein interactions in order to map active interaction sites on potential protein targets. To this end, we believe our protein chemistry group uses the most advanced proteomic technologies, including high resolution two dimensional gel electrophoresis in conjunction with in-gel tryptic digests followed by mass spectrometry, in order to identify specific drug targets.

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.

OUR STRATEGY

Our strategy is to develop a large portfolio of drug candidates that may 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 the candidates greatly increases our probability of commercial success. By utilizing our technology to rapidly discover and validate new targets and drug candidates that regulate them, we believe that we are well positioned to help fill the product pipeline gap of major pharmaceutical companies.

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

- expand, enhance and protect our technology;

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- focus on diseases that represent large medical markets with significant populations that are currently under served;
- structure corporate partnering agreements to permit multiple collaborations in each disease area by focusing on disease pathways and targets;
- establish strategic collaborations with pharmaceutical and biotechnology companies to enhance product development and commercialization and to partner our future research programs in the later stages of drug development; and
- develop small molecule drugs, which can be delivered to intracellular targets.

PRODUCT DEVELOPMENT

We believe that, with a steadily aging population, the main focus of medicine in the United States and other developed countries is shifting to a greater emphasis on the prevention and treatment of chronic diseases such as asthma and rheumatoid arthritis. The parallel trends of the increasing knowledge of drug targets and the increasing incidence of the diseases treated with small molecule compounds allow us to exploit our technology for large and fast growing segments of the pharmaceutical marketplace on a worldwide basis. Our programs address asthma/allergy, autoimmunity, transplant rejection, rheumatoid arthritis, inflammatory bowel disease affecting the immune system as well as cancerous tumor growth. These programs offer potential opportunities to develop drugs for many therapeutic indications. We believe that there are significant unmet medical and quality-of-life needs for these diseases that represent large commercial markets.

The following table summarizes key information in ten programs we are conducting at Rigel that focus on specific disease mechanisms:

<TABLE> <CAPTION>

COLLABORATIVE

DISORDER/DISEASE MECHANISM STATUS
PARTNER

<CAPTION>

KEY ACHIEVEMENTS

 <s></s>	<c></c>	<c></c>	<c></c>	<c></c>
Asthma/allergy	IgE receptor pathway on mast cells	Preclinical development(1)	- Testing in animal models underway - Preclinical candidate compounds identified - Cell based high throughput screening (HTS) underway - Protein interaction pathway map established - Novel drug targets identified and validated	None
	IgE production in B cells	Target screening(2)	- Target screening underway	Pfizer
	IgE production in B cells	screening(3)	 Compounds identified(5) HTS underway(5) Protein interaction pathway map established(5) Novel drug targets identified and validated(5) 	None
Autoimmunity and transplant rejection	B cell activation	Compound screening(3)	- HTS underway - Protein interaction pathway map established - Novel drug targets identified	Novarti
	T cell activation	Compound screening(3)	HTS underwayProtein interaction pathway map establishedNovel drug targets identified	Novarti

 (1 | TABLE CONTINUED ON FOL | LOWING PAGE) | || | 33 | | | |
COLLABORATIVE DISORDER/DISEASE PARTNER	MECHANISM	STATUS	KEY ACHIEVEMENTS	
Rheumatoid arthritis and inflammatory bowel disease	E-3 ubiquitin ligase	Compound screening(3)	- Compounds identified - HTS underway - Novel drug targets identified and validated	None
	Selected TNF pathway targets	Target validation(4)	- Protein interaction pathway map established - Novel drug targets identified	None
``` CANCER ```				
~~Tumor growth~~	Cell cycle inhibition	Compound screening(3)	- Compounds identified - HTS underway	Jansser
Pharmaceutica			- Protein interaction pathway map established - Novel drug targets identified and validated	
	E-3 ubiquitin ligase	Preclinical development(1)	- Preclinical candidate compound identified - HTS underway - Novel drug targets identified and validated	None
validated

Genesys	Angiogenesis	Target screening(2)	- HTS underway  - Novel drug targets identified	Cell
	<c> Inhibition of viral replication</c>	<c> Compound screening(3)</c>	<c> - Compounds identified - HTS underway</c>	<c> None</c>

- Novel drug targets identified

</TABLE>

- -----

- (1) "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 FDA.
- (2) "Target screening": Disease modeled screening in cells using our post-genomics combinatorial biology technology.
- (3) "Compound screening": Screening of small molecule compounds in biochemical and cell based assays to identify a compound which binds to a functionally active site of a validated target.
- (4) "Target validation": Testing to establish a causal link between an intracellular protein target and a cellular response important in a disease process.
- (5) These key achievements occurred not as part of the Pfizer collaboration, but through our own separate research efforts.

#### IMMUNE DISORDERS

Many diseases and disorders result from defects in the immune system. Over 50 million people in the United States suffered from allergic and asthmatic disorders in 1999. Anti-asthmatic and allergy relief medications exceeded \$5 billion in worldwide sales in 1997 and have been growing at a 5% annual growth rate. In 1999, another 3 million to 5 million patients in the United States were treated for other immune disorders. We currently have six programs in immunology focused on asthma/allergy (two programs), autoimmunity, transplant rejection, rheumatoid arthritis and inflammatory bowel disease and three programs in cancer focused on tumor growth.

## ASTHMA/ALLERGY

IGE RECEPTOR ON MAST CELLS. The goal of this program is to identify compounds that inhibit the secretion of inflammatory factors resulting from IgE binding to its receptor on mast cells. IgE is one of several immunoglobulins produced by the body's immune system. Currently, we have identified preclinical candidate compounds. Preliminary studies demonstrate that these compounds inhibit the ability of IgE to activate its receptor on mast cells. There is evidence in animal models and early clinical studies that

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blocking IgE from binding to mast cells can reduce allergic symptoms in multiple species, including humans. However, most programs in development today are intravenous therapeutic antibodies. We believe that small molecule inhibitors of IgE signaling pathways could play an important role in treatment of such chronic disorders.

IGE PRODUCTION IN B CELLS. In this program, we have been working with our partner, Pfizer, since January 1999 to identify intracellular drug targets that control the production of IgE in B cells. We have identified, not as part of the Pfizer collaboration, but separately through our own research efforts, a protein target that appears to regulate a key event in this pathway that leads to allergic and asthmatic symptoms and a compound in this program.

## AUTOIMMUNITY AND TRANSPLANT REJECTION

Autoimmunity disorders and organ transplant rejection are the result of inappropriate activation of the immune system. Most existing therapies for inflammatory diseases also have toxic side effects. A challenge facing all research groups in this field has been the design of selective and specific immune system therapeutics that affect only the pathological activities without negatively affecting the protective activities of the immune system.

Our programs are designed to identify and validate novel molecules which specifically signal cell activation and cell death, or apoptosis, of T cells and

B cells. Activation and apoptosis determine the quality, magnitude, and duration of immune responses. Activation pathways are initiated by the binding of antigen (foreign protein) to specific surface receptors on T cells or B cells. This sets off an intracellular cascade of signals, resulting in changes in gene expression and the production of proteins that drive the immune response or lead to antibody production and secretion in B cells. The apoptosis signals prevent self activation, overactivation or prolonged activation of the T and B cells, which can lead to auto-immune disease or organ rejection. We are identifying T cell and B cell-specific drug targets that are effective in modulating immune-mediated processes.

B CELL ACTIVATION. The goal of the B cell activation program is to prevent antibody secretion by activated B cells, an important mechanism in autoimmunity transplantation rejection. We have identified novel drug targets using our post-genomics combinatorial biology technology and have initiated high throughput screening. This program has been partnered with Novartis since August 1999.

T CELL ACTIVATION. The goal of our T cell program is to identify early steps in the process of T cell activation. T cells are responsible for cell-mediated inflammatory and humoral responses, both of which are important mechanisms of transplant rejection and autoimmune diseases. We have identified novel drug targets using our post-genomics combinatorial biology technology and have initiated high throughput screening. This program has been partnered with Novartis since May 1999.

## RHEUMATOID ARTHRITIS AND INFLAMMATORY BOWEL DISEASE

We have programs directed at two different cellular pathways for these inflammatory diseases:

E-3 UBIQUITIN LIGASE. This program is focused on characterizing and developing specific inhibitors of protein-degrading enzymes, named E-3 ubiquitin ligases, in inflammation. The levels of many intracellular proteins that play a critical role in signaling pathways are regulated by this 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 principle has been successfully used in the design of a number of therapeutics for the treatment of inflammation. We also anticipate that, as the field of E-3 ubiquitin ligase biology evolves, inhibitors can be identified which will have clinical utility in metabolic diseases and possibly in neurodegenerative processes. We have screened over 100,000 small molecules against several members of the E-3 ubiquitin ligase family,

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and have identified several small molecule compounds which, based on preliminary data, appear to be potent and specific inhibitors.

SELECTED TNF PATHWAY TARGETS. This second program focuses on blocking the inflammatory signals of the Tumor Necrosis Factor, or TNF pathway, a pathway validated by existing antibody therapies as an important site for therapeutic intervention. We have identified and validated several novel members of this signaling pathway which are moving into both biochemical and cell based high throughput compound screens. Our preliminary results suggest that the targets we have identified in the TNF pathway regulate inflammatory responses in specific cell types, thus potentially making small molecule compounds directed at these targets more disease specific. In addition, these small molecules will be less likely to exhibit the side effects of chronic administration of anti-TNF antibodies or antibodies directed at the TNF receptor.

Additionally, our scientists have identified potential drug targets in the TNF pathway that protect T cells from apoptotic signals, and have used those interactions to identify a protective protein termed Toso. When T cells are activated, Toso production is activated and in turn causes other intracellular proteins to block apoptotic signals. Thus Toso may protect activated T cells from apoptosis. We are investigating Toso inhibition as a method of selectively killing activated disease-causing T cells.

## CANCER

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 1999 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 1999, an estimated 1.2 million people were diagnosed with cancer, and more than 500,000 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 these diseases.

We are currently pursuing three important pathways directed against tumor growth:

CELL CYCLE INHIBITION. This program is directed toward the cell cycle checkpoint pathway. The proliferation of normal cells is controlled by built-in safety mechanisms in the cell cycle, termed checkpoints, that ensure that only cells with normal genetic material can progress through the cell cycle and divide. Cells with genetic mutations are recognized and shunted into the apoptosis pathway to protect the organism from cancer and other genetic disorders. It is estimated that more than 50 percent of all human tumors contain cancer cells that have lost one or more crucial checkpoint genes. Cancer cells also can carry mutations in another group of normal cell genes that mimic extracellular proliferation signals, causing tumor cells to continue to divide even in the absence of normal cell growth signals. The net result of these genetic mutations is uncontrolled cell division and disease. We have collaborated with our partner Janssen Pharmaceutica since December 1998 to identify intracellular drug targets involved in cell cycle control. We have identified several novel drug targets in this program, one of which has been accepted by Janssen Pharmaceutica as validated and has entered small molecule

E-3 UBIQUITIN LIGASE. Our second antitumor program is focused on the E-3 ubiquitin ligase pathway unique to malignancies. The goal of this program is to examine specific inhibitors of ubiquitin ligases implicated in regulating mitosis, or cell division, in a number of transformed cell lines and normal cells. We also have identified a preclinical candidate compound in this program.

ANGIOGENESIS. Our third antitumor program is directed toward the angiogenesis pathway. Angiogenesis is defined as the growth of new blood vessels. In diseased circumstances or in oxygen deficient conditions, angiogenesis is stimulated by the synthesis and release of specific pro-angiogenic factors. In contrast to normal angiogenesis, tumor angiogenesis is a continuous process. As a significant proportion of tumors are dependent on continued angiogenesis, inhibition of this process blocks tumor growth which often leads to complete tumor deterioration. Thus, we believe therapeutic intervention of

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tumor-promoted angiogenesis represents an important form of anti-tumor therapy. We have established and initiated two screens in human capillary endothelial cells using our post-genomics combinatorial biology technology in order to identify targets in the angiogenesis pathway.

## INFECTIOUS DISEASES

HEPATITIS C. We have initiated a viral research program based upon technology acquired from Questcor in September 2000. Hepatitis C is a major cause of chronic hepatitis, cirrhosis and hepatocellular carcinoma. The goal of this program is to interfere with the IRES translation mechanism of the hepatitis C virus. We are attempting to discover and develop a highly specific inhibitor of IRES translation in the form of a small molecule compound. Targets have been identified and validated, a high throughput screen 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.

## RESEARCH AND DEVELOPMENT EXPENSES

Our research and development expenses were \$24.6 million in the nine months ended September 30, 2000, \$17.1 million in 1999, \$8.3 million in 1998 and \$4.6 million in 1997.

## CORPORATE COLLABORATIONS

To fund a wide array of research and development programs, we have established and will continue to pursue corporate collaborations with pharmaceutical and biotechnology companies. We currently have collaborations on six of our ten research programs, including one with Janssen Pharmaceutica relating to oncology therapeutics and diagnostics, one with Pfizer relating to asthma and allergy therapeutics, three with Novartis relating to immunology, and one with Cell Genesys relating to angiogenesis. In addition, we have collaborated with Neurocrine in order to obtain rights to small chemical compounds.

As of September 30, 2000, we had received a total of \$31.8 million from our collaborators. Included in this amount is \$10.0 million from participation in our preferred equity financing and \$21.8 million for technology access and research funding, of which \$3.0 million has been deferred at September 30, 2000. 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 the inventor or inventors thereof in accordance with United States patent law, subject to licenses or assignments granted in the agreements.

## JANSSEN PHARMACEUTICA

Effective December 1998, we entered into a three-year research collaboration, ending December 2001, with Janssen Pharmaceutica, a Johnson & Johnson company, to identify, discover, and validate novel drug targets that regulate cell cycle, and, specifically, the identification of drug targets and the active peptides that bind to them that can restore a mutated cell's ability to stop uncontrolled cell division. Under the agreement, we will provide certain assays and associated technology to Janssen Pharmaceutica for the assessment of the alteration or normalization of the dysfunctional cell cycles of cancer cells for Janssen Pharmaceutica's internal research purposes. Subsequently, in an amendment to the collaboration in July 2000, Janssen Pharmaceutica expanded the collaboration whereby we will be performing compound screening and medicinal chemistry on validated targets accepted by Janssen Pharmaceutica.

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Janssen Pharmaceutica has accepted the first target identified during the collaboration as fully validated. Rigel and Janssen Pharmaceutica each has commenced high throughput screening of its respective compound libraries.

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

Janssen Pharmaceutica 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 Janssen Pharmaceutica for internal research. Janssen Pharmaceutica'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, as described above.

We will have the non-exclusive right to use any technology developed by Janssen Pharmaceutica during the research collaboration, and any improvements to our technology developed by Janssen Pharmaceutica during its internal research, on a royalty-free and worldwide basis. However, during the first 18 months after the signing date of the agreement, we may not enter into a research collaboration with a third party to identify drug targets and the associated active peptides which cause alterations in the cell cycle of human tumor cells.

The research collaboration will terminate (three years after the effective date of the agreement) unless the agreement is terminated, or the research collaboration is extended for up to two additional one year periods at Janssen Pharmaceutica's option.

The Johnson & Johnson Development Corporation, the investment entity affiliated with Janssen Pharmaceutica, 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 and in February 2000, 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.

## PFIZER

Effective January 1999, we entered into a two-year research collaboration with Pfizer, ending January 31, 2001 and renewable at Pfizer's option for an additional year. Pfizer is required to notify us of its election to renew the collaboration beyond January 31, 2001 no later than January 12, 2001. We do not, however, expect that our collaboration with Pfizer will be renewed. The goal of the collaboration is to identify intracellular drug targets that control the production of IgE, a key mediator in allergic reactions and asthma in B cells. We will provide the following technology developed or identified during and pursuant to the research collaboration to Pfizer:

- technology associated with identified drug targets;

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- technology necessary for Pfizer's performance of its research collaboration obligations; and
- technology necessary for Pfizer's performance of its research collaboration obligations; and
- technology necessary for Pfizer's performance of high throughput screening, or HTS, on identified 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. During the research collaboration, we may not conduct research within the scope of the research collaboration by ourselves or with any third party except in connection with the research collaboration with Pfizer.

We and Pfizer each have the non-exclusive right to use for research purposes the technology of the other which is 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 which 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 provide research funding to us for a minimum of two years, as well as cash for equity, technology access payments, research milestones, and royalties on the sales of these products.

In addition to typical termination events, Pfizer may terminate this agreement if Dr. Donald Payan's association with us as our chief scientific officer or similar role ends and we and Pfizer cannot agree on a successor acceptable to Pfizer.

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.

## NOVARTIS

In May 1999, we signed an agreement for the establishment of a broad collaboration with Novartis, whereby the two companies will work on 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 will be conducted jointly by Novartis and us, and the other three research projects will be conducted at Novartis. 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 pulmonary inflammation. Novartis will select the remaining two projects by May 2001.

Once a drug target from any of the five research projects has been identified and validated, Novartis shall have 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.

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Under the agreement, Novartis has the non-exclusive right to utilize our post-genomics combinatorial biology technology and two hybrid protein interaction technology for confirmational and similar uses relating to validated drug targets, including uses necessary for the further development, registration, and commercialization of products whose 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, to pay milestone payments and technology access payments to us, and to 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 post-genomics combinatorial biology technology and two hybrid protein interaction technology developed during a research project on a royalty-free and worldwide basis.

Novartis may terminate the joint research projects two years after the applicable commencement date, or three and one half years after the applicable commencement date if Novartis gives six months prior notice of its termination.

In some circumstances, Novartis also may terminate either of the joint research projects after the expiration of 12 months after the applicable commencement date. Novartis may terminate the research projects to be conducted at Novartis at any time.

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. Novartis agreed, in certain circumstances, to purchase up to \$10.0 million of our stock at our option. In September 2000, we exercised this right to sell \$10.0 million of our common stock in a private placement transaction concurrent with this public offering at the price per share at which our common stock will be sold in this offering.

#### CELL GENESYS

In September 1999, we established a research collaboration and license agreement with Cell Genesys. The goal of the research collaboration is to use our post-genomics combinatorial biology technology to identify novel therapeutic peptide, protein, and gene products in the field of gene therapy. Cell Genesys also will be granted exclusive, royalty-free worldwide rights to make, use, and commercialize therapeutic peptide, protein and gene products in the field of gene therapy. Cell Genesys also will be granted the right to make and use the intracellular drug targets with which their gene therapy products bind for the sole purpose of the research and development of gene therapy products. Cell Genesys also has the option to obtain rights under some of our cell lines and associated technology to make and commercialize gene therapy products.

In exchange for our performance of the research and the license granted to Cell Genesys, we were granted a royalty-free, worldwide right to some Cell Genesys patents and technology pertaining to retroviral gene delivery technology for use in the field of our post-genomics combinatorial biology. Each company will pay to the other company third-party sublicensing fees and royalties associated with the grant of the licenses discussed above, and fund their own research.

## NEUROCRINE BIOSCIENCES

In addition to our nine programs focusing on specific disease mechanisms, effective December 1997, we conducted a research collaboration with Neurocrine to discover novel molecular targets involved in glial cell activation.

Under the terms of the agreement, Neurocrine has the exclusive, royalty-free right to utilize our technology and technology developed during the research collaboration to develop, make and commercialize on a worldwide basis, products which incorporate or are discovered using a drug target involved in glial cell activation or a peptide identified or produced by us which binds to this type of drug

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target. We have the exclusive, royalty-free right to utilize Neurocrine technology and technology developed during the research collaboration to develop, make and commercialize on a worldwide basis, products which incorporate or are discovered using a drug target not involved in glial cell activation or a peptide identified or produced by Neurocrine which does not bind to this type of drug target. Each company will assign to the other company its rights in proprietary technology and technology developed during the research collaboration which is related to the other company's products described above.

## 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 are effectively maintained as trade secrets. Accordingly, patents or other proprietary rights are an essential element of our business. We have 57 pending patent applications and one issued patent in the United States as well as corresponding foreign patent applications. At least seven patent applications had been filed in the United States by or on behalf of universities which had granted us exclusive license rights to the technology. To date, no patents have issued to us but we have received notification from the United States Patent Office that it intends to allow claims in three of our 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  $\overline{\phantom{a}}$ 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.

M&E has notified us that it has received patent protection in European countries for a process similar to certain aspects of our technologies. M&E has

also notified us of its belief that we have infringed, and are contributorily infringing, certain claims of that European patent. We are currently reviewing their patent file and evaluating the appropriate course of action. If legal action were initiated on this patent, it could be lengthy, costly and require significant management time and other resources which could adversely affect the pursuit of scientific and business goals. In addition, any such legal action could result in the award of damages or a court order preventing us from using the technology covered by the M&E patent. We are also aware that M&E has sought patent protection in Australia and the U.S., and has the option to seek patent protection, it might conflict with or overlap with the patent rights we are pursuing. We currently do not, and do not plan to, operate in any country outside the United States.

#### COMPETITION

We face, and will continue to face, intense competition from pharmaceutical and biotechnology companies, as well as 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 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

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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

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 which 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

If our potential preclinical compounds become ready to enter clinical

testing, our ongoing development activities 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. Before commencing clinical investigations in humans, we must submit to, 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 IND regulations;
- must meet requirements for institutional review board oversight;
- must meet requirements for informed consent;

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- 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. None of the product candidates that we have internally developed has advanced to the stage of human testing designed to determine safety, known as Phase I clinical trials. We do not know when or if clinical trials will begin and, once begun, will not know whether any such clinical trials will be successful or if such trials will be completed on schedule or at all. We 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.

Because we moved to a new facility in March 1999 designed to comply with all applicable federal, state and local environmental and hazardous waste regulations, we expect no additional substantial expenditures for this purpose. The facility was also designed to comply with current earthquake design criteria.

# EMPLOYEES

As of September 30, 2000, we employed 102 persons, of whom 29 hold PhD or MD degrees and seven hold other advanced degrees. Approximately 85 employees are engaged in research and development, and 17 support administration, finance,

management information systems, facilities and human resources. None of our employees is represented by a collective bargaining agreement, nor have we experienced work stoppages. We believe that our relations with our employees are good.

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### FACILITIES

Our facilities consist of approximately 61,000 square feet of research and office space located at 240 East Grand Avenue, South San Francisco, California that is leased to us until 2016. We have options to renew this lease for two additional periods of five years each. We believe our facility will meet our space requirements for research and development and administration functions through the year 2001.

### LEGAL PROCEEDINGS

We are not a party to any pending material litigation.

### 44 SCIENTIFIC ADVISORY BOARD

We utilize scientists and physicians to advise us on scientific and medical matters as part of our Scientific Advisory Board including, experts in human genetics, mouse genetics, molecular biology, biochemistry, cell biology, chemistry, infectious diseases, immunology and structural biology. Generally, each of our scientific and medical advisors and consultants receives an option to purchase our common stock and an honorarium for time spent assisting us. The following is a list of our Scientific Advisory Board members:

GARRY P. NOLAN, PHD, our co-founder and Chairman of the Scientific Advisory Board, is Associate Professor in the Department of Molecular Pharmacology and Department of Microbiology and Immunology at Stanford University Medical Center.

ROBIN G. COOPER, DSC, PHD is a former Research Advisor at Eli Lilly and Co., and presently President of Cooper Consulting Inc.

CHARLES S. CRAIK, PHD is Professor of Pharmaceutical Chemistry and Pharmacology, Biochemistry and Biophysics, and Director of the Chemistry and Chemical Biology Graduate Group at the University of California San Francisco.

DANIEL R. LITTMAN, MD, PHD is the Coordinator of the Molecular Pathogenesis Program, Skirball Institute of Biomolecular Medicine and Professor of Microbiology and Pathology at the New York University School of Medicine and Investigator, Howard Hughes Medical Institute.

RICHARD M. LOCKSLEY, MD is Professor, Departments of Medicine and Microbiology/Immunology, Chief of the Division of Infectious Diseases and Investigator, Howard Hughes Medical Institute, at the University of California San Francisco.

RICHARD SCHELLER, PHD is Professor of Molecular and Cellular Physiology and Investigator, Howard Hughes Medical Institute at Stanford University.

KEVAN M. SHOKAT, PHD is Associate Professor of Cellular and Molecular Pharmacology at the University of California San Francisco and Associate Professor, Department of Chemistry at University of California Berkeley.

JOHN B. TAYLOR, DSC, PHD is the former Sr. Vice President for WW Pharmaceutical Discovery Operations with Rhone Poulenc Rorer (Aventis) and presently a Pharmaceutical R&D Consultant.

RICHARD ULEVITCH, PHD is Chairman of the Department of Immunology at the Scripps Research Institute.

MATTHIAS WABL, PHD is Professor of Microbiology and Immunology in the Department of Microbiology and Immunology at the University of California San Francisco.

## 45 CLINICAL ADVISORY BOARD

In addition to our Scientific Advisory Board, we utilize a number of scientists and physicians to advise us on the scientific and medical matters associated with clinical trials. This group is known as our Clinical Advisory Board. The following is a list of our Clinical Advisory Board members:

THOMAS A. RAFFIN, MD, our co-founder and Chairman of our Clinical Advisory Board, is the Colleen and Robert Haas Professor of Medicine and Biomedical Ethics, Chief of the Division of Pulmonary and Critical Care Medicine and Co-Director of the Center for Biomedical Ethics at Stanford University Medical Center.

DENNIS A. CARSON, MD is Professor of Medicine in the Department of Medicine at the University of California San Diego and Director of the Sam and Rose Stein

Institute on Aging.

ALAN R. LEFF, MD is Professor of Medicine, Neurobiology, Pharmacology and Physiology, Pediatrics, Anesthesia and Critical Care, Clinical Pharmacology and Cell Physiology, and Senior Director for Research and Development for the Biological Science Division at the University of Chicago, Chicago, Illinois.

ROBERT S. MUNFORD, MD is Professor of Internal Medicine and Microbiology at the University of Texas Southwestern Medicine Center in Dallas, Texas.

GLENN D. ROSEN, MD is Associate Professor of Medicine in the Division of Pulmonary and Critical Care Medicine at Stanford University Medical Center.

### 46 MANAGEMENT

#### 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.

# <TABLE>

NAME	AGE	POSITION
<s></s>	<c></c>	<c></c>
James M. Gower	52	President, Chief Executive Officer and Director
Donald G. Payan, MD	52	Executive Vice President and Chief Scientific Officer and Director
Brian C. Cunningham	57	Senior Vice President, Chief Operating Officer, Chief Financial Officer and Secretary
James H. Welch	42	Vice President, Finance and Administration and Assistant Secretary
Raul R. Rodriguez	39	Vice President, Business Development
Jean Deleage, PhD(1)	59	Director
Alan D. Frazier(2)	48	Director
Walter H. Moos, PhD(1)(2)	46	Director
Stephen A. Sherwin, MD(1)	51	Director
Thomas S. Volpe		

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- (1) Member of the audit committee.
- (2) Member of the compensation committee.

JAMES M. 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.

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.

BRIAN C. CUNNINGHAM has been our Secretary since July 1996. In July 1998, he joined us as Senior Vice President and Chief Operating Officer, and in February 1999, he also became 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 and is currently Of Counsel. From May 1982 to December 1989, he served as Vice President, Secretary and General Counsel

of Genentech Inc. Mr. Cunningham holds a BS in engineering science and a JD from Washington University.

JAMES H. 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 in business administration from Whitworth College and an MBA from Washington State University.

RAUL R. RODRIGUEZ joined us as our Vice President, Business Development in April 2000. 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. Mr. Rodriguez holds an AB in history and science from Harvard College, an MPH from the University of Illinois and an MBA from Stanford University.

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 sciences companies. From 1979 to 1996, Dr. Deleage was a managing partner of Burr, Egan, Deleage & Co., a venture capital firm. Dr. Deleage was the 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 Flamel Technologies S.A., Aclara 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 & Company, 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, the Technology Alliance of Washington, Voyager Capital's Advisory Board and the Washington Venture Capital Association. 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, Berkelev.

STEPHEN A. SHERWIN, MD joined us as a director in March 2000. Since March 1990, he has served as President, Chief Executive Officer and director of Cell Genesys, Inc. and as Chairman of the Board of Cell Genesys since March 1994. From 1983 to 1990, Dr. Sherwin held various positions at Genentech Inc., most recently as Vice President, Clinical Research. He received his MD from Harvard Medical School and his BA from Yale University. Dr. Sherwin also currently serves as a director of Abgenix, Inc. and Neurocrine Biosciences, Inc.

THOMAS S. VOLPE joined as a director in August 2000. Since December 1999, he has served as the Chairman of Prudential Volpe Technology Group. Mr. Volpe also serves on the board of directors of

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Linear Technology Corporation. From 1986 to 1999, Mr. Volpe was President, CEO and founder of Volpe Brown Whelan & Company, a risk capital and investment banking firm focused on rapidly growing entrepreneurial companies. Prior to forming Volpe Brown Whelan & Company, he was President, CEO 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 holds an AB in Economics from Harvard University, a 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.

#### AUDIT COMMITTEE

Our audit committee, consisting of Drs. Deleage, Sherwin and Moos, reviews our internal accounting procedures and the services provided by our independent auditors

### COMPENSATION COMMITTEE

Our compensation committee, consisting of Mr. Frazier and Dr. Moos, reviews and recommends to our board of directors the compensation and benefits of all our officers and establishes and reviews general policies relating to compensation and benefits of our employees.

### DIRECTOR COMPENSATION

We do not provide cash compensation to members of our board of directors for serving on our board of directors or for attendance at committee meetings. Members of our board of directors are reimbursed for some expenses in connection with attendance at board and committee meetings. In consideration for services as a non-employee director, on November 12, 1998, we granted an option to purchase 20,000 shares of common stock to Dr. Moos at an exercise price of \$.20 per share. The \$.20 per share exercise price for these options was equal to the fair market value of the common stock on the date of grant as determined by our board of directors. These options vest in a series of 36 equal monthly installments beginning on the grant date of the option. On March 8, 2000 and August 2, 2000, we granted options to purchase 20,000 and 6,341 shares of common stock to Dr. Sherwin at exercise prices of \$11.00 and \$4.50 per share, respectively. These options vest in a series of 24 equal monthly installments beginning on the grant date of the option.

### COMPENSATION COMMITTEE INTERLOCKS AND INSIDER PARTICIPATION

Our compensation committee currently consists of Mr. Frazier and Dr. Moos. Mr. Gower served on our compensation committee from February 1998 to January 2000. No current member of the compensation committee has been an officer or employee of ours at any time. None of our executive officers serves as a member of the board of directors or compensation committee of any other company that has one or more executive officers serving as a member of our board of directors or compensation committee. Prior to the formation of a compensation committee in February 1998, the board of directors as a whole made decisions relating to compensation of our executive officers.

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# EXECUTIVE COMPENSATION

The following table sets forth information concerning the compensation that we paid during 1999 to our Chief Executive Officer and each of the four other most highly compensated executive officers that earned more than \$100,000 during 1999. All option grants were made under our 1997 Stock Option Plan.

# <TABLE> <CAPTION>

		MPENSATION	LONG TERM COMPENSATION		
NAME AND PRINCIPAL POSITION		BONUS			
<pre> <s> James M. Gower  President, Chief Executive Officer and Director </s></pre>		<c></c>	<c> 450,000</c>		
Donald G. Payan  Executive Vice President and Chief Scientific Officer and Director	235,417		150,000		
Brian C. Cunningham(1)	250 <b>,</b> 000				
James H. Welch(2)  Vice President, Finance and Administration and Assistant Secretary	100,000	\$25,000	150,000		
Donald W. Perryman(3)  Former Vice President, Business Development					

 140,000 |  |  |

- -----
- (1) In January 2000, we granted Mr. Cunningham an option to purchase 200,000 shares of common stock at an exercise price of \$4.50 per share, which was equal to the fair market value of the common stock on the date of grant as determined by the board of directors. These options vest monthly over a four-year period from the date of grant.
- (2) Mr. Welch joined Rigel in May 1999. His annualized 1999 salary was \$150,000. In January 2000, we granted Mr. Welch an option to purchase 50,000 shares of

common stock at an exercise price of \$4.50 share, which was equal to the fair market value of the common stock on the date of grant as determined by the board of directors. These options vest monthly over a four-year period.

(3) Mr. Perryman resigned as Vice President, Business Development, effective January 15, 2000.

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 1999. Options granted to purchase shares of our common stock under our 1997 Stock Option Plan generally vest over a four-year or five-year period. The exercise price per share is equal to the fair market value of our common stock on the date of grant as determined by our board of directors. In determining the fair market value of our common stock on the date of grant our board of directors considered many factors, including:

- the fact that option grants involved illiquid securities in a nonpublic company;
- prices of preferred stock issued by Rigel to outside investors in arm's-length transactions, and the rights, preferences and privileges of the preferred stock over the common stock;
- Rigel's performance and operating results at the time of grant;
- the status of Rigel's research and development efforts;
- Rigel's stage of development and business strategy; and
- the likelihood of achieving a liquidity event for the shares of common stock underlying these options, such as an initial public offering or a sale of Rigel.

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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 Securities and Exchange Commission 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 assumed initial public offering price of \$9.00 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.  $% \left( 1\right) =\left( 1\right) \left( 1\right)$

Percentages shown under "Percentage of Total Options Granted to Employees in 1999" are based on an aggregate of 2,449,000 options granted to employees under our 1997 Stock Option Plan during 1999.

OPTION GRANTS IN LAST FISCAL YEAR ENDED DECEMBER 31, 1999

<TABLE> <CAPTION>

		INDIVID	UAL GRANTS	POTENTIAL REALIZABLE VALUE AT ASSUMED ANNUAL RATES OF				
	NUMBER OF SECURITIES UNDERLYING	% OF TOTAL OPTIONS GRANTED TO					APPRECIATI	ON OF STOCK OPTION TERM
-								
NAME	OPTIONS GRANTED	EMPLOYEES IN 1999	\$/SH	DATE	5%	10%		
<s></s>	<c></c>	<c></c>	<c></c>	<c></c>	<c></c>	<c></c>		
James M. Gower	450,000	18.4%	\$.20	2/11/09	6,507,023	10,414,657		
Donald G. Payan	150,000	6.1%	.20	2/11/09	2,169,008	3,471,552		
Brian C. Cunningham		%				-		
James H. Welch	150,000	6.1%	.20	5/11/09	2,169,008	3,471,552		
Donald W. Perryman		%				_		

  |  |  |  |  |  |The following table sets forth summary information regarding the number and value of options held as of December 31, 1999 for our Chief Executive Officer and each of our four most highly compensated executive officers. In the nine-month period ended September 30, 2000, Mr. Cunningham, our Chief Operating Officer and Chief Financial Officer acquired 100,000 shares and Mr. Welch, our Vice President, Finance and Administration, acquired 37,500 shares upon the exercise of options. Neither our Chief Executive Officer nor any of our four most highly compensated executive officers acquired any shares upon exercise of

options in 1999. Amounts shown in the value of unexercised in-the-money options at December 31, 1999 column are based on an initial public offering price of \$9.00 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 these shares.

# AGGREGATED OPTION EXERCISES IN LAST FISCAL YEAR AND FISCAL YEAR-END OPTION

<TABLE> <CAPTION>

UNDERLYING UNEXERCISED IN-THE-MONEY OPTIONS OPTIONS AT DECEMBER 31, 1999 AT DECEMBER 31, 1999 ______ VESTED UNVESTED VESTED UNVESTED NAME - ----<C> <C> <S> <C> 75,000 375,000 \$ 660,000 \$ 3,300,000 25,000 125,000 220,000 1,100,000 141,666 358,334 1,253,744 3,171,256 -- 150,000 -- 1,320,000 58,333 41,667 519,164 370,836 James M. Gower..... Donald G. Payan.... 141,666 Brian C. Cunningham..... 58,333 James H. Welch..... Donald W. Perryman.... </TABLE>

VALUE OF UNEXERCISED

### 2000 EQUITY INCENTIVE PLAN

Our board of directors adopted our 2000 Equity Incentive Plan on January 27, 2000, which was subsequently approved by our stockholders on March  $\overline{15}$ , 2000. The 2000 Equity Incentive Plan is an amendment and restatement of our 1997 Stock Option Plan.

### SHARE RESERVE

We have reserved a total of 9,525,000 shares of our common stock for issuance under the incentive plan. If the recipient of a stock award does not purchase the shares subject to such stock award before the stock award expires or otherwise terminates, the shares that are not purchased will again become available for issuance under the incentive plan.

### ADMINISTRATION

The board administers the incentive plan unless it delegates administration to a committee. The board has the authority to construe, interpret and amend the incentive plan as well as to determine:

- who will receive awards under the incentive plan;
- the dates on which such awards will be granted;
- the number of shares subject to the awards;
- the vesting and/or exercisability of the awards;
- the exercise price of the awards;
- the type of consideration that may be used to satisfy the exercise price;
- the other terms of the awards.

## ELIGIBILITY

The board may grant incentive stock options that qualify under Section 422 of the Internal Revenue Code to our employees and to the employees of our affiliates. The board also may grant nonstatutory stock options, stock bonuses and restricted stock purchase awards to our employees, directors and consultants as well as to the employees, directors and consultants of our affiliates.

Our incentive plan includes the following features:

- a stock option is a contractual right to purchase a specified number of our shares at a specified price (exercise price) during a specified period of time.
- an incentive stock option is a stock option that meets the requirements of Section 422 of the Internal Revenue Code. The holder of such an option will not be required to pay tax on either the date of grant or the date of exercise. If two holding period tests are met-more than two years between  $% \left( 1\right) =\left( 1\right) \left( 1\right)$ grant date and sale date and more than one year between exercise date and sale date-the optionholder will be taxed on the profit received on the subsequent disposition of the option stock as long-term capital gain. If the holding periods are not met, there has been a disqualifying disposition, and the difference between the exercise price and the fair

market value of the shares on the exercise date will be taxed at ordinary income rates. The difference between the fair market value on date of exercise and the exercise price is an item of adjustment for purposes of the alternative minimum tax unless there is a disqualifying disposition in the year of exercise.

- a nonstatutory stock option is a stock option that does not meet the Internal Revenue Code criteria for qualifying as an incentive stock option. Upon exercise of a nonstatutory option, the option holder will be required to pay state and federal income tax and, if applicable, federal employment taxes on the difference between the exercise price and the fair market value on the exercise date.

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- a restricted stock purchase award is an offer to purchase shares at a price that is at or near the fair market value of the shares. A stock bonus, on the other hand, is a grant of our shares at no cost to the recipient in consideration for past services rendered. Such awards generally are subject to a vesting schedule pursuant to which we may reacquire the shares subject to the award at the original purchase price (which is zero in the case of a stock bonus) if the recipient's service to us and our affiliates terminates before the shares vest.

The board may not grant an incentive stock option to any person who, at the time of the grant, owns or is deemed to own stock possessing more than 10% of our total combined voting power or the total combined voting power of an affiliate of ours, unless the exercise price is at least 110% of the fair market value of the stock on the grant date and the option term is no more than five years.

LIMITS ON OPTION GRANTS

There are limits on the number of shares that the board may grant under an option.

- section 162(m) of the Internal Revenue Code denies a deduction to publicly held corporations for compensation paid to the corporation's chief executive officer and its four highest compensated officers in a taxable year to the extent that the compensation for each such officer exceeds \$1,000,000. When we become subject to Section 162(m), in order to prevent options granted under the incentive plan from being included in such compensation, the incentive plan provides that the board may not grant options under the incentive plan to any employee covering an aggregate of more than 1,500,000 shares in any calendar year.
- an employee may not receive incentive stock options that exceed the \$100,000 per year limitation set forth in Section 422(d) of the Internal Revenue Code. In calculating the \$100,000 per year limitation, we consider the aggregate number of shares under all incentive stock options granted to that employee that will become exercisable for the first time during a calendar year. For this purpose, we include incentive stock options granted under the incentive plan as well as under any other stock plans that we and our affiliates maintain. We then determine the aggregate fair market value of shares subject to all such incentive stock options as of the grant date of the options. Taking the options into account in the order in which they were granted, we treat only the options covering the first \$100,000 worth of stock as incentive stock options. We treat any options covering stock in excess of \$100,000 as nonstatutory stock options.

OPTION TERMS

The board may grant incentive stock options with an exercise price of 100% or more of the fair market value of a share of our common stock on the grant date. It may grant nonstatutory stock options with an exercise price as low as 85% of the fair market value of a share on the grant date.

THE MAXIMUM OPTION TERM IS TEN YEARS

The maximum term of options granted under our equity incentive plan is ten years. The board may provide for exercise periods of any length following an optionholder's termination of service in individual option grants. However, generally options will provide that they terminate three months after the optionholder's service to us and our affiliates terminates. If such termination is due to the optionholder's disability, the exercise period generally is extended 12 months unless the term of the option expires prior to that date in accordance with the terms of the individual's option agreement. If such termination is due to the optionholder's death, or if the optionholder dies within three months after his or her service terminates, the exercise period generally is extended to 18 months following the optionholder's death unless the term of the option expires prior to that date in accordance with the terms of the individual's option agreement.

but not incentive stock options. However, the optionholder may designate a beneficiary to exercise either type of option following the optionholder's death. If the optionholder does not designate a beneficiary, the optionholder's option rights will pass to his or her heirs will or the laws of descent and distribution.

### TERMS OF OTHER STOCK AWARDS

The board determines the purchase price of other stock awards, which may not be less than 85% of the fair market value of our common stock on the grant date. However, the board may award stock bonuses in consideration of past services without a cash purchase price. Shares that we sell or award under the incentive plan may, but need not be, restricted and subject to a repurchase option in our favor in accordance with a vesting schedule that the board determines. The board, however, may accelerate the vesting of such awards.

### OTHER PROVISIONS

Transactions not involving our receipt of consideration, such as a merger, consolidation, reorganization, stock dividend, or stock split, may change the class and number of shares subject to the incentive plan and to outstanding awards. In that event, the board will appropriately adjust the incentive plan as to the class and the maximum number of shares subject to the incentive plan and to the Section 162 (m) limit. It also will adjust outstanding awards as to the class, number of shares and price per share applicable to such awards.

If we dissolve or liquidate, then-outstanding stock awards will terminate immediately prior to such event. However, we treat outstanding stock awards differently in the following situations:

- a sale, lease or other disposition of all or substantially all of our assets or securities;
- a merger or consolidation in which we are not the surviving corporation; or
- a reverse merger in which we are the surviving corporation but the shares of our common stock outstanding immediately before the merger are converted by virtue of the merger into other property, such as securities or cash.

In these situations, the surviving corporation may either assume all outstanding awards under the incentive plan or substitute other awards for the outstanding awards. If the surviving corporation does not assume or substitute, then, for award holders who are then providing services to us or our affiliates, the vesting and exercisability of the awards will accelerate and the awards will terminate immediately prior to the occurrence of the event described above. The vesting and exercisability of awards held by award holders who are no longer providing services to us or one of our affiliates will not accelerate. However, those awards will also terminate immediately prior to the occurrence of the event described above.

## STOCK AWARDS GRANTED

As of September 30, 2000, 2,073,642 shares were issued upon the exercise of options under our equity incentive plan, 2,500 shares of which have been repurchased; 100,000 shares were issued upon stock bonuses; options to purchase 5,725,828 shares were outstanding; and 1,625,530 shares remained available for grant.

### PLAN TERMINATION

The incentive plan will terminate in 2010 unless the board terminates it sooner.

# 2000 NON-EMPLOYEE DIRECTORS' STOCK OPTION PLAN

Our board of directors adopted the 2000 Non-Employee Directors' Stock Option Plan on August 18, 2000, which was subsequently approved by our stockholders on September 11, 2000. The directors' plan

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will become effective on the effective date of this initial public offering. The directors' plan provides for the automatic grant to our non-employee directors of options to purchase shares of our common stock.

### SHARE RESERVE

We have reserved a total of 300,000 shares of our common stock for issuance under the directors' plan.

If an optionholder does not purchase the shares subject to such option before the option expires or otherwise terminates, the shares that are not purchased again become available for issuance under the directors' plan.

### ADMINISTRATION

The board administers the directors' plan. The board has the authority to construe, interpret and amend the directors' plan, but the directors' plan specifies the essential terms of the options, including:

- who will receive options under the directors' plan;
- the dates on which such options will be granted;
- the number of shares subject to the options;
- the vesting schedule applicable to the options;
- the exercise price of the options; and
- the type of consideration that may be used to satisfy the exercise price.

### ELIGIBILITY

Each non-employee director who is serving on the effective date of this offering will automatically be granted an option to purchase 20,000 shares of common stock. Each person who is elected or appointed to be a non-employee director for the first time after the effective date of this offering will be granted an option to purchase 20,000 shares of common stock upon such election or appointment. In addition, each non-employee director who continues to serve as a non-employee director automatically will be granted an option to purchase 5,000 shares of common stock on the day following each annual meeting of our stockholders commencing in 2001. The number of shares subject to the grants to be made following each annual meeting will be pro-rated for any non-employee director who has not continuously served as a director for the entire 12-month period prior to the date of grant. The options will vest over two years in equal monthly installments provided that the non-employee director continues to provide services to us or one of our affiliates.

### OPTION TERMS

Options granted under the directors' plan will have an exercise price equal to 100% of the fair market value of the common stock on the grant date and a term of two years. As long as a non-employee director continues to serve with us or with an affiliate of ours, whether in the capacity of a director, an employee or a consultant, the non-employee's option will continue. Options will terminate three months after the optionholder's service terminates. However, if such termination is due to the optionholder's disability, the exercise period will be extended to 12 months unless the term of the option expires prior to that date in accordance with the terms of the individual's option agreement. If such termination is due to the optionholder's death or if the optionholder dies within three months after his or her service terminates, the exercise period will be extended to 18 months following death unless the term of the option expires prior to that date in accordance with the terms of the individual's option agreement.

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Optionholders may transfer options granted under the directors' plan by gift to immediate family or, under certain circumstances, to a trust for estate-planning purposes. Optionholders also may designate a beneficiary to exercise their options following the optionholder's death. Otherwise, option exercise rights will pass by the optionholder's will or by the laws of descent and distribution.

### OTHER PROVISIONS

Transactions not involving our receipt of consideration, such as a merger, consolidation, reorganization, stock dividend or stock split, may change the class and number of shares subject to the directors' plan and to outstanding options. In that event, the board will appropriately adjust the directors' plan as to the class and the maximum number of shares subject to the directors' plan. It also will adjust outstanding options as to the class, number of shares and price per share applicable to such options.

If we dissolve or liquidate, then outstanding options will terminate immediately prior to such event. However, we treat outstanding options differently in the following situations:

- a sale, lease or other disposition of all or substantially all of our assets or securities;
- a merger or consolidation in which we are not the surviving corporation; or
- a reverse merger in which we are the surviving corporation but the shares of our common stock outstanding immediately before the merger are converted by virtue of the merger into other property, such as securities or cash.

In these situations, the surviving corporation will either assume the options outstanding under the directors' plan or substitute other options for the outstanding options. If the surviving corporation does not assume or substitute all outstanding options under the directors' plan, then for optionholders who are then providing services to us or one of our affiliates, the vesting and exercisability of the options will accelerate and the options will terminate if they are not exercised prior to the event described above. The vesting and exercisability of options held by optionholders who are no longer providing services to us or one of our affiliates will not accelerate. However, these options also will terminate immediately prior to the occurrence of the event described above.

### OPTIONS ISSUED

We have not issued any options under the directors' plan.

### PLAN TERMINATION

The directors' plan will terminate in 2010 unless the board terminates it sooner.

### 2000 EMPLOYEE STOCK PURCHASE PLAN

Our board of directors adopted the 2000 Employee Stock Purchase Plan on August 18, 2000, which was subsequently approved by our stockholders on September 11, 2000. The employee stock purchase plan will become effective on the effective date of this initial public offering.

### SHARE RESERVE

We have authorized the issuance of 400,000 shares of our common stock pursuant to purchase rights granted to eligible employees under the purchase plan. On each anniversary of the effective date of this offering, starting with the anniversary of this offering in 2001, the share reserve will automatically be increased by a number of shares equal to the lesser of:

- 1% of our then outstanding shares of common stock;
- 400,000 shares; or
- a number determined by our board of directors.

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# ELIGIBILITY

The purchase plan is intended to qualify as an employee stock purchase plan within the meaning of Section 423 of the Internal Revenue Code. The purchase plan provides a means by which eligible employees may purchase our common stock through payroll deductions. We implement the purchase plan by offerings of purchase rights to eligible employees. Generally, all of our full-time employees and full-time employees of our affiliates incorporated in the United States may participate in offerings under the purchase plan. However, no employee may participate in the purchase plan if, immediately after we grant the employee a purchase right, the employee has voting power over 5% or more of our outstanding capital stock. As of the date hereof, no shares of common stock had been purchased under the purchase plan.

### ADMINISTRATION

Under the purchase plan, the board may specify offerings of up to 27 months. Unless the board otherwise determines, common stock will be purchased for accounts of participating employees at a price per share equal to the lower of:

- 85% of the fair market value of a share on the first day of the offering; or
- 85% of the fair market value of a share on the purchase date.

For the first offering, which will begin on the effective date of this initial public offering, we will offer shares registered on a Form S-8 registration statement. Eligible employees will be permitted to authorize payroll deductions under the offering following the date on which the Form S-8 registration becomes effective. The fair market value of the shares on the first date of this offering will be the price per share at which our shares are first sold to the public as specified in the final prospectus with respect to our initial public offering. Otherwise, fair market value generally means the closing sales price (rounded up where necessary to the nearest whole cent) for such shares (or the closing bid, if no sales were reported) as quoted on the Nasdaq National Market on the trading day prior to the relevant determination date, as reported in The Wall Street Journal.

The board may provide that employees who become eligible to participate after the offering period begins nevertheless may enroll in the offering. These employees will purchase our stock at the lower of:

- 85% of the fair market value of a share on the day they began participating in the purchase plan; or
- 85% of the fair market value of a share on the purchase date.

If authorized by the board, participating employees may authorize payroll deductions of up to 15% of their compensation (including overtime pay, bonus, incentive pay and commissions) for the purchase of stock under the purchase plan. Generally employees may end their participation in the offering at any time up to ten days before a purchase period ends. Their participation ends automatically on termination of their employment or loss of full-time status.

### OTHER PROVISIONS

The board may grant eligible employees purchase rights under the purchase plan only if the purchase rights, together with any other purchase rights granted under other employee stock purchase plans established by us or by our affiliates, if any, do not permit the employee's rights to purchase our stock to accrue at a rate which exceeds \$25,000 of fair market value of our stock for each calendar year in which the purchase rights are outstanding.

Upon a change in control, a surviving corporation may assume outstanding purchase rights or substitute other purchase rights therefor. If the surviving corporation does not assume or substitute the purchase rights, the participant's accumulated payroll deductions shall be used to purchase our stock immediately before the change in control and the participant's rights under the offering shall terminate following such purchase.

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### DESCRIPTION OF 401(k) PLAN

We maintain a retirement and deferred savings plan for our employees. The retirement and deferred savings plan is intended to qualify as a tax-qualified plan under Section 401 of the Internal Revenue Code. The retirement and deferred savings plan provides that each participant may contribute up to 20% of his or her pre-tax compensation (up to a statutory limit, which is \$10,500 in calendar year 2000). Under the plan, each employee is fully vested in his or her deferred salary contributions. Employee contributions are held and invested by the plan's trustee. The retirement and deferred savings plan also permits us to make discretionary contributions, subject to established limits and a vesting schedule. To date, we have not made any discretionary contributions to the retirement and deferred savings plan on behalf of participating employees.

## LIMITATIONS OF LIABILITY; INDEMNIFICATION OF DIRECTORS AND OFFICERS

In connection with the consummation of this offering, we will adopt and file an amended and restated certificate of incorporation and amended and restated bylaws. As permitted by Delaware law, our amended and restated certificate of incorporation provides that no director will be personally liable to us or our stockholders for monetary damages for breach of fiduciary duty as a director, except for liability:

- for any breach of duty of loyalty to us or to our stockholders;
- for acts or omissions not in good faith or that involve intentional misconduct or a knowing violation of law;
- for unlawful payment of dividends or unlawful stock repurchases or redemptions under Section 174 of the Delaware General Corporation Law; or
- for any transaction from which the director derived an improper personal benefit.

Our amended and restated certificate of incorporation further provides that we must indemnify our directors to the fullest extent permitted by Delaware law.

In addition, our amended and restated by laws provide that:

- we are required to indemnify our directors and officers to the fullest extent permitted by Delaware law, subject to limited exceptions;
- we may indemnify our other employees and agents to the extent that we indemnify our officers and directors, unless otherwise prohibited by law, our amended and restated certificate of incorporation, our amended and restated bylaws or agreements;
- we are required to advance expenses to our directors and executive officers as incurred in connection with legal proceedings against them for which they may be indemnified; and
- the rights conferred in the amended and restated bylaws are not exclusive.

We have entered into indemnification agreements with each of our directors and certain officers. These agreements, among other things, require us to

indemnify each director and officer to the fullest extent permitted by Delaware law, including indemnification for expenses such as attorneys' fees, judgments, fines and settlement amounts incurred by the director or officer in any action or proceeding, including any action by or in the right of Rigel, arising out of the person's services as a director or officer of us, any subsidiary of ours or any other company or enterprise to which the person provides services at our request. At present, we are not aware of any pending or threatened litigation or proceeding involving any of our directors, officers, employees or agents in which indemnification would be required or permitted. We believe that our charter provisions and indemnification agreements are necessary to attract and retain qualified persons as directors and officers.

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### EMPLOYMENT AGREEMENTS

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

# 59 RELATED PARTY TRANSACTIONS

Stock option grants to our executive officers and directors are described in this prospectus under the heading "Management--Director Compensation, --Executive Compensation and - --Employment Agreements."

From January 31, 1997 through September 30, 2000, the following executive officers, directors and holders of more than 5% of our voting securities purchased securities in the amounts and as of the dates set forth below.

<TABLE> <CAPTION>

PREFERRED STOCK

______

EXECUTIVE OFFICERS, DIRECTORS AND 5% STOCKHOLDERS(1)	COMMON STOCK	SERIES A	SERIES B	SERIES C	SERIES D	SERIES D WARRANTS	SERIES E
<\$>	<c></c>	<c></c>	<c></c>	<c></c>	<c></c>	<c></c>	<c></c>
DIRECTORS							
Tak W. Mak(2)	50,000						
Thomas S. Volpe							
33,333							
FIVE PERCENT STOCKHOLDERS							
Entities affiliated with Alta							
Partners(3)			2,500,000	1,403,509	613,747		
166,667							
Entities affiliated with							
Frazier and							
Company, Inc.(4)				3,649,123	573 <b>,</b> 596		
125,000							
Johnson & Johnson Development							
Corporation					1,500,000		
166,666							
Entities affiliated with							
Lombard Odier & Cie			3,750,000	2,105,263	837,161	83,460	
500,000							
Novartis Pharma AG					2,000,000		
Price Per Share	\$4.50		\$.80	\$1.14	\$2.00	\$2.00	
\$6.00							
Date(s) of Purchase	1/00		1/97	11/97	12/98-5/99	12/98	2/00-

  |  |  |  |  |  |  |- ------

- (1) See "Principal Stockholders" for more detail on shares held by these purchasers.
- (2) Dr. Mak resigned as a director on March 8, 2000.
- (3) Dr. Deleage, one of our directors, is the managing general partner of Alta Partners.
- (4) Mr. Frazier, one of our directors, is the managing principal of Frazier and Company, Inc.

Upon the closing of this offering, all shares of our outstanding preferred stock will automatically convert into shares of common stock on a one-for-one basis.

We have entered into an Amended and Restated Registration Rights Agreement with each of the purchasers of preferred stock set forth above, pursuant to which these and other stockholders will have registration rights with respect to their shares of common stock issuable upon conversion of their preferred stock following this offering.

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. 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 President, Chief Executive Officer and Chairman of the Board of Cell Genesys.

We anticipate that we will sell 1,111,111 shares of our common stock to Novartis in a private placement concurrent with this offering pursuant to our agreement with Novartis, dated May 26, 1999.

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.

### 60 PRINCIPAL STOCKHOLDERS

The following table shows information known to us with respect to the beneficial ownership of our common stock as of September 30, 2000, and as adjusted to reflect the sale of the shares of common stock offered in the public offering under this prospectus and the concurrent private placement 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 1999;
- 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 September 30, 2000 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 29,517,485 shares of common stock outstanding as of September 30, 2000, assuming the conversion of all outstanding shares of preferred stock into common stock upon the closing of this offering, and 39,628,596 shares of common stock outstanding immediately following the completion of this offering, including the shares to be issued to Novartis in the concurrent private placement. Unless otherwise indicated, the address of each of the named individuals is c/o Rigel Pharmaceuticals, Inc., 240 East Grand Avenue, South San Francisco, California 94080.

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<TABLE>

SHARES ISSUABLE PURSUANT TO

OPTIONS

PERCENT OF TOTAL

OUTSTANDING

EXERCISABLE

SHARES

OWNED OUTSTANDING DAYS OF SHARES OF SEPTEMBER 30, PRIOR TO THE AFTER THE BENEFICIAL OWNER COMMON STOCK 2000 OFFERINGS OFFERINGS - -----<S> <C> <C> <C> <C> FIVE PERCENT STOCKHOLDERS Entities affiliated with Lombard Odier & 24.7% Cie(1)..... 7.275.884 11. rue de la Corraterie 1211 Geneve 11 Switzerland Entities affiliated with Alta Partners(2)... 4,683,923 15.9 One Embarcadero Center, Suite 4050 San Francisco, CA 94111 Entities affiliated with Frazier and Company, Inc.(3)..... 4,347,719 14.7 11.0 601 Union Street, Suite 2110 Seattle, WA 98101 Novartis Pharma AG(4)..... 2,000,000 6.8 7.9 Head Financial Investments CH-4002 Basil, Switzerland Johnson & Johnson Development Corporation... 1,666,666 5.7 4.2 One Johnson & Johnson Plaza New Brunswick, NJ 08933 DIRECTORS AND NAMED EXECUTIVE OFFICERS 500,000 157,500 2.2 James M. Gower..... 1.7 52,500 Donald G. Payan.... 750,000 2.7 2.0 Brian C. Cunningham..... 100,000 166,666 James H. Welch..... 37,500 17,916 Donald W. Perryman(5)..... 63,333 13,333 Jean Deleage(2)..... 4,683,923 15.9 11.8 Alan D. Frazier(3)..... 4,347,719 14.7 11.0 Walter H. Moos..... 13,333 Stephen A. Sherwin..... 8,780 Thomas S. Volpe..... 33,333 2,500

10,515,808

432,528

37.1%

_ _____

27.6% </TABLE>

All executive officers and directors as a group (11 people) (6).....

- (1) Includes 5,087,161 shares held by Lombard Odier & Cie and 2,105,263 shares held by Ryco and Co. Also includes 83,460 shares issuable upon the exercise of warrant within 60 days of September 30, 2000.
- (2) Includes 4,579,305 shares held by Alta California Partners, L.P. and 104,618 shares held by Alta Embarcadero Partners, LLC. 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

Less than one percent (1%).

Healthcare II, L.P. except to the extent of his proportionate pecuniary interest therein.

- (4) Percent of total outstanding shares beneficially owned after the offerings includes the sale of 1,111,111 shares of common stock to be acquired in a private placement concurrent with the closing of this initial public offering.
- (5) Mr. Perryman resigned as Vice President, Business Development, effective January 15, 2000.
- (6) Includes 83,460 shares issuable upon the exercise of a warrant that is exercisable within 60 days of September 30, 2000.

### 62 DESCRIPTION OF SECURITIES

Upon the closing of this offering and the filing of our amended and restated certificate of incorporation, our authorized capital stock will consist of 100,000,000 shares of common stock, \$.001 par value, and 10,000,000 shares of preferred stock, \$.001 par value.

### COMMON STOCK

As of September 30, 2000, there were 29,517,485 shares of common stock outstanding that were held of record by approximately 155 stockholders after giving effect to the conversion of our preferred stock into common stock at a one-to-one ratio. There will be 39,628,596 shares of common stock outstanding (assuming no exercise of the underwriters' over-allotment option and no exercise of outstanding options) after giving effect to the sale of the shares of common stock offered by this prospectus and the concurrent private placement to Novartis.

The holders of common stock are entitled to one vote per share on all matters submitted to a vote of our stockholders and do not have cumulative voting rights. Accordingly, holders of a majority of the shares of common stock entitled to vote in any election of directors may elect all of the directors standing for election. Subject to preferences that may be applicable to any preferred stock outstanding at the time, the holders of outstanding shares of common stock are entitled to receive ratably any dividends out of assets legally available therefor as our board of directors may from time to time determine. Upon liquidation, dissolution or winding up of Rigel, holders of our common stock are entitled to share ratably in all assets remaining after payment of liabilities and the liquidation preference of any then outstanding shares of preferred stock. Holders of common stock have no preemptive or conversion rights or other subscription rights. There are no redemption or sinking fund provisions applicable to the common stock. All outstanding shares of common stock are fully paid and nonassessable.

### PREFERRED STOCK

Pursuant to our amended and restated certificate of incorporation, our board of directors will have the authority, without further action by the stockholders, to issue up to 10,000,000 shares of preferred stock, in one or more series. Our board shall determine the rights, preferences, privileges and restrictions of the preferred stock, including dividend rights, conversion rights, voting rights, terms of redemption, liquidation preferences, sinking fund terms and the number of shares constituting any series or the designation of any series. The issuance of preferred stock could adversely affect the voting power of holders of common stock, and the likelihood that holders of preferred stock will receive dividend payments and payments upon liquidation may have the effect of delaying, deferring or preventing a change in control of Rigel, which could depress the market price of our common stock. We have no preset plan to issue any shares of preferred stock.

## WARRANTS

As of September 30, 2000, three warrants to purchase an aggregate of 150,000 shares of our common stock were outstanding. These warrants shall expire upon the earlier of (i) June 1, 2008 or (ii) seven years after the closing of the initial public offering of our stock and entitle the holders of these warrants to purchase up to 150,000 shares of our common stock at a price of \$1.14 per share, subject to adjustment in the event of a merger, reorganization or sale of Rigel. These warrants give the holders the right of a net issue election.

As of September 30, 2000, one warrant to purchase 175,000 shares of our Series B preferred stock was outstanding. This warrant automatically converts upon the earlier of (i) April 30, 2004 or (ii) a merger or reorganization involving Rigel and entitles the holder of this warrant to purchase up to 175,000 shares of our Series B preferred stock at a price of \$.80 per share, subject to adjustment in the event of a merger, reorganization or sale of Rigel. This warrant gives the holder the right of a net issue election.

Series C preferred stock was outstanding. This warrant shall expire upon June 30, 2005 and entitles the holder of this warrant to purchase up to 131,578 shares of our Series C preferred stock at a price of \$1.14 per share, subject to adjustment in the event of a merger, reorganization or sale of us. This warrant gives the holder the right of a net issue election.

As of September 30, 2000, one warrant to purchase an aggregate of 83,460 shares of our Series D preferred stock was outstanding. This warrant shall expire upon the earlier of (i) the closing of the initial public offering of our stock, (ii) a reorganization, merger or sale of Rigel or (iii) December 3, 2003 and entitle the holder of this warrant to purchase up to 83,460 shares of our Series D preferred stock at a price of \$2.00 per share, subject to adjustment in the event of a merger, reorganization or sale of us. This warrant gives the holder the right of a net issue election.

### REGISTRATION RIGHTS

Upon completion of this offering and the concurrent private placement to Novartis, holders of an aggregate of 25,282,454 shares of common stock and warrants to purchase an aggregate of 306,578 shares of common stock will be entitled to rights to register these shares under the Securities Act. These rights are provided under an Amended and Restated Registration 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, the holders of these shares 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 and in some cases, including this offering, exclude these shares entirely. In addition, the holders of these shares may require us, at our expense and on not more than two occasions at any time beginning six months from the date of the closing of this offering, 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, the holders may require us at our expense to register their shares on Form S-3 when this form becomes available.

ANTI-TAKEOVER PROVISIONS OF CERTAIN PROVISIONS OF DELAWARE LAW AND OUR CHARTER CERTIFICATE ON INCORPORATION AND BYLAWS

We are subject to Section 203 of the Delaware General Corporation Law. In general, the statute prohibits a publicly held Delaware corporation from engaging in any business combination with any interested stockholder for a period of three years following the date that the stockholder became an interested stockholder unless:

- prior to the date, our board of directors approved either the business combination or the transaction that resulted in the stockholder becoming an interested stockholder;
- upon consummation of the transaction that resulted in the stockholder becoming an interested stockholder, the interested stockholder owned at least 85% of the voting stock of the corporation outstanding at the time the transaction commenced, excluding those shares owned by persons who are directors and also officers, and by employee stock plans in which shares held subject to the plan will be tendered in a tender or exchange offer; or
- on or subsequent to this date, the business combination is approved by our board of directors and authorized at an annual or special meeting of stockholders, and not by written consent, by the affirmative vote of at least two-thirds of the outstanding voting stock that is not owned by the interested stockholder.

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- Section 203 defines "business combination" to include:
- any merger or consolidation involving the corporation and the interested stockholder;
- any sale, transfer, pledge or other disposition involving the interested stockholder of 10% or more of the assets of the corporation;
- subject to exceptions, any transaction that results in the issuance or transfer by the corporation of any stock of the corporation to the interested stockholder; and
- the receipt by the interested stockholder of the benefit of any loans, advances, guarantees, pledges or other financial benefits provided by or through the corporation.

In general, Section 203 defines an interested stockholder as any entity or person beneficially owning 15% or more of the outstanding voting stock of the corporation and any entity or person affiliated with or controlling or controlled by the entity or person.

Our amended and restated certificate of incorporation requires that upon completion of the offering, any action required or permitted to be taken by our stockholders must be effected at a duly called annual or special meeting of stockholders and may not be effected by a consent in writing. Additionally, our amended and restated certificate of incorporation:

- substantially limits the use of cumulative voting in the election of directors;
- provides that the authorized number of directors may be changed only by resolution of our board of directors; and
- authorizes our board of directors to issue blank check preferred stock to increase the amount of outstanding shares.

Our amended and restated bylaws provide that candidates for director may be nominated only by our board of directors or by a stockholder who gives written notice to us no later than 60 days prior nor earlier than 90 days prior to the first anniversary of the last annual meeting of stockholders. The authorized number of directors is fixed in accordance with our amended and restated certificate of incorporation. Our board of directors may appoint new directors to fill vacancies or newly created directorships. Our amended and restated bylaws also limit who may call a special meeting of stockholders.

Upon completion of the offering, the terms of the board of directors will be divided into three classes each with a term of three years: Class I, whose term will expire at the annual meeting of stockholders to be held in 2001; Class II, whose term will expire at the annual meeting of stockholders to be held in 2002; and Class III, whose term will expire at the annual meeting of stockholders to be held in 2003. The Class I directors are Mr. Frazier and Dr. Deleage, the Class II directors are Dr. Moos, Dr. Sherwin and Mr. Volpe and the Class III directors are Mr. Gower and Dr. Payan. At each annual meeting of stockholders after the initial classification, the successors to directors whose terms expire will be elected to serve a term of three years. This classification of directors may have the effect of delaying or preventing changes in our control.

Delaware law and these charter provisions may have the effect of deterring hostile takeovers or delaying changes in control of our management, which could depress the market price of our common stock.

### TRANSFER AGENT AND REGISTRAR

The transfer agent and registrar for the common stock is Wells Fargo Bank Minnesota, N.A.  $\,$ 

### 65 SHARES ELIGIBLE FOR FUTURE SALE

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

Upon completion of this offering and the concurrent private placement to Novartis, we will have outstanding an aggregate of 39,628,596 shares of common stock, assuming no exercise of the underwriters' over-allotment option and no exercise of outstanding options or warrants after September 30, 2000. Of these shares, all of the shares sold in this offering will be freely tradable without restriction or further registration under the Securities Act, unless these shares are purchased by affiliates. The remaining 30,628,596 shares of common stock held by existing stockholders are restricted securities. Restricted securities may be sold in the public market only if registered or if they qualify for an exemption from registration described below under Rules 144, 144(k) or 701 promulgated under the Securities Act.

As a result of the contractual restrictions described below and the provisions of Rules 144, 144(k) and 701, the restricted shares will be available for sale in the public market as follows:

- no shares will be eligible for sale upon completion of this offering;
- 29,400,819 shares will be eligible for sale upon the expiration of the lock-up agreements, described below, beginning 180 days after the date of this prospectus; and
- 1,881,258 shares will be eligible for sale upon the exercise of vested options 180 days after the date of this prospectus.

All of our officers, directors and stockholders and option holders have agreed not to transfer or dispose of, directly or indirectly, any shares of our common stock or any securities convertible into shares or exercisable or exchangeable for shares of our common stock, for a period of at least 180 days after the date of this prospectus. Transfers or dispositions can be made sooner only with the prior written consent of Morgan Stanley & Co. Incorporated. Morgan Stanley & Co. Incorporated may release any of the shares subject to these lock-up agreements at any time without notice.

#### RULE 144

In general, under Rule 144 as currently in effect, beginning 90 days after the date of this prospectus, a person or persons whose shares are aggregated, who has beneficially owned restricted securities for at least one year, including the holding period of any prior owner except an affiliate, would be entitled to sell within any three-month period a number of shares that does not exceed the greater of:

- 1% of the number of shares of our common stock then outstanding, which will equal approximately 396,286 shares immediately after this offering; or
- the average weekly trading volume of our common stock on the Nasdaq National Market during the four calendar weeks preceding the filing of a notice on Form 144 with respect to the sale.

Sales under Rule 144 are also subject to manner of sale provisions and notice requirements and to the availability of current public information about Rigel.

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### RULE 144(k)

Under Rule 144(k), a person who is not deemed to have been one of our affiliates at any time during the 90 days preceding a sale, and who has beneficially owned the shares proposed to be sold for at least two years, including the holding period of any prior owner except an affiliate, is entitled to sell these shares without complying with the manner of sale, public information, volume limitation or notice provisions of Rule 144. 6,300,308 shares of our common stock will qualify as "144(k) shares" within 180 days after the date of this prospectus.

## RULE 701

In general, under Rule 701 of the Securities Act as currently in effect, any of our employees, consultants or advisors, other than affiliates, who purchase or receive shares from us in connection with a compensatory stock purchase plan or option plan or other written agreement will be eligible to resell their shares beginning 90 days after the date of this prospectus, subject only to the manner of sale provisions of Rule 144, and by affiliates under Rule 144 without compliance with its holding period requirements.

## REGISTRATION RIGHTS

Upon completion of this offering and the concurrent private placement to Novartis, the holders of an aggregate of 25,282,454 of our common stock and warrants to purchase an aggregate of 306,578 shares of common stock, or their transferees, will be entitled to rights with respect to the registration of their shares under the Securities Act. Registration of their shares under the Securities Act would result in these shares becoming freely tradeable without restriction under the Securities Act, except for shares purchased by affiliates, immediately upon the effectiveness of such registration.

### STOCK OPTIONS

Following this offering, we intend to file a registration statement on Form S-8 under the Securities Act covering the shares of common stock reserved for issuance under our 2000 Equity Incentive Plan, 2000 Employee Stock Purchase Plan and 2000 Non-Employee Directors' Stock Option Plan that will become effective upon filing. Accordingly, shares registered under that registration statement will, subject to Rule 144 volume limitations applicable to affiliates, be available for sale in the open market after the filing, except those shares subject to lock-up agreements.

### 67 UNDERWRITERS

Under the terms and subject to the conditions contained in the underwriting agreement dated the date hereof, the underwriters named below, for whom Morgan Stanley & Co. Incorporated, Lehman Brothers Inc. and FleetBoston Robertson Stephens, Inc. are acting as representatives, have severally agreed to purchase, and Rigel has agreed to sell to them, an aggregate of 9,000,000 shares of common stock. The number of shares of common stock that each underwriter has agreed to purchase is set forth opposite its name below:

<table></table>	
<caption></caption>	
UNDERWRITERS	NUMBER OF SHARES
<\$>	<c></c>
Morgan Stanley & Co. Incorporated	
Lehman Brothers Inc	
Robertson Stephens, Inc	
Total	9,000,000
	=======

</TABLE>

The underwriters are offering the shares of common stock subject to their acceptance of the shares from us and subject to prior sale. The underwriting agreement provides that the obligations of the several underwriters to pay for and accept delivery of the shares of common stock offered hereby are subject to the approval of certain legal matters by their counsel and to certain other conditions. The underwriters are obligated to take and pay for all of the shares of common stock offered hereby, other than those covered by the over-allotment option described below, if any such shares are taken.

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

Rigel has granted to the underwriters an option, exercisable for 30 days from the date of this prospectus, to purchase up to 1,350,000 additional shares of common stock at the public offering price set forth on the cover page hereof, less underwriting discounts and commissions. The underwriters may exercise this option solely for the purpose of covering over-allotments, if any, made in connection with this offering of common stock. To the extent this option is exercised, each underwriter will become obligated, subject to certain conditions, to purchase approximately the same percentage of additional shares of common stock as the number set forth next to the underwriter's name in the preceding table bears to the total number of shares of common stock set forth next to the names of all underwriters in the preceding table. The following table provides information regarding the amount of the discount to be paid by us to the underwriters:

<TABLE> <CAPTION>

		TOTAL			
	PER SHARE	WITHOUT OVER-ALLOTMENT	WITH OVER-ALLOTMENT		
<\$>	<c></c>	<c></c>	<c></c>		
Underwriting discounts and commissions to be paid by us					

 \$ | \$ | \$ |We estimate that the total expenses of the offering, including registration, filing and listing fees, printing fees and legal and accounting expenses, but excluding underwriting discounts and commissions, will be approximately \$1 million.

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Rigel, our directors and officers and certain other stockholders have each agreed, without the prior written consent of Morgan Stanley & Co. Incorporated on behalf of the underwriters, during the period ending 180 days after the date of this prospectus, subject to certain exceptions, not to, directly or indirectly:

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

whether any such transaction described above is to be settled by delivery of common stock or such other securities, in cash or otherwise. The foregoing restrictions shall not apply to (1) the sale of any shares to the underwriters, (2) transactions relating to shares of our common stock (other than shares

acquired in the directed share program) or other securities acquired in open market transactions after the date of this prospectus or (3) the transfer of shares of common stock or any securities convertible into or exercisable or exchangeable for common stock to a member of the stockholder's immediate family or to a trust of which the stockholder or an immediate family member is the beneficiary if certain conditions are met. Morgan Stanley & Co. Incorporated may release any of the shares subject to these lock-up agreements at any time without notice.

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

Our common stock will be quoted on the Nasdaq National Market under the symbol "RIGL."  $\,$ 

In order to facilitate the offering of the common stock, the underwriters may engage in transactions that stabilize, maintain or otherwise affect the price of the common stock. Specifically, the underwriters may over-allot in connection with the offering, creating a short position in the common stock for their own account. In addition, to cover over-allotments or to stabilize the price of the common stock, the underwriters may bid for, and purchase, shares of common stock in the open market. Finally, the underwriting syndicate may reclaim selling concessions allowed to an underwriter or a dealer for distributing the common stock in the offering if the syndicate repurchases previously distributed shares of common stock in transactions to cover syndicate short positions, in stabilization transactions or otherwise. Any of these activities may stabilize or maintain the market price of the common stock above independent market levels. The underwriters are not required to engage in these activities and may end any of these activities at any time.

The underwriting agreement provides that Rigel and the underwriters will indemnify each other against certain liabilities, including liabilities under the Securities Act.

### DIRECTED SHARE PROGRAM PROSPECTUS DISCLOSURE

At the request of Rigel, the underwriters have reserved for sale at the initial offering price, up to 450,000 shares in this offering for directors, officers, employees, business associates and related persons of Rigel. The shares of common stock available for sale to the general public will be reduced to the extent such persons purchase such reserved shares. Any reserved shares which are not so purchased will be offered by the underwriters to the general public on the same basis as the other shares in this offering.

### PRICING OF THE OFFERING

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

### 69 LEGAL MATTERS

Cooley Godward LLP, Palo Alto, California, will provide us with an opinion as to the validity of the common stock offered under this prospectus. Skadden, Arps Slate, Meagher & Flom LLP, Palo Alto, California, will pass upon certain legal matters related to this offering for the underwriters. As of the date of this prospectus, certain partners and associates of Cooley Godward LLP own an aggregate of 78,860 shares of our common stock through investment partnerships. Brian Cunningham, our Senior Vice President, Chief Operating Officer, Chief Financial Officer and Secretary, is Of Counsel with Cooley Godward and participates in their investment partnerships. Mr. Cunningham currently holds 200,000 shares of our common stock and holds options to purchase 500,000 shares of our common stock.

### EXPERTS

Ernst & Young LLP, independent auditors, have audited our financial statements at December 31, 1998 and December 31, 1999, and for the years ended December 31, 1997, 1998 and 1999, as set forth in their report. We have included our financial statements in this prospectus and elsewhere in the registration statement in reliance on Ernst & Young LLP's report, given on their authority as experts in accounting and auditing.

We have filed with the Securities and Exchange Commission (the "SEC") a registration statement on Form S-1 under the Securities Act with respect to the shares of common stock offered under this prospectus. This prospectus does not contain all of the information in the registration statement and the exhibits and schedule to the registration statement. For further information with respect to us and our common stock, we refer you to the registration statement and to the exhibits and schedule to registration statement. Statements contained in this prospectus as to the contents of any contract or any other document referred to are not necessarily complete, and in each instance, we refer you to the copy of the contract or other document filed as an exhibit to the registration statement. Each of these statements is qualified in all respects by this reference. You may inspect a copy of the registration statement without charge at the SEC's principal office in Washington, D.C., and copies of all or any part of the registration statement may be obtained from the Public Reference Section of the SEC, 450 Fifth Street, N.W., Washington, D.C. 20549, upon payment of fees prescribed by the SEC. The SEC maintains a World Wide Web site that contains reports, proxy and information statements and other information regarding registrants that file electronically with the SEC. The address of the Web site is http://www.sec.gov. The SEC's toll free investor information service can be reached at 1-800-SEC-0330. Information contained on our website does not constitute part of this prospectus.

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

We intend to furnish our stockholders with annual reports containing financial statements audited by our independent public accountants and quarterly reports for the first two fiscal quarters of each fiscal year containing unaudited interim financial information. Our telephone number is  $(650) \ 624-1100$ .

# 70 RIGEL PHARMACEUTICALS, INC. INDEX TO FINANCIAL STATEMENTS

# <TABLE>

	PAGE
<s> Report of Ernst &amp; Young LLP, Independent Auditors</s>	<c> F-2</c>
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Statements of Operations	F-4
Statement of Stockholders' Equity	F-5
Statements of Cash Flows	F-7
Notes to Financial Statements	F-8

# $$\mathrm{F}\text{-}1$$ REPORT OF ERNST & YOUNG LLP, INDEPENDENT AUDITORS

The Board of Directors
Rigel Pharmaceuticals, Inc.

We have audited the accompanying balance sheets of Rigel Pharmaceuticals, Inc. as of December 31, 1998 and 1999, and the related statements of operations, stockholders' equity, and cash flows for each of the three years in the period ended December 31, 1999. 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, 1998 and 1999, and the results of its operations and its cash flows for each of the three years in the period ended December 31, 1999 in conformity with accounting principles generally accepted in the United States.

## F-2 RIGEL PHARMACEUTICALS, INC.

# BALANCE SHEETS

(IN THOUSANDS, EXCEPT SHARE AND PER SHARE AMOUNTS)

<TABLE> <CAPTION>

	DECEMB:	ER 31,	CEDMEMDED 20	STOCKHOLDERS' EQUITY AT
	1998	1999	SEPTEMBER 30, 2000	SEPTEMBER 30, 2000
				DITED)
<s> ASSET</s>	<c></c>	<c></c>	<c></c>	<c></c>
Current assets:  Cash and cash equivalents	\$ 9,493   112	\$ 5,836  2,348 346	\$ 7,016 3,954 462 710	
Total current assets	3,218	8,530 8,398 241  \$ 17,169	12,142 9,081 231  \$ 21,454	
LIABILITIES AND STO	CKHOLDERS'	EQUITY		
Current liabilities: Accounts payable	104 916 2,833 721	\$ 883 288 1,403 4,770 2,176	\$ 1,017 429 651 2,522 2,679	
Total current liabilities	1,652		7,298 5,390 496 891	
Stockholders' equity:  Convertible preferred stock, \$0.001 par value;  22,000,000, 24,000,000 and 26,750,000 shares authorized in 1998, 1999 and September 30, 2000, respectively (none pro forma), issuable in series; 19,033,707, 22,053,887 and 24,836,343 shares issued and outstanding in 1998, 1999 and September 30, 2000, respectively (none pro forma); (aggregate liquidation preference of \$27,475 at 1999 and				
\$43,739 at September 30, 2000)	19	22	25	
(29,517,485 shares pro forma)	3 21,676  (16,253)	3 35,164 (5,814) (28,619)	5 62,810 (7,249) (48,212)	30 62,810 (7,249) (48,212)
Total stockholders' equity	5,445	756	7 <b>,</b> 379	\$ 7,379
	\$ 12,956	\$ 17,169	\$ 21,454	======

 ====== | ====== | ====== |  |PRO FORMA

See accompanying notes.

 $$\mathrm{F}\text{-}3$$  RIGEL PHARMACEUTICALS, INC.

STATEMENTS OF OPERATIONS

(IN THOUSANDS, EXCEPT PER SHARE AMOUNTS)

<TABLE> <CAPTION>

	YEARS	ENDED DECEMB		THS ENDED BER 30,	
	1997	1998	1999	1999	2000
				•	DITED)
<pre><s> Contract revenues from collaborations</s></pre>	<c></c>	<c> \$ 28</c>	<c> \$ 8,984</c>	<c> \$ 5,898</c>	<c> \$ 10,008</c>
Costs and expenses: Research and development (see Note A) General and administrative (see Note A)	4,568 1,033	8,305 2,217	17,112 3,952	3,092	24,609 5,010
Total costs and expenses	5,601	10,522	21,064	13,707	29,619
Loss from operations		(10,494)	(12,080)	(7,809)	(19,611)
Interest income (expense), net	85	(110)	(286)	(120)	18
Net loss  Deemed dividend to Series E preferred	(5,516)	(10,604)		(7 <b>,</b> 929)	(19,593)
stockholders					(10,133)
Net loss allocable to common stockholders	\$(5,516) ======	\$(10,604) ======			
Net loss per common share, basic and diluted	\$ (2.20) =====	\$ (4.01) ======	\$ (4.39)	\$ (2.87) =====	\$ (6.92) ======
Weighted average shares used in computing net loss per common share, basic and diluted	2,512	2,643	2,818	2,764	4,297
Pro forma net loss per common share, basic and diluted (unaudited)			\$ (0.52) ======		\$ (1.04) ======
Weighted average shares used in computing pro forma net loss per common share, basic and diluted (unaudited)			23 <b>,</b> 996		28,709

Note A:

Includes charges for stock-based compensation as follows:

<TABLE>

<\$>	<c></c>	<c></c>		<c< th=""><th>&gt;</th><th><c2< th=""><th>&gt;</th><th><c< th=""><th>:&gt;</th></c<></th></c2<></th></c<>	>	<c2< th=""><th>&gt;</th><th><c< th=""><th>:&gt;</th></c<></th></c2<>	>	<c< th=""><th>:&gt;</th></c<>	:>
Research and development	\$	 \$	6	\$	2,321	\$	450	\$	7,594
General and administrative	\$	 \$		\$	254	\$	113	\$	757

  |  |  |  |  |  |  |  |  |See accompanying notes.

# F-4RIGEL PHARMACEUTICALS, INC.

# STATEMENT OF STOCKHOLDERS' EQUITY (IN THOUSANDS, EXCEPT SHARE AND PER SHARE AMOUNTS)

<TABLE>

<caption></caption>							
	CONVER' PREFERREI		COMMON STOCK		COMMON STOCK ADDITIONAL DEI		
ACCUMULATED							
DEFICIT	SHARES	AMOUNT	SHARES	AMOUNT	CAPITAL	COMPENSATION	
<s></s>	<c></c>	<c></c>	<c></c>	<c></c>	<c></c>	<c></c>	<c></c>
Balance at December 31, 1996 (133)	665,000	1	2,400,000	3	58		
Issuance of common stock at \$0.001 per share for cash in January 1997			110,000				
Issuance of Series B convertible preferred stock at \$0.80 per share in January 1997 for cash, net of issuance cost	7,500,000	8			5,961		
Issuance of warrants to purchase Series B preferred stock for							

Series B preferred stock for  $% \left\{ 1\right\} =\left\{ 1\right$ 

financing arrangement					47	
Issuance of Series C preferred stock at \$1.14 per share in November 1997 for cash, net of issuance cost	7,236,843 150,000	7			8 <b>,</b> 202	
Issuance of options to consultants	100,000				1,1	
for services					5	
Issuance of common stock upon exercise of options			46,667		5	
Net loss and comprehensive loss $(5,516)$						
						 _
Balance at December 31, 1997 (5,649) Issuance of warrants to purchase	15,551,843	16	2,556,667	3	14,449	
Series C preferred stock for financing arrangement					86	
Issuance of Series D preferred stock at \$2.00 per share in December 1998 for cash, net of issuance costs	3,481,864	3			6,938	
 Issuance of warrants to purchase						
Series D preferred stock for financing arrangement					185	
Compensation expense related to options granted to consultants					6	
Issuance of common stock upon exercise of options			118,666		12	
Net loss and comprehensive loss (10,604)						
Balance at December 31, 1998 (16,253)	19,033,707	19	2,675,333	3	21,676	 -

<CAPTION>

	STOCKHOLDERS' EQUITY
<s></s>	<c></c>
Balance at December 31, 1996 Issuance of common stock at \$0.001 per share for cash in January	(71)
1997  Issuance of Series B convertible preferred stock at \$0.80 per share in January 1997 for cash,	
net of issuance cost  Issuance of warrants to purchase Series B preferred stock for	5,969
financing arrangement  Issuance of Series C preferred stock at \$1.14 per share in November 1997 for cash, net of	47
issuance cost Issuance of Series C preferred stock at \$1.14 per share in August 1997 for license	8,209
rights Issuance of options to consultants	171
for services	5
exercise of options  Net loss and comprehensive loss	5 (5,516)
Balance at December 31, 1997 Issuance of warrants to purchase	8,819

TOTAL

Series C preferred stock for financing arrangement Issuance of Series D preferred	86
stock at \$2.00 per share in December 1998 for cash, net of	
issuance costs	6,941
Issuance of warrants to purchase	
Series D preferred stock for financing arrangement	185
Compensation expense related to	103
options granted to	
consultants	6
Issuance of common stock upon	1.0
exercise of options	12
Net loss and comprehensive loss	(10,604)
Balance at December 31, 1998	

 5,445 |

### (TABLE CONTINUED ON FOLLOWING PAGE.)

# F-5 RIGEL PHARMACEUTICALS, INC.

# STATEMENT OF STOCKHOLDERS' EQUITY (CONTINUED) (IN THOUSANDS, EXCEPT SHARE AND PER SHARE AMOUNTS)

<TABLE> <CAPTION>

<caption></caption>		CONVERTIBLE PREFERRED STOCK COMMON ST			ADDITIONAL	DEFERRED	
ACCUMULATED					PAID-IN	STOCK	
DEFICIT	SHARES	AMOUNT	SHARES	AMOUNT	CAPITAL	COMPENSATION	
<pre><s> Issuance of Series C preferred   stock at \$1.14 per share for   financing arrangement</s></pre>	<c> 20,000</c>	<c></c>	<c></c>	<c></c>	<c></c>	<c></c>	<c></c>
Issuance of Series D preferred stock at \$2.00 per share for cash, net of issuance cost	3,000,000	3			5 <b>,</b> 925		
Issuance of Series D preferred stock upon exercise of warrant at \$2.00 per share	180						
Issuance of common stock upon exercise of options			420,501		51		
Compensation expense related to options granted to consultants					406		
						(7, 000)	
Deferred stock compensation					7 <b>,</b> 083	(7,083)	
Amortization of deferred stock compensation						1,269	
Net loss and comprehensive loss							
Balance at December 31, 1999 (28,619) Issuance of Series E preferred stock at \$6.00 per share for	22,053,887	22	3,095,834	3	35,164	(5,814)	
<pre>cash, net of issuance cost   (unaudited)</pre>	2,541,663	3			15,247		
Issuance of Series E preferred stock in exchange for a technology license	400.000				4 050		
(unaudited)  Issuance of Series D preferred stock upon exercise of warrant	133,333				1,250		
at \$2.00 per share (unaudited)	107,460				215		
exercise of options							

(unaudited)			1,485,308	2	248		
<pre>Issuance of common stock for   services (unaudited)</pre>			100,000		900		
Compensation expense related to options granted to consultants (unaudited)					4,570		
Deferred stock compensation (unaudited)					5,216	(5,216)	
Amortization of deferred stock compensation (unaudited)						3,781	
Net loss and comprehensive loss (unaudited)(19,593)							
Balance at September 30, 2000 (unaudited)\$ (48,212)	24,836,343	\$ 25	4,681,142	\$ 5	\$62,810	\$(7,249)	
	========	======	=======	======	======	======	

<CAPTION>

	TOTAL STOCKHOLDERS EQUITY
<\$>	<c></c>
Issuance of Series C preferred stock at \$1.14 per share for financing arrangement	23
Issuance of Series D preferred stock at \$2.00 per share for	
cash, net of issuance cost  Issuance of Series D preferred stock upon exercise of warrant	5,928
at \$2.00 per share  Issuance of common stock upon	
exercise of options  Compensation expense related to options granted to	51
consultants	406
Deferred stock compensation Amortization of deferred stock	
compensation  Net loss and comprehensive	1,269
loss	(12,366)
Balance at December 31, 1999 Issuance of Series E preferred stock at \$6.00 per share for cash, net of issuance cost	756
(unaudited)  Issuance of Series E preferred stock in exchange for a technology license	15,250
(unaudited)	1,250
(unaudited)  Issuance of common stock upon exercise of options	215
(unaudited)	250
services (unaudited) Compensation expense related to options granted to consultants	900
(unaudited)	4,570
(unaudited)	2 701
compensation (unaudited)  Net loss and comprehensive loss (unaudited)	3,781 (19,593)
Balance at September 30, 2000 (unaudited)	\$ 7,379 =====

See accompanying notes.

# $$\operatorname{\mbox{F-}6}$$ RIGEL PHARMACEUTICALS, INC.

### STATEMENTS OF CASH FLOWS

(IN THOUSANDS)

<TABLE> <CAPTION>

<caption></caption>			NINE MONTHS ENDED		
		ENDED DECEME	•	SEPTEMI	BER 30,
	1997	1998	1999	1999	2000
<\$>	<c></c>	<c></c>	<c></c>	(UNAUI	 DITED) <c></c>
OPERATING ACTIVITIES	(0)	<b>10</b> 2	(0)	107	<b>10</b> 2
Net loss Adjustments to reconcile net loss to net cash used in operating activities:	\$(5 <b>,</b> 516)	\$(10,604)	\$(12,366)	\$(7 <b>,</b> 929)	\$(19,593)
Depreciation and amortization	409	1,103	1,906 1,675	1,086 563	1,907 8,351
benefits	230	192	23	23	1,250
Accounts receivable			(2,348)	(1,160)	1,886
Prepaid expenses and other current assets	(104)	(9)	(234)	(231)	(364)
Other assets	(149) 176	17 234	(108) 399	54 (64)	10 134
Accrued compensation	44	60	184	89	141
Accrued liabilities	412	503	487	(402)	148
Deferred revenue		3,472	2,254	914	(2,708)
Long-term liabilities	200	(39)	297	(162)	432
Net cash used in operating activities		(5,071)			(8,406)
INVESTING ACTIVITIES					
Purchase of available-for-sale securities					(3,954)
Capital expenditures	(2,341)	(2,389)		(6,255) 	(2 <b>,</b> 590)
Net cash used in investing activities		(2,389)		(6 <b>,</b> 255)	(6,544)
FINANCING ACTIVITIES					
Proceeds from capital lease financing Principal payments on capital lease	1,847	1,427	6,696	6,231	2,122
obligations  Net proceeds from issuances of common stock  Net proceeds from issuances of convertible	(242) 5	(571) 12	(1,415) 51	(1,011) 25	(1,707) 250
preferred stock	14,171				15,465
Net cash provided by financing					
activities	15,781 		11,260	11,173	16,130
Net increase (decrease) in cash and cash equivalents	9,142	349	(3,657)	(2,301)	1,180
period	2	9,144	9,493	9,493	5,836
Cash and cash equivalents at end of period	\$ 9,144	\$ 9,493	\$ 5,836 ======	\$ 7,192 ======	\$ 7,016 ======
SUPPLEMENTAL DISCLOSURE OF CASH FLOW INFORMATION Interest paid	\$ 71	\$ 161	\$ 597	\$ 433	\$ 677
SCHEDULE OF NON CASH TRANSACTIONS Deferred stock compensation	\$	\$	\$ 7,083	\$ 4 <b>,</b> 727	\$ 5,216

 ====== | ====== | ======= | ====== |  |See accompanying notes.

 $$\operatorname{\mbox{F-}7}$$  RIGEL PHARMACEUTICALS, INC.

NOTES TO FINANCIAL STATEMENTS

(INFORMATION FOR THE NINE MONTHS ENDED SEPTEMBER 30, 2000 IS UNAUDITED)

1. SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES

NATURE OF OPERATIONS AND BASIS OF PRESENTATION

Rigel Pharmaceuticals, Inc. ("Rigel" or the "Company") was incorporated in the state of Delaware on June 14, 1996. The Company is engaged in the discovery and development of a broad range of new small molecule drug candidates.

The Company's current operating plan anticipates that the Company will require additional capital to fund its operations and continue its research and development programs. As of December 31, 1999, the Company has funded its operations primarily through the sale of private equity securities, payments from corporate collaborators and capital asset lease financings. The Company plans to seek additional funding through public or private financing arrangements with third parties.

### 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.

### INTERIM FINANCIAL INFORMATION

The financial information at September 30, 2000 and for the nine months ended September 30, 1999 and 2000 is unaudited but, in the opinion of management, has been prepared on the same basis as the annual financial statements and includes all adjustments (consisting only of normal recurring adjustments) that the Company considers necessary for a fair presentation of the financial position at such date and the operating results and cash flow for such periods. Results for the nine months ended September 30, 2000 are not necessarily indicative of the results to expected for any subsequent period.

### UNAUDITED PRO FORMA INFORMATION

In August 2000, the board of directors authorized the filing of a registration statement with the Securities and Exchange Commission to register shares of its common stock in connection with a proposed Initial Public Offering. If the offering contemplated by this prospectus is consummated, the preferred stock outstanding as of the closing date will automatically be converted into shares of the Company's common stock. In addition, at the closing of the Initial Public Offering, the Company expects to exercise its put option to Novartis Pharma AG for the sale of \$10 million of common stock. The unaudited pro forma stockholders' equity at September 30, 2000 has been adjusted for the assumed conversion of preferred stock based on the shares of preferred stock outstanding at September 30, 2000.

## CASH, CASH EQUIVALENTS AND AVAILABLE-FOR-SALE SECURITIES

The Company invests its excess cash in deposits, money market accounts, and high quality marketable debt securities. The Company considers all highly liquid investments with a maximum original maturity of 90 days or less at the time of purchase to be cash equivalents.

The Company accounts for its investments in marketable securities in accordance with Statement of Financial Accounting Standards No. 115, "Accounting for Certain Investments in Debt and Equity Securities" ("SFAS 115").

F-8
RIGEL PHARMACEUTICALS, INC.

### NOTES TO FINANCIAL STATEMENTS (CONTINUED)

(INFORMATION FOR THE NINE MONTHS ENDED SEPTEMBER 30, 2000 IS UNAUDITED)

### 1. SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES (CONTINUED)

Under SFAS 115, all affected debt and equity securities must be stated at fair value and classified as held-to-maturity, trading, or available-for-sale. Management determines the appropriate classification of securities at the time of purchase and reevaluates such designation as of each balance sheet date.

All investments in debt securities have been designated as available-for-sale. Available-for-sale securities are carried at fair value, with unrealized gains and losses reported as a separate component of stockholders' equity, if material. Realized gains and losses and declines in value judged to be other-than-temporary, if any, on available-for-sale securities are included in other income. The cost of securities sold is based on the specific identification method. Interest on securities classified as available-for-sale is included in interest income.

# 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, which management believes approximates fair value.

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 specified in the agreement, generally the research term.

Revenue related to collaborative research with the Company's corporate collaborators are recognized as research services are performed over the related funding periods for each contract. Under these agreements, the Company is required to perform research and development activities as specified in each respective agreement. The payments received under each respective agreement 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 when the Company does not incur the required level of effort during a specific period in comparison to funds received under the respective contracts. Milestone and royalty payments, if any, will be recognized milestones.

### RESEARCH AND DEVELOPMENT

Research and development expenditures, including direct and allocated expenses, are charged to expense as incurred. Collaboration agreements generally specify minimum levels of research effort required to be performed by the Company.

# F-9 RIGEL PHARMACEUTICALS, INC.

### NOTES TO FINANCIAL STATEMENTS (CONTINUED)

(INFORMATION FOR THE NINE MONTHS ENDED SEPTEMBER 30, 2000 IS UNAUDITED)

# 1. SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES (CONTINUED) COMPREHENSIVE LOSS

Statement of Financial Accounting Standard No. 130, "Reporting Comprehensive Income" ("SFAS 130") requires components of other comprehensive income, including gains and losses on available-for-sale investments, to be included as part of total comprehensive income. For all periods presented, the comprehensive loss is equal to the net loss and has been disclosed in the statement of stockholders' equity.

## IMPAIRMENT OF LONG-LIVED ASSETS

In accordance with the provisions of Statement of Financial Accounting Standards No. 121, "Accounting for the Impairment of Long-Lived Assets and for Long-Lived Assets to be Disposed Of" ("SFAS 121"), the Company reviews long-lived assets, including property and equipment, for impairment whenever events or changes in business circumstances indicate that the carrying amount of the assets may not be fully recoverable. Under SFAS 121, an impairment loss would be recognized when estimated undiscounted future cash flows expected to result from the use of the asset and its eventual disposition is less than its carrying amount. Impairment, if any, is assessed using discounted cash flows. Through September 30, 2000, there have been no such losses.

# SEGMENT REPORTING

Statement of Financial Accounting Standards No. 131, "Disclosure about Segments of an Enterprise and Related Information" ("SFAS 131") establishes annual and interim reporting standards for an enterprise's operating segments and related disclosures about its products, services, geographic areas, and major customers. The Company has determined that it operates in only one segment. Accordingly, the adoption of SFAS 131 had no impact on the Company's financial statements.

# ACCOUNTING FOR STOCK-BASED COMPENSATION

As permitted by Statement of Financial Accounting Standards No. 123, "Accounting for Stock-Based Compensation" ("SFAS 123"), the Company has elected to follow Accounting Principles Board Opinion No. 25, "Accounting for Stock Issued to Employees" and related interpretations in accounting for its employee stock option grants ("APB 25") and to disclose the pro forma effect of SFAS 123 (see Note 6). Pro forma net loss information, as required by ("SFAS 123"), is included in Note 6. Options granted to consultants are accounted for using the

Black-Scholes method prescribed by SFAS 123 and in accordance with Emerging Issues Task Force Consensus No. 96-18 ("EITF 96-18") the options are subject to periodic re-valuation over their vesting terms.

### NET LOSS PER SHARE

Net loss per share has been computed according to the 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. Following the guidance given by the Securities and Exchange Commission Staff Accounting Bulletin No. 98, common stock and preferred stock that has been issued or granted for nominal

# $$\rm F{-}10$$ RIGEL PHARMACEUTICALS, INC.

### NOTES TO FINANCIAL STATEMENTS (CONTINUED)

(INFORMATION FOR THE NINE MONTHS ENDED SEPTEMBER 30, 2000 IS UNAUDITED)

1. SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES (CONTINUED) consideration prior to the anticipated effective date of the initial public offering must be included in the calculation of basic and diluted net loss per common share as if these shares had been outstanding for all periods presented. To date, the Company has not issued or granted shares for nominal consideration.

Pro forma net loss per share includes shares issuable upon the conversion of outstanding shares of preferred stock (using the as if method) from the original date of issuance.

A reconciliation of shares used in the calculations is as follows (in thousands):

<TABLE> <CAPTION>

YEARS	ENDED DECE	NINE MONTHS ENDED SEPTEMBER 30,		
1997	1998	1999	1999	2000
			· -	JDITED)
<c></c>	<c></c>	<c></c>	<c></c>	<c></c>
2,512	2,643	2,818	2,764	4,297
=====	=====		=====	
		21,178		24,412
		23,996		28,709
		======		======
	1997 <c>2,512</c>	1997 1998 	1997 1998 1999	YEARS ENDED DECEMBER 31, ENDED SET  1997 1998 1999 1999

# </TABLE>

During all periods presented, the Company 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):

<TABLE>

	YEARS :	ENDED DECEM	NINE MONTHS ENDED SEPTEMBER 30,		
	1997	1998	1999	1999	2000
				(UNAU	JDITED)
<s></s>	<c></c>	<c></c>	<c></c>	<c></c>	<c></c>
Convertible preferred stock	15,552	19,034	22,054	22,034	24,836
Outstanding options	1,475	3,354	5,242	5,132	5 <b>,</b> 726
Warrants					

 175 | 648 | 647 | 648 | 540 |

# SOFTWARE COSTS

In 1999, the Company adopted Statement of Position 98-1 ("SOP 98-1"),
"ACCOUNTING FOR THE COSTS OF COMPUTER SOFTWARE DEVELOPED OR OBTAINED FOR
INTERNAL USE". SOP 98-1 requires the capitalization of direct costs incurred in
connection with developing or obtaining software for internal-use, including
external direct costs of materials and services and payroll and payroll-related

costs for employees who are directly associated with and devote time to an internal use software development project. The Company's policy is to capitalize all such costs and include them as computers and software to be amortized over their estimated useful lives. Through September 30, 2000, the Company had no costs related to the implementation of internal-use software.

# $$\operatorname{\mbox{F-}} 11$$ RIGEL PHARMACEUTICALS, INC.

### NOTES TO FINANCIAL STATEMENTS (CONTINUED)

(INFORMATION FOR THE NINE MONTHS ENDED SEPTEMBER 30, 2000 IS UNAUDITED)

# 1. SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES (CONTINUED) RECENT ACCOUNTING PRONOUNCEMENTS

In June 1998, the Financial Accounting Standards Board ("FASB") issued statement of Financial Accounting Standards No. 133, "ACCOUNTING FOR DERIVATIVE FINANCIAL INSTRUMENTS AND FOR HEDGING ACTIVITIES" ("SFAS 133") which provides a comprehensive and consistent standard for the recognition and measurement of derivatives and hedging activities. In June 1999, FASB issued Financial Accounting Standards No. 137 which deferred the effective date of SFAS 133 to fiscal years beginning after June 15, 2000. The adoption of SFAS 133 is not anticipated to have an impact on the Company's results of operations of financial condition when adopted as the Company holds no derivative financial instruments and does not currently engage in hedging activities.

In December 1999, the Securities and Exchange Commission issued Staff Accounting Bulletin No. 101 ("SAB 101"). SAB 101 summarizes the SEC's views in applying generally accepted accounting principles to revenue recognition. The adoption of SAB 101 had no significant impact on the Company's revenue recognition policy or results of operations.

In March 2000, the FASB issued No. 44 ("FIN 44"), "Accounting for Certain Transactions Involving Stock compensation—an Interpretation of APB 25." This Interpretation clarifies (a) the definition of employee for purposes of applying Opinion 25, (b) the criteria for determining whether a plan qualifies as a noncompensatory plan, (c) the accounting consequence of various modifications to the terms of a previously fixed stock option or award, and (d) the accounting for an exchange of stock compensation awards in a business combination. This Interpretation is effective July 1, 2000, but certain conclusions in this Interpretation cover specific events that occur after either December 15, 1998, or January 12, 2000. To the extent that this interpretation covers events occurring during the period after December 15, 1998, or January 12, 2000, but before the effective date of July 1, 2000, the effects of applying this Interpretation are recognized on a prospective basis from July 1, 2000. The adoption of FIN 44 does not have a material impact on the Company's financial statements.

### 2. SPONSORED RESEARCH AND LICENSE AGREEMENTS

## RESEARCH AGREEMENTS

In April 1997, Rigel entered into a two-year sponsored research agreement with Leland Stanford Junior University ("Stanford") for certain patent rights, materials and other know-how relating to the discovery of viral delivery systems. Under the terms of this agreement, Rigel is required to pay research funding fees to be used for salaries and for costs associated with supplies and equipment necessary to perform the research. Stanford retains ownership of all technologies discovered under this agreement, and Rigel has an option to extend the agreement by one year and to acquire all such technologies.

In December 1997, the Company entered into a collaborative agreement with Neurocrine Biosciences, Inc. to discover novel molecular drug targets. The Company granted Neurocrine the right to utilize its technologies in the drug discovery process while Neurocrine granted to the Company the right to utilize various proprietary technologies and compounds. Both companies agreed to fund their own research.

On December 4, 1998, the Company entered into a research collaboration agreement with Janssen Pharmaceutica NV ("Janssen") to research and identify novel targets for drug discovery. Under the terms

# F-12 RIGEL PHARMACEUTICALS, INC.

# NOTES TO FINANCIAL STATEMENTS (CONTINUED)

(INFORMATION FOR THE NINE MONTHS ENDED SEPTEMBER 30, 2000 IS UNAUDITED)

2. SPONSORED RESEARCH AND LICENSE AGREEMENTS (CONTINUED) of the contract, Janssen paid an one time fee and will provide support for research activities during the three-year research period, as well as various milestones and royalties. As part of this collaborative research agreement, Johnson & Johnson ("J&J"), a related company to Janssen, participated in the

Company's Series D and E preferred stock financings. J&J 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.

On January 31, 1999, the Company 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 will provide support for research for two years, as well as payment for various milestones and royalty if certain conditions are met. In conjunction with the agreement, Pfizer contributed an additional \$2,000,000 in exchange for 1,000,000 shares of Series D preferred stock.

On May 28, 1999, the Company entered into a broad collaboration with Novartis Pharma AG, whereby the Company and Novartis agreed to work on five different research programs to identify various targets for drug development. Two of the five programs were initiated in 1999, with the third program initiated on January 1, 2000. The remaining two programs will be initiated no later than May 28, 2001. Upon the initiation of each research program, Novartis is obligated to pay a one-time, non-refundable, noncreditable fee. For each of the first two programs, Novartis will provide support for research activities for a period of five years. For all programs, Novartis will provide payment for various milestones and royalties if certain conditions, as denoted in the collaboration agreement, are met. In conjunction with the agreement, Novartis contributed an additional \$4,000,000 in exchange for 2,000,000 shares of Series D preferred stock. The agreement also allows for an additional equity investment of up to \$10,000,000 which is callable by the Company up through an IPO. The price of this additional equity investment is to be determined by the most recent private financing price or IPO price.

In September 1999, the Company entered into a collaborative research and technology agreement with Cell Genesys, Inc. Cell Genesys granted the Company rights to some of its patents and technology. In exchange the Company granted Cell Genesys right to utilize the Company's technology to discover targets in certain therapeutic areas. Both companies will fund their own research.

### LICENSE AGREEMENTS

In October 1996, Rigel entered into a license agreement with Stanford for certain patent rights and other know-how relating to the use of retrovirally produced peptide and protein libraries. Under the terms of this agreement, Rigel is required to pay a nonrefundable license fee, minimum royalties and to issue Stanford 65,000 shares of Series A preferred stock. The agreement terminates at the earlier of 20 years or 10 years after the date of the first commercial sale.

In August 1997, Rigel signed a three-year agreement relating to the 1996 agreement to provide the Company with exclusivity to these patents. Under this agreement, Rigel is required to pay a nonrefundable fee and an exclusivity fee over the next three years and issued Stanford 150,000 shares of Series C preferred stock.

At December 31, 1999, the Company's aggregate minimum commitment under all its research and license agreements is approximately \$3.1 million. The minimum commitment is \$0.4 million in 2000,

### F-13 RIGEL PHARMACEUTICALS, INC.

## NOTES TO FINANCIAL STATEMENTS (CONTINUED)

(INFORMATION FOR THE NINE MONTHS ENDED SEPTEMBER 30, 2000 IS UNAUDITED)

2. SPONSORED RESEARCH AND LICENSE AGREEMENTS (CONTINUED) \$0.3 million in 2001, \$0.3 million in 2002, \$0.3 million in 2003, \$0.3 million in 2004, and \$1.5 million thereafter.

# TECHNOLOGY TRANSFER AGREEMENT

In September 2000, the Company 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, the Company is required to pay a nonrefundable and noncreditable fee of \$500,000, milestones and royalties and to issue Questcor 83,333 shares of Series E preferred stock. The Company is also committed to invest a total of \$2 million in research and development expenses over a two year period through 2002. The agreement terminates upon the expiration of the last patent within the agreement. The Company has 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. The Company has 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

In 1998, Janssen represented 100% of total revenues. For the year ended

December 31, 1999, Pfizer, Janssen and Novartis accounted for 34%, 32% and 34%, respectively. For the nine months ended September 30, 1999, Pfizer, Janssen and Novartis accounted for 38%, 36% and 8%, respectively. For the nine months ended September 30, 2000, Pfizer, Janssen and Novartis accounted for 25%, 22% and 52%, respectively. Accounts receivable relate mainly to these three 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):

<TABLE>

AMORTIZED COST AND

	FAIR VALUE AT		
	DECEMBER 31, 1999	SEPTEMBER 30, 2000	
<\$>	<c></c>	(UNAUDITED) <c></c>	
Money market funds	\$5 <b>,</b> 836 	\$ 6,601 3,954	
	\$5,836 =====	\$10,555 =====	
Reported as: Cash equivalents	\$5 <b>,</b> 836	\$ 6,601	
Available-for-sale securities		3,954	
	\$5,836 =====	\$10 <b>,</b> 555 ======	

</TABLE>

At September 30, 2000, the average maturity of the available-for-sale securities was approximately four months.

There were no gross realized gains or losses from sales of securities in the periods presented. Unrealized gains and losses on available-for-sale securities were not material at September 30, 2000.

# F-14 RIGEL PHARMACEUTICALS, INC.

# NOTES TO FINANCIAL STATEMENTS (CONTINUED)

(INFORMATION FOR THE NINE MONTHS ENDED SEPTEMBER 30, 2000 IS UNAUDITED)

### 5. PROPERTY AND EQUIPMENT

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

<TABLE> <CAPTION>

	YEARS DECEMB	ENDED ER 31,
	1998	1999
aboratory and office equipmenteasehold improvements	<c> \$ 4,010 720</c>	<c> \$ 8,589 2,993</c>
Less accumulated depreciation and amortization	4,730 (1,512)	11,582 (3,184)
Property and equipment, net	\$ 3,218 ======	\$ 8,398 =====

</TABLE>

At December 31, 1998 and 1999 equipment under capital leases was approximately \$3,317,000 and \$9,936,000, respectively with accumulated amortization of approximately \$957,000 and \$2,736,000, respectively.

# 6. LONG-TERM OBLIGATIONS

At December 31, 1999 future minimum lease payments under all noncancelable leases are as follows (in thousands):

<TABLE> <CAPTION>

CAPITAL OPERATING LEASES LEASES

<\$>	<c></c>	<c></c>
2000	\$ 2,901	\$ 1,463
2001	2,632	2,018
2002	2,161	2,263
2003	1,501	2,333
2004		2,353
2005 and thereafter		23,035
Total minimum payment required	9,195	\$33,465
		======
Less amount representing interest	(1,541)	
Present value of future lease payments	7,654	
Less current portion	(2 <b>,</b> 176)	
Noncurrent obligations under capital leases	\$ 5,478	
	======	

### </TABLE>

The Company leases its South San Francisco office and research facility under a noncancelable operating lease which expires in February 2016. Rent expense under all operating leases amounted to approximately \$385,000, \$381,000, \$1,756,000 for the years ended December 31, 1997, 1998 and 1999 and \$1,672,000 for the nine months ended September 30, 2000, respectively.

In 1997, the Company entered into an equipment lease line agreement for up to \$2,000,000 which was fully utilized in 1998. In June 1998, the Company entered into a second equipment lease line agreement for up to \$3,000,000, which was fully utilized in June 1999.

# F-15 RIGEL PHARMACEUTICALS, INC.

### NOTES TO FINANCIAL STATEMENTS (CONTINUED)

(INFORMATION FOR THE NINE MONTHS ENDED SEPTEMBER 30, 2000 IS UNAUDITED)

### 6. LONG-TERM OBLIGATIONS (CONTINUED)

In June 1999 and August 1999, the Company entered into two additional equipment lease line agreements for an aggregate total of \$6,000,000, or \$3,000,000 each. These lines were fully utilized in May 2000.

The lease periods for all equipment leases are for four years. The interest on each lease is fixed at the time of the draw down with the interest rates ranging from 7% to 15%. Obligations under all leases are secured by the assets financed under the leases.

## EQUIPMENT LEASE LINE

In August 2000, the Company entered into an additional equipment lease line agreement for an aggregate total of \$5,000,000. The Company has the ability to draw down on this facility up to August 2001. The interest rate is fixed at the time of each draw down with the interest rates ranging from 7% to 15%. Obligations under this lease will be secured by the assets financed under the lease. At September 30, 2000, the Company has utilized \$1.1 million against this facility at an interest rate of 11%.

## 7. STOCKHOLDERS' EQUITY

In February 2000, the Company 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, the Company believed the per share price of \$6.00 represented the fair value of the preferred stock. Subsequent to the commencement of the Company's initial public offering process, the Company 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. The Company 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 for the nine months ended September 30, 2000. Also in February 2000, the Company issued 50,000 shares of Series E preferred stock for a license of technology. The Company valued the license at \$500,000 and has expensed this amount in the nine months ended September 30, 2000 as the useful life is deemed to be less than one year.

In August 2000, the Company issued 33,333 shares of Series E preferred stock to a director of the Company. The Company recorded a deemed dividend of approximately \$100,000 at the time of issuance.

All series of preferred stock are convertible at the stockholders' option at any time into common stock on a one-for-one basis, subject to adjustment for

antidilution, and carry voting rights equivalent to common stock. Conversion is automatic upon the closing of an underwritten public offering with aggregate offering proceeds exceeding \$15,000,000 and an offering price of at least \$3.50 per share (appropriately adjusted for any stock splits, stock dividends, recapitalization or similar events) or upon agreement of the majority of holders of the outstanding shares.

Holders of Series A, B, C, D, and E convertible preferred stock are entitled to noncumulative dividends of \$0.008, \$0.064, \$0.0912, \$0.16, and \$0.48 per share, respectively, if and when declared by the board of directors. These dividends are to be paid in advance of any distributions to common stockholders.

# F-16 RIGEL PHARMACEUTICALS, INC.

### NOTES TO FINANCIAL STATEMENTS (CONTINUED)

(INFORMATION FOR THE NINE MONTHS ENDED SEPTEMBER 30, 2000 IS UNAUDITED)

### 7. STOCKHOLDERS' EQUITY (CONTINUED)

In addition, dividends are to be paid to Series B, C, D, and E stockholders in advance of Series A stockholders. No dividends have been declared through September 30, 2000.

In the event of a liquidation or winding up of the Company, holders of Series A, B, C, D, and E convertible preferred stock shall have a liquidation preference of \$0.10, \$0.80, \$1.14, \$2.00, and \$6.00 per share, respectively, together with any declared but unpaid dividends, over holders of common shares. Preference shall be given to Series B, C, D, and E stockholders over Series A stockholders.

Preferred stockholders are entitled to the number of votes they would have upon conversion of their preferred shares into common stock.

The authorized, issued and outstanding Series A, B, C, D, and E shares of convertible preferred stock were as follows (in thousands): <TABLE> <CAPTION>

DECEMBER 31, 1998

DECEMBER 31, 1999

	SHARES AUTHORIZED	SHARES ISSUED AND OUTSTANDING	AGGREGATE LIQUIDATION PREFERENCE	SHARES AUTHORIZED	SHARES ISSUED AND OUTSTANDING	AGGREGATE LIQUIDATION PREFERENCE
<s></s>	<c></c>	<c></c>	<c></c>	<c></c>	<c></c>	<c></c>
Series A	665	665	\$ 66	665	665	\$ 66
Series B	7 <b>,</b> 675	7,500	6,000	7 <b>,</b> 675	7,500	6,000
Series C	8,000	7,387	8,422	8,000	7,407	8,445
Series D	5 <b>,</b> 660	3,482	6,963	7,000	6,482	12,964
Series E						
Undesignated				660		
	22,000	19,034	\$21,451	24,000	22,054	\$27,475
	=====	=====	======	======	=====	======

<CAPTION>

# SEPTEMBER 30, 2000 (UNAUDITED)

	SHARES AUTHORIZED	SHARES ISSUED AND OUTSTANDING	AGGREGATE LIQUIDATION PREFERENCE
<\$>	<c></c>	<c></c>	<c></c>
Series A	665	665	\$ 66
Series B	7,675	7,500	6,000
Series C	8,000	7,407	8,445
Series D	7,000	6,589	13,178
Series E	2,750	2,675	16,050
Undesignated	660		
	26,750	24,836	\$43,739
	=====	=====	======

</TABLE>

### WARRANTS

In conjunction with the equipment lease line executed in April 1997, the Company issued a warrant to purchase 175,000 shares of Series B preferred stock at an exercise price of \$0.80 per share. The warrant automatically converts upon the earlier of April 30, 2004 or a merger or reorganization of the Company. The fair value of this warrant, as determined using the Black-Scholes valuation model, was approximately \$47,000. The amount was expensed in 1997.

In conjunction with the equipment lease line executed in June 1998, the company issued a warrant to purchase 131,578 shares of Series C preferred stock

at an exercise price of \$1.14 per share. The warrant expires on June 30, 2005. The fair value assigned to this warrant, as determined using the Black-Scholes valuation model, was approximately \$86,000. The amount was expensed in 1998.

In conjunction with the Series D preferred stock financing in December 1998, the Company issued five warrants to purchase 191,100 shares of Series D preferred stock at an exercise price of \$2.00 per share. These warrants expire at the earlier of the closing of an IPO or December 2003. The fair value assigned to these warrants, as determined using the Black-Scholes valuation model, was approximately \$185,000. The amount was expensed in 1998. As of December 31, 1999, warrants to purchase 190,920 shares of Series D preferred stock were outstanding. As of September 30, 2000 warrants to purchase 83,460 shares of Series D preferred stock are outstanding.

In conjunction with the facilities lease entered into in June 1998, the Company issued three warrants to purchase 150,000 shares of common stock at an exercise price of \$1.14 per share. The warrants are

# F-17 RIGEL PHARMACEUTICALS, INC.

#### NOTES TO FINANCIAL STATEMENTS (CONTINUED)

(INFORMATION FOR THE NINE MONTHS ENDED SEPTEMBER 30, 2000 IS UNAUDITED)

#### 7. STOCKHOLDERS' EQUITY (CONTINUED)

exercisable at any time up to the earlier of June 1, 2008 or the seventh anniversary of the closing of an initial public offering. The fair value of these warrants was deemed to be immaterial and is not recorded in the financial statements.

#### 2000 STOCK OPTION PLAN

In January 2000, the Company adopted the 2000 Equity Incentive Plan (the "2000 Plan"), which was approved in March 2000 by stockholders. The 2000 Equity Incentive 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 employees, directors of, or consultants to, the Company and its affiliates.

Options granted under the Stock Plan expire no later than 10 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 but not to exceed five years from the date of grant.

As of September 30, 2000, a total of 9,525,000 shares of common stock have been authorized for issuance under the 2000 Plan.

# F-18 RIGEL PHARMACEUTICALS, INC.

### NOTES TO FINANCIAL STATEMENTS (CONTINUED)

(INFORMATION FOR THE NINE MONTHS ENDED SEPTEMBER 30, 2000 IS UNAUDITED)

### 7. STOCKHOLDERS' EQUITY (CONTINUED)

Activity under the 2000 Plan through September 30, 2000 is as follows:

# <TABLE>

CALITON	SHARES AVAILABLE FOR GRANT	NUMBER OF OPTIONS	WEIGHTED-AVERAGE EXERCISE PRICE
<\$>	<c></c>	<c></c>	<c></c>
Outstanding at December 31, 1996			
Beginning authorized for grant	2,325,000		
Granted	(1,545,000)	1,545,000	\$0.10
Exercised		(46,667)	0.10
Cancelled	23,333	(23,333)	0.10
Outstanding at December 31, 1997	803,333	1,475,000	0.10
Authorized for grant	3,000,000		
Granted	(2,157,500)	2,157,500	0.16
Exercised		(118,666)	0.10
Cancelled	159,584	(159,584)	0.12
Outstanding at December 31, 1998	1,805,417	3,354,250	0.14
Authorized for grant	4,200,000		0.11
Granted	(2,783,000)	2,783,000	0.24
Exercised		(423,001)	0.25
Cancelled	472,245	(472,245)	0.16

Outstanding at December 31, 1999	3,694,662	5,242,004	0.19
Shares granted out of the Plan (unaudited)	(100,000)		
Granted (unaudited)	(2,335,609)	2,335,609	5.79
Exercised (unaudited)		(1,485,308)	0.16
Cancelled (unaudited)	366,477	(366,477)	3.66
Options outstanding at September 30, 2000			
(unaudited)	1,625,530	5,725,828	\$2.36

</TABLE>

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

<TABLE> <CAPTION>

DECEMBER 31, 1999

	OPTIONS OUT	rstanding		OPTIONS	S EXERCISABLE
EXERCISE PRICE	NUMBER OF OUTSTANDING OPTIONS	WEIGHTED-AVERAGE REMAINING CONTRACTUAL LIFE	WEIGHTED- AVERAGE EXERCISE PRICE	NUMBER OF OPTIONS	WEIGHTED-AVERAGE EXERCISE PRICE
<s> \$0.10-\$0.30</s>	<c> 5,242,004</c>	<c> 8.84</c>	<c> \$0.19</c>	<c> 1,233,294</c>	<c> \$0.15</c>
\$0.10-\$0.30	5,242,004 ======	8.84	\$0.19	1,233,294	\$0.15

F-19 RIGEL PHARMACEUTICALS, INC.

NOTES TO FINANCIAL STATEMENTS (CONTINUED)

(INFORMATION FOR THE NINE MONTHS ENDED SEPTEMBER 30, 2000 IS UNAUDITED)

7. STOCKHOLDERS' EQUITY (CONTINUED)

<TABLE>

</TABLE>

SEPTEMBER 30, 2000 (UNAUDITED)

	OPTIONS OU	TSTANDING		OPTION	S EXERCISABLE
EXERCISE PRICE	NUMBER OF OUTSTANDING OPTIONS	WEIGHTED-AVERAGE REMAINING CONTRACTUAL LIFE	WEIGHTED- AVERAGE EXERCISE PRICE	NUMBER OF OPTIONS	WEIGHTED-AVERAGE EXERCISE PRICE
<\$>	<c></c>	<c></c>	<c></c>	<c></c>	<c></c>
\$0.10 - \$ 0.30	3,600,441	8.27	\$0.20	773,634	\$0.19
\$4.50 - \$ 7.65	1,683,943	9.56	\$5.13	130,366	\$4.62
\$9.00 - \$11.00	441,444	9.65	\$9.40	12,916	\$9.96
\$0.10 - \$11.00	5,725,828	8.75	\$2.36	916,916	\$0.96
	=======			=======	

</TABLE>

The weighted-average fair value of the options granted in 1997, 1998, 1999, and the nine months ended September 30, 2000, was \$0.02, \$0.03, \$0.06 and \$1.51, respectively.

Options outstanding includes options to purchase 190,000 shares granted to new hires who will commence employment with the Company at a later date. The stock compensation with respect to these options will be recorded based on the fair value of the Company's common stock at the date employment commences and amortized in accordance with the Company's policy.

Pro forma information regarding net loss and net loss per share is required by SFAS 123 and has been determined as if the Company had accounted for its employee stock options under the fair value method prescribed by the Statement. The fair value for these options was estimated at the date of grant using the minimum value method with the following weighted-average assumptions for the years ended December 31, 1997, 1998, 1999 and the nine months ended September 30, 2000: risk-free interest rates of 4.5%, 5.5%, 6.0% and 6.0%, respectively; 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. The Company's pro forma information follows (in thousands, except per share amounts):

<TABLE> <CAPTION>

	YEARS ENDED DECEMBER 31,			ENDED 30	
		1998		SEPTEMBER 30, 2000	
				(UNAUDITED)	
<\$>	<c></c>	<c></c>	<c></c>	<c></c>	
Net loss allocable to common stockholders:					
As reported	\$(5,516)	\$(10,604)	\$(12,366)	\$(29,276)	
Pro forma	(5,516)	(10,604)	(12,413)	(30,094)	
Basic and diluted net loss per common share:					
As reported	\$ (2.20)	\$ (4.01)	\$ (4.39)	(6.81)	
Pro forma.					

 (2.20) | (4.01) | (4.40) | (1.05) |The effects of applying SFAS 123 for pro forma disclosures are not likely to be representative of the effects as reported net loss for future years.

The Company granted 621,500 and 334,000 common stock options to consultants in exchange for services in 1998 and 1999, respectively and 150,000 in the nine months ended September 30, 2000. The Company has recorded compensation expense related to these options. In accordance with SFAS 123 and EITF 96-18, options granted to consultants are periodically revalued as they vest. In January 2000, the

# F-20 RIGEL PHARMACEUTICALS, INC.

#### NOTES TO FINANCIAL STATEMENTS (CONTINUED)

(INFORMATION FOR THE NINE MONTHS ENDED SEPTEMBER 30, 2000 IS UNAUDITED)

#### 7. STOCKHOLDERS' EQUITY (CONTINUED)

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. Also in January 2000, the Company granted a total of 100,000 shares of common stock to two individuals for consulting services performed in 1999. The Company has recorded \$900,000 of compensation expense related to these grants in 1999.

The Company has recorded deferred stock compensation with respect to options granted to employees of approximately \$7.1 million in the year ended December 31, 1999 and \$5.2 million for the nine months ended September 30, 2000, representing the difference between the exercise price of the options and the deemed fair value of the common stock. 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 \$1.3 million for the year ended December 31, 1999 and approximately \$3.8 million for the nine months ended in September 30, 2000 and is expected to be approximately \$1.3 million for the remainder of 2000; \$3.3 million in 2001, \$1.7 million in 2002, \$0.8 million in 2003 and \$0.1 million in 2004.

#### RESERVED SHARES

As of December 31, 1999, the Company has reserved shares of common stock for future issuance as follows:

### <TABLE>

<CAPTION>

	DECEMBER 31, 1999
<\$>	<c></c>
Warrants	150,000
Incentive stock plan	8,936,666
Convertible preferred stock	22,551,385
	31,638,051
	========

#### </TABLE>

In addition, the Company has reserved the following preferred stock for future issuance upon exercise of warrants:

# <TABLE> <CAPTION>

	DECEMBER 31, 1999
<\$>	<c></c>
Series B	175,000
Series C	131,578
Series D	190,920
/ ¬¬¬ ¬¬ ¬¬ ¬¬ ¬¬ ¬¬ ¬¬ ¬¬ ¬¬ ¬¬ ¬¬ ¬¬ ¬	

#### 2000 EMPLOYEE STOCK PURCHASE PLAN

In August 2000, the Company adopted its 2000 Employee Stock Purchase Plan

(the "Purchase Plan") which was approved in September 2000 by shareholders. A total of 400,000 shares of the Company's common stock have been reserved for issuance under the Purchase Plan. In addition, 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 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

# F-21 RIGEL PHARMACEUTICALS, INC.

#### NOTES TO FINANCIAL STATEMENTS (CONTINUED)

(INFORMATION FOR THE NINE MONTHS ENDED SEPTEMBER 30, 2000 IS UNAUDITED)

#### 7. STOCKHOLDERS' EQUITY (CONTINUED)

stock on the first day of the offering or 85% of the fair market value of the Company's common stock on the purchase date. The initial offering period will commence on the effective date of the offering.

#### 2000 NON-EMPLOYEE DIRECTORS' STOCK OPTION PLAN

In August 2000, the Company adopted the 2000 Non-Employee Directors Stock Option Plan, which was approved in September 2000 by stockholders, with a total of 300,000 shares of common stock for issuance thereunder. Each non-employee director who becomes a director of the Company 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 stockholders meeting, beginning with the first board meeting after 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 terminate in September 2009, unless terminated earlier in accordance with the provisions of the Directors' Plan.

#### 8. INCOME TAXES

As of December 31, 1999, the Company had federal and state net operating loss carryforwards of approximately \$23.6 million and \$4.1 million, respectively. The Company also had federal and California research and development tax credit carryforwards of approximately \$700,000 and \$500,000. The federal net operating loss and credit carryforwards will expire at various dates beginning in the year 2011 through 2019, if not utilized. The state of California net operating losses will expire beginning in 2005 if not utilized.

Utilization of the federal and state net operating loss and credit carryforwards may be subject to a substantial annual limitation due to the "change in ownership" provisions of the Internal Revenue Code of 1986 (IRC). The annual limitation may result in the expiration of net operating losses and credits before utilization. As of December 31, 1999, an IRC section 382 analysis has not been undertaken to determine the effects of the limitation.

Deferred income taxes reflect the net tax effects of temporary differences between the carrying amounts of assets for financial reporting and the amount used for income tax purposes. Significant

# F-22 RIGEL PHARMACEUTICALS, INC.

### NOTES TO FINANCIAL STATEMENTS (CONTINUED)

(INFORMATION FOR THE NINE MONTHS ENDED SEPTEMBER 30, 2000 IS UNAUDITED)

#### 8. INCOME TAXES (CONTINUED)

components of the Company's deferred tax assets for federal and state income taxes as of December 31 are as follows (in thousands):

# <TABLE> <CAPTION>

	1998	1999
<\$>	<c></c>	<c></c>
Deferred tax assets		
Net operating loss carryforwards	\$ 5,100	\$ 8,300
Research and development credits	400	1,000
Capitalized research and development expenses	700	1,100
Other, net	200	400

Total deferred tax assetsValuation allowance	,	,
Net deferred taxes	 \$ 	 \$ 

Due to the Company's lack of earnings history, the net deferred tax assets have been fully offset by a valuation allowance. The valuation allowance increased by \$2.5 million, \$3.9 million and \$4.4 million during the years ended December 31, 1997, 1998 and 1999, respectively.

F-23 [RIGEL LOGO]

PART II INFORMATION NOT REQUIRED IN PROSPECTUS

#### ITEM 13. OTHER EXPENSES OF ISSUANCE AND DISTRIBUTION

The following table sets forth the costs and expenses, other than the underwriting discounts payable by us, in connection with the sale of common stock being registered. All amounts are estimates except the SEC registration fee, the NASD filing fee and the Nasdaq National Market listing fee.

#### <TABLE>

</TABLE>

<\$>	<c></c>	
SEC registration fee	\$	30,000
NASD filing fee		11,000
Nasdaq National Market listing fee		91,000
Blue sky fees and expenses		25,000
Transfer agent and registrar fees		3,500
Accounting fees and expenses		250,000
Legal fees and expenses		350,000
Printing and engraving costs		200,000
Miscellaneous expenses		39,500
Total	\$1,	000,000

</TABLE>

#### ITEM 14. INDEMNIFICATION OF DIRECTORS AND OFFICERS

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

- for any breach of duty of loyalty to us or to our stockholders;
- for acts or omissions not in good faith or that involve intentional misconduct or a knowing violation of law;
- for unlawful payment of dividends or unlawful stock repurchases or redemptions under Section 174 of the Delaware General Corporation Law; or
- for any transaction from which the director derived an improper personal benefit.

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

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

The underwriting agreement (Exhibit 1.1) will provide for indemnification by the underwriters of Rigel, our directors, our officers who sign the registration statement, and our controlling persons for some liabilities, including liabilities arising under the Securities Act.

### ITEM 15. RECENT SALES OF UNREGISTERED SECURITIES

Since July 15, 1996, Rigel has sold and issued unregistered securities to a limited number of persons, as described below. None of these transactions involved any underwriters, underwriting discounts or commissions, or any public offering, and Rigel believes that each transaction was exempt from the

registration requirements of the Securities Act by virtue of Section 4(2) thereof, Regulation D promulgated thereunder or Rule 701 pursuant to compensatory benefit plans and contracts relating to compensation as provided under Rule 701. The recipients of securities in each such transaction represented their intention to acquire the securities for investment only and not with a view to or for sale in connection with any distribution thereof, and appropriate legends were affixed to the share certificates and instruments issued in such transactions. We believe that all recipients had adequate access to information about Rigel, through their relationships with Rigel.

Since July 15, 1996, Rigel has sold and issued the following unregistered securities:

- (1) From July 15, 1996 to September 30, 2000, we granted incentive stock options and nonstatutory stock options to purchase an aggregate of 8,886,109 shares of Rigel's common stock at exercise prices ranging from \$.10 to \$11.00 per share and an aggregate of 100,000 stock awards to employees, directors and consultants under the Plan. Of these stock options 986,639 shares have been canceled without being exercised, 2,073,642 shares have been exercised, 2,500 shares have been repurchased and 5,725,828 shares remain outstanding.
- (2) In July 1996 and January 1997, we sold an aggregate of 2,860,000 shares of our common stock to five purchasers at a purchase price of \$.001 per share, 350,000 shares of which we repurchased.
- (3) From July 1996 to January 1997, we sold an aggregate of 665,000 shares of our Series A preferred stock to four purchasers at a purchase price of \$.10 per share.
- (4) In January 1997, we sold an aggregate of 7,500,000 shares of our Series B preferred stock to nine purchasers at a purchase price of \$.80 per share.
- (5) In May 1997, we issued a warrant to purchase 175,000 shares of our Series B preferred stock at a purchase price of \$.80 per share.
- (6) From November 1997 to January 1998, we sold an aggregate of 7,386,843 shares of our Series C preferred stock to twelve purchasers at a purchase price of \$1.14 per share.
- (7) On March 27, 1998, we issued 20,000 shares of our Series C preferred stock to one entity for a license for technology.
- (8) In June 1998, we issued a warrant to purchase 131,578 shares of our Series C preferred stock at an exercise price of \$1.14 per share.
- (9) From December 1998 to May 1999, we sold an aggregate of 6,481,864 shares of our Series D preferred stock to ten purchasers at a purchase price of \$2.00 per share.
- (10) In December 1998, we issued five warrants to purchase an aggregate of 191,100 shares of Series D preferred stock at an exercise price of \$2.00 per share, of which 180 shares have been exercised.
- (11) On February 3, 2000, we sold an aggregate of 2,508,330 shares of our Series E preferred stock to thirteen purchasers at a purchase price of \$6.00 per share, and issued 50,000 shares of Series E preferred stock to one entity for a license for technology.
- (12) On August 31, 2000, we sold 33,333 shares of our Series E preferred stock to Thomas S. Volpe, one of our directors, at a purchase price of \$6.00 per share.
- (13) On September 28, 2000, we issued 83,333 shares of our Series E preferred stock to Questcor Pharmaceuticals, Inc. in exchange for a transfer of technology.

ITEM 16. EXHIBITS AND FINANCIAL STATEMENT SCHEDULES

<TABLE>

<C> <S>

1.1* Form of Underwriting Agreement.

</TABLE>

TT-2

<TABLE>

<C> <

3.1* Amended and Restated Certificate of Incorporation of Rigel
to be filed upon the closing of the offering made pursuant
to this Registration Statement.

3.2* Amended and Restated Bylaws of Rigel to be adopted upon the

	closing of the offering made pursuant to this Registration Statement.
4.1*	Specimen Common Stock Certificate.
4.2*	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*	Form of warrant to purchase shares of common stock.
4.4*	Warrant issued to Lighthouse Capital Partners II, L.P. for purchase of shares of Series B preferred stock.
4.5*	Warrant issued to Lighthouse Capital Partners II, L.P. for purchase of shares of Series C preferred stock.
4.6*	Form of warrant to purchase shares of Series D preferred stock.
5.1*	Opinion of Cooley Godward LLP.
10.1*	Form of Indemnity Agreement.
10.2*	2000 Equity Incentive Plan.
10.3*	Form of Stock Option Agreement pursuant to 2000 Equity
	Incentive Plan.
10.4*	2000 Employee Stock Purchase Plan.
10.5*	2000 Non-Employee Directors' Stock Option Plan.
10.6*	Collaboration Agreement between Rigel and Janssen Pharmaceutica N.V., dated December 4, 1998.
10.7*	Collaborative Research and License Agreement between Rigel and Pfizer Inc., dated January 31, 1999.
10.8*	Collaboration Agreement between Rigel and Novartis Pharma AG, dated May 26, 1999.
10.9+*	License and Research Agreement between Rigel and Cell Genesys, Inc., dated September 2, 1999.
10.10*	Collaborative Research and Development Agreement between Rigel and Neurocrine Biosciences, Inc., dated December 1997.
10.11*	Employment agreement between Rigel and Donald Payan, dated January 16, 1997.
10.12*	Lease between Rigel and Britannia Pointe Grand Limited Partnership, dated June 2, 1998.
10.13	Technology Transfer Agreement between Rigel and Questcor Pharmaceuticals, Inc., dated September 22, 2000.
23.1	Consent of Ernst & Young LLP, Independent Auditors.
23.2*	Consent of Cooley Godward LLP (included in Exhibit 5.1).
24.1*	Power of Attorney.
27.1*	Financial Data Schedule.

  ||  |  |
_ _____

- * Previously filed.
- + Confidential treatment requested as to specific portions, which portions are omitted and filed separately with the Securities and Exchange Commission.

#### ITEM 17. UNDERTAKINGS

The registrant hereby undertakes to provide to the Underwriters at the closing specified in the Underwriting Agreement certificates in such denominations and registered in such names as required by the Underwriters to permit prompt delivery to each purchaser.

Insofar as indemnification by the registrant for liabilities arising under the Securities Act may be permitted to directors, officers and controlling persons of the registrant pursuant to the provisions referenced in Item 14 of this Registration Statement or otherwise, the registrant has been advised that in the opinion of the Securities and Exchange Commission such indemnification is against public policy as

#### II-3

expressed in the Securities Act, and is, therefore, unenforceable. In the event that a claim for indemnification against such liabilities (other than the payment by the registrant of expenses incurred or paid by a director, officer, or controlling person of the registrant in the successful defense of any action, suit or proceeding) is asserted by such director, officer or controlling person in connection with the securities being registered hereunder, the registrant will, unless in the opinion of its counsel the matter has been settled by controlling precedent, submit to a court of appropriate jurisdiction the question whether such indemnification by it is against public policy as expressed in the Securities Act and will be governed by the final adjudication of such issue.

The registrant hereby undertakes that:

(1) For purposes of determining any liability under the Securities Act, the information omitted from the form of Prospectus filed as part of this Registration Statement in reliance upon Rule 430A and contained in a form of Prospectus filed by the registrant pursuant to Rule 424(b)(1) or (4) or 497(h) under the Securities Act shall be deemed to be part of this Registration Statement as of the time it was declared effective.

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

## SIGNATURES

Pursuant to the requirements of the Securities Act of 1933, as amended, the registrant has duly caused this Amendment No. 3 to the Registration Statement to be signed on its behalf by the undersigned, thereunto duly authorized, in the City of South San Francisco, State of California, on the 17th day of November, 2000.

<TABLE>

<S>

<C> <C>

RIGEL PHARMACEUTICALS, INC.

/s/ JAMES M. GOWER _____

> James M. Gower CHIEF EXECUTIVE OFFICER

</TABLE>

<TABLE>

<CAPTION> SIGNATURE

TITLE

(PRINCIPAL EXECUTIVE OFFICER)

DATE ----

/s/ JAMES M. GOWER

_____ James M. Gower

President, Chief Executive Officer and Director

November 17, 2000

/s/ BRIAN C. CUNNINGHAM _____

Brian C. Cunningham

Senior Vice President, Chief Financial Officer, Chief Operating Officer and Secretary

(PRINCIPAL FINANCE AND ACCOUNTING OFFICER)

November 17, 2000

/s/ DONALD G. PAYAN _____

Donald G. Payan

Executive Vice President, Chief Scientific Officer and Director November 17, 2000

/s/ JEAN DELEAGE ______

Jean Deleage

Director

November 17, 2000

/s/ ALAN D. FRAZIER

Alan D. Frazier

Director

November 17, 2000

/s/ WALTER H. MOOS _____

Director

November 17, 2000

Walter H. Moos

/s/ STEPHEN A. SHERWIN

Director

November 17, 2000

Stephen A. Sherwin

Thomas S. Volpe

/s/ THOMAS S. VOLPE

Director

November 17, 2000

</TABLE>

II-5 EXHIBIT INDEX

<TABLE> <CAPTION>

> EXHIBIT NUMBER

DESCRIPTION

<C> 1.1*

3.1*

<S>

Form of Underwriting Agreement.

Amended and Restated Certificate of Incorporation of Rigel to be filed upon the closing of the offering made pursuant

to this Registration Statement.

3.2*	Amended and Restated Bylaws of Rigel to be adopted upon the
	closing of the offering made pursuant to this Registration
	Statement.
4.1*	Specimen Common Stock Certificate.
4.2*	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*	Form of warrant to purchase shares of common stock.
4.4*	Warrant issued to Lighthouse Capital Partners II, L.P. for
	purchase of shares of Series B preferred stock.
4.5*	Warrant issued to Lighthouse Capital Partners II, L.P. for
	purchase of shares of Series C preferred stock.
4.6*	Form of warrant to purchase shares of Series D preferred
	stock.
5.1*	Opinion of Cooley Godward LLP.
10.1*	Form of Indemnity Agreement.
10.2*	2000 Equity Incentive Plan.
10.3*	Form of Stock Option Agreement pursuant to 2000 Equity
	Incentive Plan.
10.4*	2000 Employee Stock Purchase Plan.
10.5*	2000 Non-Employee Directors' Stock Option Plan.
10.6*	Collaboration Agreement between Rigel and Janssen
	Pharmaceutica N.V., dated December 4, 1998.
10.7*	Collaborative Research and License Agreement between Rigel
	and Pfizer Inc., dated January 31, 1999.
10.8*	Collaboration Agreement between Rigel and Novartis Pharma
	AG, dated May 26, 1999.
10.9+*	License and Research Agreement between Rigel and Cell
	Genesys, Inc., dated September 2, 1999.
10.10*	Collaborative Research and Development Agreement between
	Rigel and Neurocrine Biosciences, Inc., dated December
10 114	1997.
10.11*	Employment agreement between Rigel and Donald Payan, dated
10 10+	January 16, 1997.
10.12*	Lease between Rigel and Britannia Pointe Grand Limited
10 13	Partnership, dated June 2, 1998.
10.13	Technology Transfer Agreement between Rigel and Questcor
22.1	Pharmaceuticals, Inc., dated September 22, 2000.
23.1 23.2*	Consent of Ernst & Young LLP, Independent Auditors.  Consent of Cooley Godward LLP (included in Exhibit 5.1).
24.1*	Power of Attorney.
27.1*	Financial Data Schedule.
2/.1^ 	

 rinanciai Data Schedule. || ✓ \ TYDTE\ |  |
- -----

^{*} Previously filed.

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

#### TECHNOLOGY TRANSFER AGREEMENT

THIS TECHNOLOGY TRANSFER AGREEMENT (the "Agreement") is made and entered into as of the 22nd day of September, 2000 (the "Effective Date"), by and between RIGEL PHARMACEUTICALS, INC., a Delaware corporation ("Rigel"), and QUESTCOR PHARMACEUTICALS, INC., a California corporation ("Questcor").

WHEREAS, Questcor has developed and owns certain proprietary antiviral technology comprising HCV IRES and HCV NS5A-PKR and other viral technology and owns or has licensed certain patent applications and issued patents pertaining thereto:

 $\,$  WHEREAS, Rigel desires to pursue the commercial development of certain applications of such technology; and

WHEREAS, Rigel desires to obtain, and Questcor is willing to assign to Rigel, its right, title and interest, on a worldwide basis, in and to such technology;

NOW, THEREFORE, Rigel and Questcor hereby agree as follows:

#### ARTICLE 1

#### DEFINITIONS

- 1.1 "AFFILIATE" means any entity that directly or indirectly Owns, is Owned by or is under common Ownership, with a party to this Agreement, where "Owns" or "Ownership" means direct or indirect possession of at least fifty percent (50%) of the outstanding voting securities of a corporation or a comparable equity interest in any other type of entity.
- 1.2 "CURRENTLY IDENTIFIED COMPOUND(S)" means all compounds identified as of the Effective Date by Questcor and provided to Rigel as having potential antiviral activity, together with Homologs and Isomers of such compounds. "Homolog" means a compound that differs from such Currently Identified Compound by a -(CH(2))-group. "Isomer" means a compound that has the same composition as such Currently Identified Compound, but differs in the positions of aromatic ring substituents, location of double bonds or position of carbon in alkyl groups, such as propyl and isopropyl, and optical isomers thereof.
  - 1.3 "HCV IRES" means Hepatitis C Virus IRES technology.

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- 1.4 "HCV NS5A-PKR" means regulation of Protein Kinase RNA (PKR)-activated protein by Hepatitis C Virus Non-Structural 5A Protein.
- 1.5 "LICENSED PRODUCT(S)" means any product, including without limitation, compounds, compositions, formulations, any indication therefor, and any associated methods or processes, developed pursuant to this Agreement, the manufacture, use, importation or sale of which by Rigel, its Affiliates or licensees would constitute an infringement of a Valid Claim of a Questcor Patent or a Washington Patent.
- 1.6 "MATERIAL BREACH" means the failure of Rigel to perform the diligence obligation described in Section  $2.4\,(c)$ , or the failure of Rigel to perform the research and development obligation described in Section  $5.1\,(b)$ , or the failure of Rigel to perform any of the payment obligations in Sections  $4.1,\ 4.2,\ 4.3,\ 4.4,\ 4.5$  or 6.4, or if Sections  $7.2\,(a)$  or 7.4 are not true as of the Effective Date.
- 1.7 "NET SALES" means the gross receipts received by Rigel or its Affiliates for the sale of Licensed Products to Third Parties by Rigel or its Affiliates, less (a) cash, trade, or quantity discounts actually given, (b) rebates allowed or granted to governmental agencies or other payors, (c) credits, returns, and replacements, and (d) taxes, including sales taxes and duties, incurred by reason of the sale of such Licensed Products but excluding taxes on income. If Licensed Products are sold in combination with other products, the price of the Licensed Products for the purpose of calculating Net Sales shall be deemed to be the then current price at which the Licensed Products are sold independent of other products, or in the absence of such independent sales prices, the portion of the sales price of such combined product which is attributable to the Licensed Product itself.
- 1.8 "QUESTCOR MATERIALS" means various reagents, samples and other tangible materials relating to the HCV IRES, HCV NS5A-PKR and other viral technologies, which have been, or will be transferred to Rigel, a compilation

of which has previously been provided to Rigel.

- 1.9 "QUESTCOR PATENT(S)" means (a) the patents and patent applications listed on APPENDIX C including all foreign patents and patent applications, whether now existing or hereafter filed, corresponding to the patents and patent applications under clause (a); (b) any provisionals, substitutions, divisionals, reissues, reexaminations, renewals, continuations, continuations—in—part, substitute applications and inventors' certificates arising from, or based upon, any of the foregoing patents or patent applications; and (c) any patents issuing from any of the foregoing patent applications.
- 1.10 "QUESTCOR TECHNOLOGY" means the Currently Identified Compounds, the Questcor Materials and the modifications, improvements, know-how, trade secrets, data, information and materials relating to the HCV IRES, HCV NS5A-PKR and other viral technologies, which have been, or will be transferred to Rigel, a compilation of which has previously been provided to Rigel.
- 1.11 "SHARES" shall mean the shares of Rigel capital stock to be issued to Questcor pursuant to Section 4.2, and in the event the shares initially issued to Questcor are shares of

2.

Rigel Series E Preferred Stock, the term "Shares" shall also refer to any shares of Rigel Common Stock issued upon conversion thereof, or any other Rigel securities issued to Questcor in respect of its holdings of Series E Preferred Stock.

- 1.12 "THIRD PARTY" means any entity that is not a party nor an Affiliate of a party.
- 1.13 "VALID CLAIM" means a claim of an issued and unexpired patent, which claim has not lapsed, been canceled, or become abandoned, and which claim has not been declared invalid by a court of competent jurisdiction, and which has not been admitted to be invalid or unenforceable through reissue or disclaimer.
- 1.14 "WASHINGTON LICENSE AGREEMENT" means that certain license agreement dated as of April 4, 1997, by and between Questcor and the University of Washington, as amended.
- 1.15 "WASHINGTON PATENT(S)" means (a) the patents and patent applications listed on APPENDIX D licensed by Questcor from the University of Washington including all foreign patents and patent applications, whether now existing or hereafter filed, corresponding to the patents and patent applications under clause (a); (b) any provisionals, substitutions, divisionals, reissues, reexaminations, renewals, continuations, continuations—in-part, substitute applications and inventors' certificates arising from, or based upon, any of the foregoing patents or patent applications; and (c) any patents issuing from any of the foregoing patent applications.

#### ARTICLE 2

#### ASSIGNMENT OF RIGHTS

- 2.1 ASSIGNMENT OF PATENT RIGHTS. Questcor hereby sells and assigns to Rigel all of its right, title and interest in and to the Questcor Patents. Questcor further agrees to promptly execute, upon each request by Rigel, assignment and other documents, testify and take other acts at Rigel's expense and as reasonably requested by Rigel, in order to apply for and obtain, in Rigel's name and for its benefit, patents, trade secrets and other intellectual property rights throughout the world related to the Questcor Patents and to transfer, effect, confirm, perfect, record, preserve, protect and enforce all rights, title and interests transferred hereunder. Questcor hereby further sells and assigns to Rigel its rights to enforce the Questcor Patents for any infringement occurring prior to the Effective Date.
- 2.2 ASSIGNMENT OF QUESTCOR TECHNOLOGY. Questcor hereby sells and assigns to Rigel all of its right, title and interest in and to the Questcor Technology. Following such assignment, Rigel shall have the right to practice the Questcor Technology without restriction. Questcor hereby further sells and assigns to Rigel its rights to enforce any misappropriation of Questcor Technology occurring prior to the Effective Date.

### 2.3 WASHINGTON PATENT RIGHTS.

(a) Questcor hereby agrees to assign the Washington License Agreement to Rigel, and will use its reasonable best efforts to obtain the consent of the University of

Washington to such assignment, as provided for in Section 20.4 of that agreement. Rigel agrees to cooperate with Questcor in obtaining such assignment.

(b) If the assignment of the Washington License Agreement to Rigel, with the consent of the University of Washington, under the same terms, conditions and obligations as enjoyed by Questcor, is not effected within ninety (90) days of the Effective Date, without the payment of consideration to the University by Rigel, then within ninety-five (95) days of the Effective Date, Questcor shall make available to Rigel an exclusive sublicense of all of its rights to the Washington License Agreement, without further consideration. If Questcor fails to offer such an assignment or sublicense of the Washington License Agreement to Rigel within ninety-five (95) days of the Effective Date, Rigel may elect to terminate this Agreement pursuant to Article 9.

#### 2.4 DILIGENCE.

- (a) Rigel shall use commercially reasonable efforts to enforce, defend, prosecute, and maintain the Questcor Patents and to enforce the Ouestcor Technology.
- (b) In addition to the requirements specified in this Agreement, Rigel shall promptly proceed with the research, development, manufacture, and sale of Licensed Products, and the development and other commercial exploitation of the Questcor Patents and Questcor Technology.
- (c) Within two years of the Effective Date, Rigel shall make a presentation to at least six (6) Third Parties that are pharmaceutical or biotechnology companies, and, if appropriate, have follow-up discussions with those same companies, including not more than three companies that may be identified by Questcor in writing to Rigel within sixty (60) days of the Effective Date, regarding opportunities to cooperate or collaborate with Rigel in the commercial development of Licensed Products, Questcor Technology, or to license such rights from Rigel. Rigel shall report to the Joint Program Management Team regarding the results of such presentations to Third Parties.
- (d) During the two-year period from 2001 through 2002, Rigel shall make expenditures for research and development of Licensed Products as specified in Article 5.1(b) herein.

### ARTICLE 3

### DELIVERY OF QUESTCOR TECHNOLOGY

3.1 TECHNOLOGY DELIVERY. Promptly after the Effective Date, Questcor shall deliver and transfer possession and ownership to Rigel of all tangible manifestations of the Questcor Patents (as listed in Appendix C) and the Questcor Technology (as listed in Appendix E), including, without limitation, samples of the Currently Identified Compounds and the Questcor Materials in the amounts and in the forms specified in Appendix A and B, respectively.

4.

Questcor shall complete the delivery of the Questcor Technology to Rigel within sixty (60) days of the Effective Date.

- 3.2 COMPLETION OF TECHNOLOGY DELIVERY. Rigel will deem the delivery of Questcor Technology complete when it has verified receipt of all materials and information listed in Appendix E, which in no event shall be later than forty-five (45) days after initial delivery of all of the items listed in Appendix E. Rigel agrees that in the event that Rigel identifies any materials or information that are not included in such initial delivery, Rigel will promptly notify Questcor of such omission. Questcor agrees that in the event it receives any such notification, it will use its commercially reasonable efforts to promptly deliver such identified omitted materials or information to Rigel.
- 3.3 AVAILABILITY OF QUESTCOR PERSONNEL. Questcor will make its appropriate employees reasonably available to provide technical advice and assistance relating to the transferred technology as set forth in Sections 3.1 and 3.2. Following completion of technology transfer according to Section 3.2, for one year from the Effective Date, Questcor will use its commercially reasonable efforts to make available its employees to Rigel to provide technical advice and assistance relating to the operation of transferred technology. Rigel will pay Questcor \$100 per hour of technical advice and assistance provided by Questcor's employees hereunder. Such employees shall sign a confidentiality agreement directly with Rigel to cover Rigel confidential information. Questcor hereby consents to Rigel engaging Questcor consultants to assist in such technology transfer under arrangements agreed to directly between Rigel and such consultants.

#### CONSIDERATION

- 4.1 INITIAL PAYMENT. Upon execution of this Agreement Rigel shall pay to Questcor as an up-front fee, five hundred thousand dollars (\$500,000) in consideration for the rights to the Questcor Patents, the Currently Identified Compounds, the Questcor Technology and the Washington License Agreement. Such payment will be non-creditable and non-refundable.
- 4.2 DELIVERY PAYMENT. Rigel shall issue to Questcor \$500,000 in Rigel equity, in the form of 83,333 shares of Rigel Series E Preferred Stock (valued for this purpose at \$6.00 per share), or, if the outstanding shares of Rigel Series E Preferred Stock shall have converted into Common Stock prior to the date that payment is due under this Section 4.2, the shares of Common Stock issuable upon conversion of 83,333 shares of Rigel Series E Preferred Stock, upon the earlier of: (i) complete transfer of Questcor Technology pursuant to Section 3.2, if Questcor has executed either an assignment or sublicense of the Washington License Agreement according to Section 2.3(a) or Section 2.3(b), or (ii) execution of either an assignment or sublicense of the Washington License Agreement according to Section 2.3(a) or Section 2.3(b), if complete transfer of Questcor Technology pursuant to Section 3.2 has occurred.

5.

- 4.3 MILESTONE PAYMENTS. Rigel will pay Questcor the following amounts within thirty (30) days of the occurrence of the following milestone events with respect to the first Licensed Product to reach such milestone:
  - (a) Licensed Product utilizing a Currently Identified Compound:

# <TABLE>

		Milestone	Amount
<\$>	-	Preclinical Selection	<c> \$1,000,000</c>
	-	Start of Phase I clinical trial	\$2,000,000
	-	Start of Phase III clinical trial	\$2,000,000
	-	NDA Filing	\$5,000,000
	-	After annual sales exceed \$100 Million or cumulative sales exceed \$200 Million, whichever is first	\$7,000,000

#### </TABLE>

As used herein, "Preclinical Selection" means successful completion of IND-enabling toxicity studies.

(b) Licensed Products not utilizing any Currently Identified

# <TABLE>

Compounds:

	Milestone		Amount	
<s></s>	-	Start of Phase I clinical trial	<c> \$1,000,000</c>	
	-	Start of Phase III clinical trial	\$1,000,000	
	-	NDA Filing	\$2,500,000	
,	-	After annual sales exceed \$100 Million or cumulative sales exceed \$200 Million, whichever is first	\$3,500,000	

#### </TABLE>

Rigel will make a milestone payment only once for each milestone event, regardless of the number of Licensed Products.

4.4 ROYALTIES. As additional consideration for the rights to the Questcor Patents assigned to Rigel pursuant to Article 2 (Assignment), Rigel will pay to Questcor royalties on Net Sales by Rigel or its Affiliates of Licensed Products that are covered in whole or in part by a Valid Claim in the Questcor Patents or the Washington Patents. The royalties will be paid at the following rates:

# <TABLE> <CAPTION>

	Portion of Annual Net Sales	Royalty
<s></s>		<c></c>
	- On Net Sales less than \$100,000,000	4%
	- On Net Sales \$100,000,000 \$500,000,000	6%
	- On Net Sales greater than \$500,000,000	10%

</TABLE>

(b) Licensed Products not utilizing a Currently Identified

Compound:

<TABLE>

		Portion of Annual Net Sales	Royalty
<s></s>			<c></c>
	-	On Net Sales less than \$100,000,000	3%
	-	On Net Sales \$100,000,000 \$500,000,000	5%
	-	On Net Sales greater than \$500,000,000	8%

#### </TABLE>

In the event of a license by Rigel to a non-Affiliate, this Section 4.4 will not apply to any Licensed Product developed pursuant to such license, and instead Rigel shall make payments regarding such Licensed Product in accordance with Section 4.5.

- 4.5 LICENSE FEES. In the event that Rigel, or its Affiliates, at its sole discretion, licenses all or part of the Questcor Patents or Washington Patents to a Third Party for research, development, and/or commercialization, Rigel will pay Questcor a portion of the license fees received by Rigel as follows:
- (a) if the license granted to the Third Party includes the right to commercialize Currently Identified Compounds, Rigel will pay Questcor 35% of all upfront and milestone cash payments received by Rigel and 35% of royalties received by Rigel based on Net Sales of Licensed Products that are covered in whole or in part by a Valid Claim in the Questcor Patents or the Washington Patents;
- (b) if the license granted to the Third Party includes the right to practice Questcor Technology which is then covered by a Valid Claim of a Questcor Patent or a Washington Patent but excludes the right to commercialize Currently Identified Compounds, Rigel will pay Questcor 25% of all upfront and milestone cash payments received by Rigel and 25% of royalties received by Rigel based on Net Sales of Licensed Products that are covered in whole or in part by a Valid Claim in the Questcor Patents or the Washington Patents, provided,

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however that none of the following events has occurred: (1) Rigel has spent over \$1,000,000 in internal and external research expenses on the Antiviral Program (as defined in Article 5); or (2) twelve months have passed from the Effective Date; or (3) Rigel includes in such license intellectual property developed solely by Rigel subsequent to the Effective Date;

- (c) if the license granted to the Third Party includes the right to practice Questcor Technology which is then covered by a Valid Claim of a Questcor Patent or a Washington Patent but excludes the right to commercialize Currently Identified Compounds, and where any of the events specified in the proviso of Section 4.5(b) has occurred, Rigel will pay Questcor 15% of all upfront and milestone cash payments received by Rigel and 15% of royalties received by Rigel based on Net Sales of Licensed Products that are covered in whole or in part by a Valid Claim in the Questcor Patents or the Washington Patents; and
- (d) in the event Rigel or its Affiliates license all or part of the Questcor Patents or the Washington Patents to a Third Party at a time when one or more applications for a Questcor Patent or a Washington Patent remains pending, and no payment is due under (a), (b) or (c), then promptly following the issuance of such patent the parties shall reasonably determine in good faith whether a payment would have been due under (a), (b) or (c)

above if such patent had issued prior to the granting of such license. If such a payment would have been due, Rigel shall then promptly make payments under this Section 4.5 as if such patent had issued prior to the granting of the license.

- 4.6 DATE OF PAYMENT. Payment of the royalties and fees specified in Sections 4.4 and 4.5 will be made by Rigel or its Affiliates to Questcor within thirty (30) days after March 31, June 30, September 30 and December 31 of each year during the term of this Agreement, for the Net Sales received by Rigel during the previous calendar quarter. Each quarterly payment will be accompanied by a written statement by Rigel detailing Net Sales received by Rigel for which such royalties and fees are due.
- 4.7 RECORDS; DISCREPANCY PAYMENTS. Rigel will keep, and require its Affiliates and licensees to keep, complete and accurate records of the Net Sales of Licensed Products, as set forth in this Article. Following reasonable advance written notice to Rigel, Questcor will have the right, at its cost and expense, through an independent national firm of certified public accountants reasonably acceptable to Rigel and bound by obligations of confidentiality not to disclose Rigel's records, to examine such records once per calendar year during regular business hours, during the period of time during which such payments are due and payable hereunder and for two (2) years thereafter. Notwithstanding the preceding sentence: (i) if such examination reveals an underpayment by Rigel to Questcor, Rigel will promptly pay such underpayment amount to Questcor; (ii) if such examination reveals an underpayment of five percent (5%) or more, Rigel will also pay the costs of such examination; and (iii) if such examination reveals an overpayment by Rigel, Questcor will promptly remit such overpayment to Rigel.
- 4.8 PAYMENT CURRENCY AND METHOD. Unless otherwise provided for herein, and subject to foreign exchange regulations then prevailing, all payments payable under this Agreement will be paid in cash in U.S. dollars. All payments provided for herein shall be made by check or wire transfer.

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4.9 LATE PAYMENTS. In the event of a late payment due hereunder, the party from whom the payment is due will pay to the other party interest at the lower of: (a) the highest rate permitted by law; or (b) the prime rate charged by Citibank, N.A. as stated in The Wall Street Journal, New York edition, on the date such payment is due (or the immediately preceding business date if such payment date is not a business day) plus two percent (2%), in either case on the outstanding balance until such late payment and such interest accrued thereon is paid in full to the party to whom the payment is owed. The acceptance by the party to whom the payment is made of any such late payment will not act as a waiver of any rights such party may have hereunder due to a breach by the party from whom the payment is due relating to such late payment.

#### ARTICLE 5

#### RESEARCH AND DEVELOPMENT

#### 5.1 RIGEL RESEARCH AND DEVELOPMENT PROGRAM.

- (a) Rigel will assume primary responsibility (directly or through licensees) for research and development of Licensed Products. Rigel will commit high-throughput screening, chemistry, virology, and other discovery research, and preclinical and clinical development resources to this anti-viral program (the "Antiviral Program") consistent with the resources it commits to other similar research programs at Rigel. Any efforts by Rigel licensees directed toward the Antiviral Program shall be treated as efforts of Rigel under this Section 5.1.
- (b) During the two-year period of calendar years 2001 and 2002, Rigel will spend, or have executed firm commitments to spend, a total of two million dollars (\$2,000,000) in research and development expenses related to the Questcor Technology and the development of Licensed Products.
- 5.2 JOINT PROGRAM MANAGEMENT TEAM. Questcor and Rigel will each designate up to three and no less than two representatives to a Joint Program Management Team that will oversee the activities of the Antiviral Program and seek to ensure that goals are set appropriately and timelines are met. The Joint Program Management Team will also oversee Rigel's business development obligations as set forth in Section 2.4. The Joint Program Management Team will meet periodically, but at least four times a year, at times to be agreed upon. In conjunction with each meeting, Rigel will make reports to the Joint Program Management Team in sufficient detail so as to determine compliance by Rigel under this Article 5 and Section 2.4. This Section 5.2 shall expire upon the commencement of the first Phase I clinical trial of a product arising from the Antiviral Program.
- 5.3 ACCESS TO QUESTCOR PERSONNEL. Rigel will have access to certain Questcor employees and consultants on a consulting basis as specified in Section 3.3.

# ARTICLE 6 PATENT PROSECUTION AND MAINTENANCE

- $6.1\,$  PATENT PROSECUTION. Rigel shall have the sole right to prosecute and maintain patents and applications included in the Questcor Patents.
- 6.2 PATENT MAINTENANCE. Rigel shall have the sole right to maintain and enforce any issued Questcor Patents at Rigel's own expense.

9.

- 6.3 WASHINGTON PATENTS. Subject to the approval of the University of Washington, Rigel shall have the same rights and obligations to prosecute, maintain and enforce the Washington Patents as Questcor currently has under the Washington License Agreement or such other specification of such rights as Rigel and the University of Washington may agree.
- 6.4 REIMBURSEMENT OF PATENT EXPENSES. Rigel will reimburse Questcor for all of Questcor's expenses associated with preparing, maintaining, prosecuting, enforcing and defending the Questcor Patents that Questcor incurred prior to the Effective Date. Rigel will also reimburse Questcor for the patent expenses paid by Questcor under the Washington License Agreement that Questcor incurred prior to the effective date of such assignment (or exclusive sublicense). Rigel will pay Questcor under this section within thirty (30) days after receiving an itemized accounting of each set of prior patent expenses. The total amount reimbursed to Questcor under this Section 6.4 shall not exceed \$250,000.

#### ARTICLE 7

### REPRESENTATIONS AND WARRANTIES

- $7.1\,$  QUESTCOR REPRESENTATIONS AND WARRANTIES. Questcor hereby represents and warrants to Rigel as follows:
- (a) TECHNOLOGY OWNERSHIP. (i) Questcor owns all right, title and interest in and to the Questcor Patents and Questcor Technology listed on APPENDICES A, B AND C; (ii) it has not granted any license under the Questcor Patents and is under no obligation to grant any such license to any Third Party, (iii) there are no outstanding liens, encumbrances, agreements or understandings of any kind, either written, oral or implied, regarding the Questcor Patents or Questcor Technology that are inconsistent or in conflict with any provision of this Agreement;
- (b) EMPLOYEES AND CONSULTANTS. Each of the Questcor employees and consultants who contributed to the development of the Questcor Technology performed such work under a written agreement with Questcor that assigned to Questcor all of such individual's right, title and interest in and to such technology;
- (c) PATENT DISCLOSURES. To the best of its knowledge, the Questcor Patents were filed prior to any publication of the inventions described therein or other act that would bar the issuance of a patent thereon; complies as to form with the requirements of a patent

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application filed in the United States Patent and Trademark Office; and makes all necessary disclosures for a patent application;

- (d) INVENTION ASSIGNMENTS. The Questcor Patents properly identify the inventors of the inventions described therein, and such inventors have assigned to Questcor all of their right, title and interest in and to such patent rights;
- (e) WASHINGTON LICENSE AGREEMENT. As of the Effective Date, the Washington License Agreement is in full force and effect, and there has been no material breach by either party to the Washington License Agreement; and
- (f) PATENT PROCEEDINGS AND THIRD PARTY CLAIMS. To the best of its knowledge, no patent application within the Questcor Patents or the Washington Patents is the subject of any pending interference, opposition, cancellation or other protest proceeding. Questcor further represents and warrants that, it has not received and is not aware of any Third Party claims that the practice of the Patents infringes any proprietary rights of such Third Party.
- 7.2 MUTUAL REPRESENTATIONS AND WARRANTIES. Each party hereby represents and warrants:
- (a) DUE AUTHORIZATION. Such party is duly authorized to execute and deliver this Agreement and to perform its obligations hereunder.

(b) BINDING AGREEMENT; NO CONFLICT. This Agreement is a legal and valid obligation binding upon it and enforceable in accordance with its terms. The execution, delivery and performance of this Agreement by such party does not conflict with any agreement, instrument or understanding, oral or written, to which it is a party or by which it may be bound, nor violate any law or regulation of any court, governmental body or administrative or other agency having jurisdiction over it.

#### 7.3 INVESTMENT REPRESENTATIONS.

(a) Questcor is acquiring the Shares for its own account, and not as nominee or agent, for investment and not with a view to, or for resale in connection with, any distribution or public offering thereof within the meaning of the Securities Act of 1933, as amended (the "Securities Act"). In this regard:

(i) Questcor understands that (i) the Shares have not been registered under the Securities Act by reason of a specific exemption therefrom, that such securities must be held by it indefinitely, and that Questcor must, therefore, bear the economic risk of such investment indefinitely, unless a subsequent disposition thereof is registered under the Securities Act or is exempt from such registration; (ii) each certificate representing the Shares will be endorsed with the following legends:

(1) THE SECURITIES REPRESENTED HEREBY HAVE NOT BEEN REGISTERED UNDER THE SECURITIES ACT OF 1933, AS AMENDED (THE "ACT"), OR UNDER THE SECURITIES LAWS OF CERTAIN STATES. THESE

11.

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.

(2) THE SECURITIES REPRESENTED BY THIS CERTIFICATE ARE SUBJECT TO THE TERMS AND CONDITIONS, INCLUDING RESTRICTIONS ON TRANSFERABILITY, OF THAT CERTAIN TECHNOLOGY TRANSFER AGREEMENT, DATED SEPTEMBER 22, 2000. A COPY OF SUCH TECHNOLOGY TRANSFER AGREEMENT WILL BE FURNISHED TO THE RECORD HOLDER OF THIS CERTIFICATE WITHOUT CHARGE UPON WRITTEN REQUEST TO RIGEL PHARMACEUTICALS, INC. AT ITS PRINCIPAL PLACE OF BUSINESS.

(3) Any legend required to be placed thereon by Rigel's By-laws (and shown on Exhibit A hereto or as may hereafter be added to such By-laws with respect to all Common Stock of Rigel) or under applicable state securities laws;

and (iii) Rigel will instruct any transfer agent not to register the transfer of the Shares (or any portion thereof) unless the conditions specified in the foregoing legends are satisfied, until such time as a transfer is made, pursuant to the terms of this Agreement, and in compliance with Rule 144 or pursuant to a registration statement or, if the opinion of counsel referred to above is to the further effect that such legend is not required in order to establish compliance with any provisions of the Act or of this Agreement.

(ii) Questcor has been furnished with such materials and has been given access to such information relating to Rigel as it has requested, and Questcor has been afforded the opportunity to ask questions regarding Rigel and the Shares, all as it has found necessary to make an informed investment decision.

(iii) Questcor is itself a research stage biotechnology company, and acknowledges that it can bear the economic risk of its investment and has such knowledge and experience in financial or business matters that it is capable of evaluating the merits and risks of the investment in the Shares.

(iv) Questcor is an "accredited investor" as such term is defined in Rule 501 of the General Rules and Regulations prescribed by the Securities and Exchange Commission pursuant to the Act, and Questcor was not formed for the specific purpose of acquiring the Shares.

(b) STAND OFF; RESTRICTION ON TRANSFER. If so requested by Rigel or any managing underwriter of Rigel's initial public offering of securities, Questcor shall not sell or otherwise transfer any of the Shares or other securities of Rigel during a period of up to 180 days following the effective date of the registration statement covering such initial public offering. If

so requested, Questcor shall execute a form of standstill agreement directly with such managing underwriter, provided that the duration of such agreement shall not exceed such 180-day period and that each of the officers and directors of Rigel has executed an equivalent standstill agreement. Questcor shall not sell, assign or otherwise transfer the Shares to any other person (other than a sale to the general public under Rule 144 or in an acquisition or reorganization of Rigel) without the prior consent of Rigel, which shall not be unreasonably withheld but may be conditioned on the execution by the transferee of an undertaking as set forth in this Section 7.3(b).

#### 7.4 RIGEL REPRESENTATION AND COVENANT.

- (a) REPRESENTATION. All corporate action on the part of Rigel, its officers, directors and stockholders necessary for the authorization, execution and delivery of this Agreement has been taken. The Shares which will be acquired by Questcor hereunder, when issued, sold and delivered in accordance with the terms hereof for the consideration expressed herein, will be duly authorized, validly issued, fully paid and nonassessable.
- (b) COVENANT. With a view to making available to Questcor the benefits of Rule 144 and any other rule or regulation of the Securities and Exchange Commission that may permit Questcor to sell the Shares to the public without registration, the Company agrees to make and keep public information available, as those terms are defined in Rule 144, at all times after ninety (90) days after the effective date of the first registration statement filed by Rigel for the offering of its Common Stock to the general public.
- 7.5 DISCLAIMER. EXCEPT AS SPECIFIED HEREIN, QUESTCOR EXPRESSLY DISCLAIMS ANY AND ALL WARRANTY, EXPRESS OR IMPLIED, INCLUDING BUT NOT LIMITED TO THE IMPLIED WARRANTIES OF TITLE, MERCHANTABILITY, FITNESS FOR A PARTICULAR PURPOSE, AND NON-INFRINGEMENT. EXCEPT AS SPECIFIED HEREIN, QUESTCOR DOES NOT WARRANT OR REPRESENT THE PATENTABILITY, VALIDITY, SCOPE, OR USEFULNESS OF THE QUESTCOR PATENTS OR QUESTCOR TECHNOLOGY.

#### ARTICLE 8

#### INDEMNIFICATION AND LIABILITY

8.1 INDEMNITY. Rigel agrees to indemnify, hold harmless and defend Questcor against any and all Third Party claims, suits, losses, damages, costs, fees and expenses (collectively, "Claims") resulting from the possession, manufacture, use, sale, offer for sale, import or administration of Licensed Products by Rigel, its Affiliates or its licensees, including, but not limited to, any claims with respect to death or injury to any person and damage to any property of any end user of Licensed Products or customer of such end user, provided, however, that Rigel shall not have any obligation of indemnification with respect to liability caused in whole or in part by the intentional wrongdoing or negligence of Questcor.

13.

- 8.2 PROCEDURE. If Questcor desires to make a claim under Section 8.1, it shall give Rigel prompt notice of such claim and all related information known to Questcor and shall permit Rigel to control the defense and settlement of such matter.
- 8.3 LIMITATION OF LIABILITY. IN NO EVENT SHALL EITHER PARTY, ITS DIRECTORS, OFFICERS, EMPLOYEES, AGENTS, LICENSEES OR AFFILIATES BE LIABLE TO THE OTHER PARTY FOR ANY INDIRECT, INCIDENTAL, SPECIAL, EXEMPLARY OR CONSEQUENTIAL DAMAGES, WHETHER BASED UPON A CLAIM OR ACTION OF CONTRACT, WARRANTY, NEGLIGENCE, STRICT LIABILITY OR OTHER TORT, OR OTHERWISE, ARISING OUT OF THIS AGREEMENT.

### ARTICLE 9

### TERM AND TERMINATION

- 9.1 TERM. The term of this Agreement shall commence upon the Effective Date and shall continue in effect until the last to expire of the claims of the Questcor Patents or the Washington Patents, unless otherwise terminated by a Party.
- 9.2 TERMINATION AT RIGEL'S OPTION. Upon written notice to Questcor, Rigel may terminate this Agreement if: (i) the Washington License Agreement is not assigned or sublicensed in a manner acceptable to Rigel within ninety-five (95) days of the Effective Date, as set forth in Section 2.3(b); or (ii) the technology transfer described in Article 3 is not completed within sixty (60) days of the Effective Date.
- 9.3 ROYALTY TERM. Upon the expiration of the Questcor Patents and the Washington Patents, Rigel will have no further obligation to make any payment to Questcor under this Agreement in respect of Net Sales, apart from those payments that are accrued hereunder but unpaid by the date of such

expiration, for which payments Rigel will remain liable.

#### 9.4 MATERIAL BREACH: NOTICE, ARBITRATION, TERMINATION:

- (a) In addition to its other rights and remedies, either party (the "Non-Breaching Party") may terminate this Agreement following at least sixty (60) days (the "Notice Period") prior written notice (the "Notice of Breach") to the other party (the "Breaching Party") in the event that the Breaching Party has committed a Material Breach under this Agreement and the Breaching Party fails to cure such breach within such Notice Period.
- (b) If the Breaching Party, in good faith, disputes the assertion that a Material Breach has occurred, it shall respond in writing to the Notice of Breach within thirty (30) days of receipt of the Notice of Breach. If the Non-Breaching Party still contends a Material Breach has occurred, the Chief Executive Officers of the parties (or their designees) shall confer within forty-five (45) days of receipt of the original Notice of Breach. If the Chief Executive Officers are unable to resolve the dispute, the Breaching Party may give notice, prior to completion of the 60-day Notice Period, that it is invoking the Arbitration provision of Section 11.3 below on the issue of the Material Breach. The Non-Breaching Party's right to terminate this agreement is suspended during the pendency of the Arbitration Proceedings.

14.

- (c) Upon giving such notice of Arbitration the Breaching Party shall place into escrow any payments that the Non-Breaching Party has asserted it is due under the Notice of Breach.
- (d) If the Arbitration rules that no Material Breach has occurred the funds shall be released from escrow to the Breaching Party, and the Notice of Breach shall have no force or effect.
- (e) If the ruling of the Arbitration is that a Material Breach has occurred:
- (i) the funds (or the appropriate portion of the funds) held in escrow and due the Non-Breaching Party shall be released to the Non-Breaching Party, and
- (ii) The Breaching Party shall pay the reasonable costs of the Arbitration of the Non-Breaching Party, and
  - (iii) The Breaching Party may either:
- $\hbox{(1) accept a termination of the Agreement}\\ \hbox{if requested by the Non-Breaching Party, or}\\$
- $$\rm (2)$$  agree to abide by the ruling of the Arbitration with respect to the issue of the Material Breach
- (iv) If the Breaching Party agrees to abide by the ruling of the Arbitration, the Notice of Breach shall be considered withdrawn and the Agreement shall continue in effect as interpreted by the Arbitration ruling, and the Breaching Party shall have no further right to invoke the Arbitration provision of this Agreement on the issue or issues decided by the Arbitration.
- (f) If Questcor terminates this Agreement pursuant to a Material Breach by Rigel, upon request by Questcor, Rigel will assign all rights in the Questcor Patents, the Washington Patents, and the Questor Technology back to Questcor.
- 9.5 EFFECT OF TERMINATION. Termination of this Agreement under Section 9.2 or Section 9.4 by reason of Material Breach by Rigel will not terminate any licenses granted hereunder by Rigel to Third Parties. Questcor shall accept assignment of such Third Party Licenses from Rigel to Questcor, or renegotiate such licenses on substantially equivalent economic terms as were contained in the original Licenses from Rigel. Termination of this Agreement will not affect any rights or obligations of the parties accrued prior to the effective date of such termination, including without limitations obligations with respect to payments accrued hereunder prior to the effective date of such termination. In the event of Termination under Section 9.2 or Section 9.4 by reason of Material Breach by Rigel, Rigel will promptly cease any use of the Questcor Technology and return the Questcor Technology to Questcor.

15.

#### ARTICLE 10

#### CONFIDENTIALITY

- 10.1 CONFIDENTIAL INFORMATION. Questcor shall not disclose any of the Questcor Technology, the Questcor Patent applications or Washington Patent applications (hereinafter referred to as the "Confidential Information") to any Third Party without prior the written consent by Rigel or as permitted by Section 10.2.
- 10.2 PERMITTED DISCLOSURES. Questcor shall not be obligated to keep confidential any information which:
- (a) is now, or hereafter becomes, through no breach of any confidentiality obligation on the part of Questcor, generally known or available:
- (b) is hereafter furnished to Questcor by a Third Party, as a matter of right and without breach of any confidentiality obligation by such Third Party;
- (c) is the subject of a written permission to disclose provided by Rigel;  $\ensuremath{\mbox{}}$
- (d) is in response to a valid order of a court or other governmental body of the United States or any political subdivision thereof; PROVIDED, HOWEVER, that the responding party shall first have given notice to the other party hereto and shall have made a reasonable effort to obtain a protective order requiring that the Confidential Information so disclosed be used only for the purposes for which the order was issued; or
- (e) is otherwise required by law or regulation to be disclosed (including without limitation disclosures required by regulations promulgated by the U.S. Securities and Exchange Commission).
- 10.3 RIGEL'S OBLIGATIONS. Rigel shall treat the Confidential Information at the same level of confidentiality as it does its other confidential information.

#### ARTICLE 11

### MISCELLANEOUS PROVISIONS

11.1 COMPLIANCE WITH LAW. Each party agrees to comply with all applicable federal, state and local law, regulations, and orders, including such law, regulations and orders relating to the research, development and commercial exploitation of Licensed Products.

16.

- 11.2 GOVERNING LAW. This Agreement shall be governed and construed in accordance with the laws of the State of California, as applied to contracts executed and performed entirely within the State of California, without regard to conflicts of laws rules.
- 11.3 DISPUTE RESOLUTION. The parties agree that any dispute or controversy arising out of or relating to any interpretation, construction, performance, breach, or Material Breach of this Agreement shall be settled by arbitration to be held in San Francisco, California, in accordance with the Commercial Rules then in effect of the American Arbitration Association. The arbitrator may grant injunctions or other relief in such dispute or controversy. The decision of the arbitrator shall be final, conclusive, and binding on the parties to the arbitration. Judgment may be entered on the arbitrator's decision in any court of competent jurisdiction. Questcor and Rigel shall each pay one-half of the costs and expenses of such arbitration (including the arbitrator's fees), and each shall separately pay its respective attorneys' fees and expenses.
- 11.4 ASSIGNMENT. Except as otherwise provided herein, this Agreement may not be assigned in part or in whole by any party without the prior written consent of the other party; PROVIDED, HOWEVER, that either party may assign this Agreement to any of its Affiliates or to any successor by merger or sale of substantially all of its business unit to which this Agreement relates. This Agreement will be binding upon the successors and permitted assigns of the parties and the name of a party appearing herein will be deemed to include the names of such party's successors and permitted assigns to the extent necessary to carry out the intent of this Agreement. Any assignment which is not in accordance with this Section 11.4 will be void.
- 11.5 NOTICES. All notices and other communications hereunder will be in writing and will be deemed given if delivered personally or by facsimile transmission (receipt verified), telexed, or sent by express courier service, to the parties at the following addresses (or at such other address for a party as will be specified by like notice; provided, that

notices of a change or address will be effective only upon receipt thereof):

If to Rigel, addressed to:

Rigel Pharmaceuticals, Inc. 240 East Grand Avenue South San Francisco, CA 94080

With a copy to:

Cooley Godward LLP Five Palo Alto Square Palo Alto, CA 94306 Attention: Robert L. Jones, Esq.

If to Questcor, addressed to:

Questcor Pharmaceuticals, Inc. 26118 Research Road Hayward, CA 94545

17.

Latham & Watkins 135 Commonwealth Drive Menlo Park, CA 94025 Attention: Elizabeth Powers, Esq.

- 11.6 AMENDMENT. No amendment, modification or supplement of any provision of the Agreement will be valid or effective unless made in writing and signed by an authorized representative of each party.
- 11.7 WAIVER. No provision of the Agreement will be waived by any act, omission or knowledge of a party or its agents or employees except by an instrument in writing expressly waiving such provision and signed by a duly authorized officer of the waiving party.
- 11.8 SEVERABILITY. Whenever possible, each provision of the Agreement will be interpreted in such manner as to be effective and valid under applicable law, but if any provision of the Agreement is held to be prohibited by or invalid under applicable law, such provision will be ineffective only to the extent of such prohibition or invalidity, without invalidating the remainder of the Agreement.
- 11.9 ENTIRE AGREEMENT OF THE PARTIES. This Agreement constitutes and contains the complete, final and exclusive understanding and agreement of the parties and cancel and supersede any and all prior negotiations, correspondence, understandings and agreements, whether oral or written, between the parties respecting the subject matter thereof.
- 11.10 PUBLICITY. Within five (5) days from the Effective Date, the parties shall issue a joint press release regarding the business relationship set forth in this Agreement, with at least one executive-level quote from each party, and such press release shall be approved by advance by both parties. Rigel shall approve such joint press release unless, in conjunction with its initial public offering, it receives reasonable advice of counsel that such press release should not be made at such time. Each party shall have the right to identify the other party (other by listing such other party's name and logo) as a business partner in marketing and publicity materials and on each party's Web site. Except as otherwise specified in this paragraph, a party shall not use the other party's name or logo except with the prior consent of such other party.

IN WITNESS WHEREOF, the parties hereto have duly executed this Agreement as of the Effective Date.

18.

QUESTCOR PHARMACEUTICALS, INC.

RIGEL PHARMACEUTICALS, INC.

By: /s/ Charles J. Casamento

By: /s/ Raul R. Rodriguez

Name: Charles J. Casamento

Name: Raul R. Rodriguez

Title: Chairman, President & CEO

Title: Vice President Business Development

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19.

APPENDIX A

and

METHOD FOR SELECTIVE INACTIVATION OF VIRAL REPLICATION CANADA

Owner: RIBOGENE, INC.

Inventors - MILES, VINCENT J.; MATHEWS, MICHAEL B.; KATZE, MICHAEL G.;
WITHERELL, GARY W.; WATSON, JULIA C.

WITHEREDE, GART W., WAISON, OULIA C.

Pat No: FILED WAIT EXAM

App No: 2,159,639 APRIL 01, 1994
Basic App: PCT/US94/03623 APRIL 02, 1993
Publication No. 1: WO94/23041 OCTOBER 13, 1994

Priority Date: APRIL 02, 1993

METHOD FOR SELECTIVE INACTIVATION OF VIRAL REPLICATION JAPAN

Owner: RIBOGENE, INC.

Inventors - MILES, VINCENT J.; MATHEWS, MICHAEL B.; KATZE, MICHAEL G.; WITHERELL, GARY W.; WATSON, JULIA C.

Pat No: FILED WAIT EXAM

App No: 6-522423 APRIL 01, 1994
Basic App: PCT/US94/03623 APRIL 02, 1993 ()
Publication No. 1: WO94/23041 OCTOBER 13, 1994

Priority Date: APRIL 02, 1993

METHOD FOR SELECTIVE INACTIVATION OF VIRAL REPLICATION HONG KONG

Owner: RIBOGENE, INC.

Inventors - MILES, VINCENT J.; MATHEWS, MICHAEL B.; KATZE, MICHAEL G.;
WITHERELL, GARY W.; WATSON, JULIA C.

Pat No: FILED WAIT EXAM

App No: 94912387.1 SEPTEMBER 24, 1998 Basic App: PCT/US94/03623 APRIL 01, 1994 ()

Priority Date: APRIL 01, 1994

A-1.

METHOD FOR SELECTIVE INACTIVATION OF VIRAL REPLICATION EUROPEAN PATENT CONV. J. A. KEMP & CO.

Owner: RIBOGENE, INC. Agent Ref.: N.68947A

Inventors - MILES, VINCENT J.; MATHEWS, MICHAEL B.; KATZE, MICHAEL G.; WITHERELL, GARY W.; WATSON, JULIA C.

Pat No: App No: 94912387.1 APRIL 01, 1994 Basic App: PCT/US94/03623 APRIL 02, 1993 ()

Publication No. 1: 0693126 JANUARY 24, 1996

Priority Date: APRIL 02, 1993

METHOD FOR SELECTIVE INACTIVATION OF VIRAL REPLICATION

Owner: RIBOGENE, INC. Agent Ref.: 7960-030-228

Inventors - MILES, VINCENT J.; MATHEWS, MICHAEL B.; KATZE, MICHAEL G.; WITHERELL, GARY W.; WATSON, JULIA C.

Pat No: PUBLISHED

App No: PCT/US94/03623 APRIL 01, 1994
Basic App: PCT/US94/03623 APRIL 02, 1993 ()
Publication No. 1: W094/23041 OCTOBER 13, 1994

Priority Date: APRIL 02, 1993

Archive: 13,419

PENDING

PCT

METHOD FOR SELECTIVE INACTIVATION OF VIRAL REPLICATION UNITED STATES

Owner: RIBOGENE, INC.

Inventors - MILES, VINCENT J.; MATHEWS, MICHAEL B.; KATZE, MICHAEL G. Pat No: 5,738,985 APRIL 14, 1998 Expires: APRIL 14, 2015 PATENTED App No: 08/221,816 APRIL 01, 1994

Priority Date: APRIL 02, 1993

Archive: 14,052

METHOD FOR SELECTIVE INACTIVATION OF VIRAL REPLICATION

UNITED STATES

Inventors - MILES, VINCENT J.; MATTHEWS, MICHAEL B.; KATZE, MICHAEL G.; WITHERELL, GARY W.; WATSON, JULIA C.

Pat No:

ALLOWEL

App No: 08/925,156 SEPTEMBER 08, 1997

Continuation of App No 08/221,816 now Pat No 5,738,985

Priority Date: APRIL 01, 1994

A-2.

NOVEL SCREENING METHODS TO IDENTIFY AGENTS THAT SELECTIVELY

CANADA

JAPAN

INHIBIT HEPATITIS C VIRUS REPLICATION Owner: RIBOGENE, INC.

Inventors - KATZE, MICHAEL G.; GALE, JR., MICHAEL J.

Pat No:

FILED WAIT EXAM

App No: 2,283,379 MARCH 05, 1998
Basic App: PCT/US98/04226 MARCH 05, 1997 ()
Publication No. 1: WO98/39487 SEPTEMBER 11, 1998

Priority Date: MARCH 05, 1997

NOVEL SCREENING METHODS TO IDENTIFY AGENTS THAT SELECTIVELY

INHIBIT HEPATITIS C VIRUS REPLICATION

Owner: RIBOGENE, INC.

Inventors - KATZE, MICHAEL G.; GALE, JR., MICHAEL J.

Pat No:

App No: 66840/98 MARCH 05, 1998
Basic App: PCT/US98/04226 MARCH 05, 1997 ()
Publication No. 1: WO98/39487 SEPTEMBER 11, 1998

Priority Date: MARCH 05, 1997

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NOVEL SCREENING METHODS TO IDENTIFY AGENTS THAT SELECTIVELY NEW ZEALAND

INHIBIT HEPATITIS C VIRUS REPLICATION

Owner: RIBOGENE, INC.

Inventors - KATZE, MICHAEL G.; GALE, JR., MICHAEL J.

Pat No: FILED WAIT EXAM

App No: 337703 MARCH 05, 1998
Basic App: PCT/US98/04226 MARCH 05, 1997 ()
Publication No. 1: WO98/39487 SEPTEMBER 11, 1998

Priority Date: MARCH 05, 1997

NOVEL SCREENING METHODS TO IDENTIFY AGENTS THAT SELECTIVELY MEXICO

INHIBIT HEPATITIS C VIRUS REPLICATION

Owner: RIBOGENE, INC.

Inventors - KATZE, MICHAEL G.; GALE, JR., MICHAEL J.

Pat No: FILED WAIT EXAM

App No: 998116 MARCH 05, 1998
Basic App: PCT/US98/04226 MARCH 05, 1997 ()
Publication No. 1: W098/39487 SEPTEMBER 11, 1998

Priority Date: MARCH 05, 1997

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A-3.

NOVEL SCREENING METHODS TO IDENTIFY AGENTS THAT SELECTIVELY

INHIBIT HEPATITIS C VIRUS REPLICATION

Owner: RIBOGENE, INC.

Inventors - KATZE, MICHAEL G.; GALE, JR., MICHAEL J.

Pat No: FILED WAIT EXAM

App No: 10-538754 MARCH 05, 1998
Basic App: PCT/US98/04226 MARCH 05, 1997 ()
Publication No. 1: W098/39487 SEPTEMBER 11, 1998

Priority Date: MARCH 05, 1997

NOVEL SCREENING METHODS TO IDENTIFY AGENTS THAT SELECTIVELY NORWAY INHIBIT HEPATITIS C VIRUS REPLICATION

Owner: RIBOGENE, INC.

Inventors - KATZE, MICHAEL G.; GALE, JR., MICHAEL J.

Pat No: FILED WAIT EXAM

App No: 19994295 App No: 19994295 MARCH 05, 1998
Basic App: PCT/US98/04226 MARCH 05, 1997 ()
Publication No. 1: WO98/39487 SEPTEMBER 11, 1998

Priority Date: MARCH 05, 1997

NOVEL SCREENING METHODS TO IDENTIFY AGENTS THAT RUSSIAN FEDERATION SELECTIVELY INHIBIT HEPATITIS C VIRUS REPLICATION.

Owner: RIBOGENE, INC.

Inventors - KATZE, MICHAEL G.; GALE, JR., MICHAEL J.

FILED WAIT EXAM

App No: 99120790 MARCH 05, 1998 Basic App: PCT/US98/04226 MARCH 05, 1997 () Publication No. 1: WO98/39487 SEPTEMBER 11, 1998

Priority Date: MARCH 05, 1997

NOVEL SCREENING METHODS TO IDENTIFY AGENTS THAT SELECTIVELY HUNGARY INHIBIT HEPATITIS C VIRUS REPLICATION

Owner: RIBOGENE, INC.

Inventors - KATZE, MICHAEL G.; GALE, JR., MICHAEL J.

Pat No: Expires: MARCH 05, 2018 FILED WAIT EXAM App No: P0001395 MARCH 05 1998

Basic App: PCT/US98/04226 MARCH 05, 1997 ()

Priority Date: MARCH 05, 1997

A-4.

NOVEL SCREENING METHODS TO IDENTIFY AGENTS THAT SELECTIVELY TURKEY INHIBIT HEPATITIS C VIRUS REPLICATION

Owner: RIBOGENE, INC.

Inventors - KATZE, MICHAEL G.; GALE, JR., MICHAEL J.

Pat No: Expires: MARCH 05, 2018 FILED WAIT EXAM App No: 1999/02561 MARCH 05, 1998

Basic App: PCT/US98/04226 MARCH 05, 1997 () Publication No. 1: WO98/39487 SEPTEMBER 11, 1998

Priority Date: MARCH 05, 1997

NOVEL SCREENING METHODS TO IDENTIFY AGENTS THAT SELECTIVELY CHINA

INHIBIT HEPATITIS C VIRUS REPLICATION

Owner: RIBOGENE, INC.

Inventors - KATZE, MICHAEL G.; GALE, JR., MICHAEL J.

Pat No:

App No: 98804841.8 MARCH 05, 1998 Basic App: PCT/US98/04226 MARCH 05, 1997 () Publication No. 1: WO98/39487 SEPTEMBER 11, 1998

Priority Date: MARCH 05, 1997

NOVEL SCREENING METHODS TO IDENTIFY AGENTS THAT SELECTIVELY CZECH REPUBLIC INHIBIT HEPATITIS C VIRUS REPLICATION

Owner: RIBOGENE, INC.

Inventors - KATZE, MICHAEL G.; GALE, JR., MICHAEL J.

FILED WAIT EXAM Pat No:

App No: PV3149-99 MARCH 05, 1998 Basic App: PCT/US98/04226 MARCH 05, 1997 () Publication No. 1: WO98/39487 SEPTEMBER 11, 1998

Priority Date: MARCH 05, 1997

NOVEL SCREENING METHODS TO IDENTIFY AGENTS THAT SELECTIVELY INHIBIT HEPATITIS C VIRUS REPLICATION Owner: RIBOGENE, INC.

POLAND

PENDING

Inventors - KATZE, MICHAEL G.; GALE, JR., MICHAEL J.

Pat No:

FILED WAIT EXAM MARCH 05, 1998

FILED WATT EXAM

App No: P335721 Basic App: PCT/US98/04226 MARCH 05, 1997 ()
Publication No. 1: W098/39487 SEPTEMBER 11, 1998

Priority Date: MARCH 05, 1997

A-5.

ISRAEL NOVEL SCREENING METHODS TO IDENTIFY AGENTS THAT SELECTIVELY

INHIBIT HEPATITIS C VIRUS REPLICATION

Owner: RIBOGENE, INC.

Inventors - KATZE, MICHAEL G.; GALE, JR., MICHAEL J.

FILED WAIT EXAM Pat No:

App No: 131730 MARCH 05, 1998 Basic App: PCT/US98/04226 MARCH 05, 1997 () Publication No. 1: WO98/39487 SEPTEMBER 11, 1998

Priority Date: MARCH 05, 1997

NOVEL SCREENING METHODS TO IDENTIFY AGENTS THAT SELECTIVELY TAIWAN

INHIBIT HEPATITIS C VIRUS REPLICATION

Owner: RIBOGENE, INC.

Inventors - KATZE, MICHAEL G.; GALE, JR., MICHAEL J.

Pat No: FILED WAIT EXAM

App No: 87103232 MARCH 05, 1998

Priority Date: MARCH 05, 1997

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NOVEL SCREENING METHODS TO IDENTIFY AGENTS THAT SELECTIVELY KOREA (SOUTH) INHIBIT HEPATITIS C VIRUS REPLICATION

Owner: RIBOGENE, INC.

Inventors - KATZE, MICHAEL G.; GALE, JR., MICHAEL J.

Pat No:

### MARCH 05, 1998

Basic App: PCT/US98/04226 MARCH 05 1007

Publication " MARCH 05, 1997 () Publication No. 1: WO98/39487 SEPTEMBER 11, 1998

Priority Date: MARCH 05, 1997

NOVEL SCREENING METHODS TO IDENTIFY AGENTS THAT EUROPEAN PATENT CONV. SELECTIVELY INHIBIT HEPATITIS C VIRUS REPLICATION

Owner: RIBOGENE, INC.

Inventors - KATZE, MICHAEL G.; GALE, JR., MICHAEL J.

Pat No: FILED WAIT EXAM

App No: 98908928.9 MARCH 05, 1998 Basic App: PCT/US98/04226 Basic App: PCT/US98/04226 MARCH 05, 1997 ()
Publication No. 1: WO98/39487 SEPTEMBER 11, 1998

Priority Date: MARCH 05, 1997

A-6.

NOVEL SCREENING METHODS TO IDENTIFY AGENTS THAT SELECTIVELY PCT INHIBIT HEPATITIS C VIRUS REPLICATION

Owner: RIBOGENE, INC.

Inventors - KATZE, MICHAEL G.; GALE, JR., MICHAEL J.

Pat No: COMPLETED

App No: PCT/US98/04226 MARCH 05, 1998 Basic App: PCT/US98/04226 MARCH 05, 1997 () Publication No. 1: WO98/39487 SEPTEMBER 11, 1998

Priority Date: MARCH 05, 1997

A-7.

APPENDIX B

WASHINGTON PATENTS

Pending U.S. Patent Application U.S.S.N. 60/027,982

NOVEL SCREENING METHODS TO IDENTIFY AGENTS THAT SELECTIVELY UNITED STATES

INHIBIT HEPATITIS C VIRUS REPLICATION

Owner: UNIVERSITY OF WASHINGTON

Inventors - KATZE, MICHAEL G.; GALE, JR., MICHAEL J.
Pat No: 6,030,785 FEBRUARY 29, 2000
App No: 09/035,619 MARCH 05, 1998 PATENTED

Priority Date: MARCH 05, 1997

NOVEL SCREENING METHODS TO IDENTIFY AGENTS THAT SELECTIVELY UNITED STATES

INHIBIT HEPATITIS C VIRUS REPLICATION

Inventors - KATZE, MICHAEL G.; GALE, JR., MICHAEL J. PENDING Pat No:

App No: 09/514,006 FEBRUARY 25, 2000

Continuation of App No 09/035,619 now Pat No 6,030,785

Priority Date: MARCH 05, 1998

B-1.

EXHIBIT 23.1

### CONSENT OF ERNST & YOUNG LLP, INDEPENDENT AUDITORS

We consent to the reference to our firm under the captions "Selected Financial Data" and "Experts" and to the use of our report dated February 25, 2000, in Amendment No. 3 to the Registration Statement (Form S-1 No. 333-45864) and related Prospectus of Rigel Pharmaceuticals, Inc. for the registration of 10,350,000 shares of its common stock.

/s/ ERNST & YOUNG LLP

Palo Alto, California November 17, 2000