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

FORM 10-Q

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

FOR THE QUARTERLY PERIOD ENDED SEPTEMBER 30, 2001.

OR

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

FOR THE TRANSITION PERIOD FROM _____ TO _____.

Commission File Number 0-29889

Rigel Pharmaceuticals, Inc.
(Exact name of registrant as specified in its charter)

Delaware	**94–3248524**
(State or other jurisdiction of incorporation or organization)	(I.R.S. Employer Identification No.)
240 East Grand Avenue **South San Francisco, CA** (Address of principal executive offices)	**94080** (Zip Code)

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

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

As of October 31, 2001, there were 37,591,548 shares of the Registrant's common stock outstanding.

RIGEL PHARMACEUTICALS, INC.
QUARTERLY REPORT ON FORM 10-Q
FOR THE QUARTERLY PERIOD ENDED SEPTEMBER 30, 2001

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PART I FINANCIAL INFORMATION

Item 1. Financial Statements

RIGEL PHARMACEUTICALS, INC.
CONDENSED BALANCE SHEETS
(in thousands, except share and per share amounts)

	September 30, 2001	December 31, 2000
	(unaudited)	
Assets		
Current assets:		
Cash and cash equivalents	$ 11,106	$ 49,030
Available for sale securities	26,225	3,964
Accounts receivable	3,676	663
Prepaid expenses and other current assets	1,360	1,026
Total current assets	42,367	54,683
Property and equipment, net	9,053	9,338
Other assets	1,455	241
	$ 52,875	$ 64,262
Liabilities and stockholders' equity		
Current liabilities:		
Accounts payable	$ 745	$ 1,314
Accrued compensation	808	724
Accrued liabilities	699	696
Deferred revenue	4,632	2,370
Capital lease obligations	3,162	2,952
Total current liabilities	10,046	8,056
Capital lease obligations	4,829	5,761
Long-term portion of deferred revenue	2,613	400
Other long-term liabilities	1,078	1,035
Commitments		
Stockholders' equity:		
Common stock, $0.001 par value; 100,000,000 shares authorized; 37,557,238 and 36,804,186 shares issued and outstandingon September 30, 2001 and December 31, 2000, respectively	38	37
Additional paid-in capital	108,956	108,742
Deferred stock compensation	(3,100)	(5,792)
Accumulated other comprehensive income	88	2
Accumulated deficit	(71,673)	(53,979)
Total stockholders' equity	34,309	49,010
	$ 52,875	$ 64,262

RIGEL PHARMACEUTICALS, INC.
CONDENSED STATEMENT OF OPERATIONS
(in thousands, except per share amounts)

	Three Months Ended September 30,		Nine Months Ended September 30,	
	2001	2000	2001	2000
	(unaudited)		(unaudited)	
Revenues:				
Contract revenues from collaborations	$ 4,206	$ 3,211	$ 10,524	$ 10,008
Costs and expenses:				
Research and development (See Note A)	8,631	8,598	23,395	24,609
General and administrative (See Note A)	1,991	1,869	5,885	5,010
	10,622	10,467	29,280	29,619
Loss from operations	(6,416)	(7,256)	(18,756)	(19,611)
Interest income	437	208	1,662	695
Interest expense	(240)	(222)	(600)	(677)
Net loss	$ (6,219)	$ (7,270)	$ (17,694)	$ (19,593)

Deemed dividend to Series E preferred stockholders	-	(100)	-	(10,133)
Net loss allocable to common stockholders	$ (6,219)	$ (7,370)	$ (17,694)	$ (29,726)
Net loss per share, basic and diluted	$ (0.17)	$ (1.62)	$ (0.48)	$ (6.92)
Weighted average shares used in computing net loss per common share, basic and diluted	37,516	4,561	37,173	4,297

Note A:

Includes charges for stock-based compensation as follows:				
Research and development	$ (151)	$ 2,136	$ 1,199	$ 7,594
General and administrative	85	254	424	757
	$ (66)	$ 2,390	$ 1,623	$ 8,351

RIGEL PHARMACEUTICALS, INC.
CONDENSED STATEMENT OF CASH FLOWS
(in thousands)

	Nine Months Ended September 30,	
	2001	**2000**
	(unaudited)	
Operating activities:		
Net loss	$ (17,694)	$ (19,593)
Adjustments to reconcile net loss to net cash used in operating activities:		
Depreciation and amortization	2,908	1,907
Amortization of deferred stock compensation	2,119	3,781
Noncash stock compensation	(496)	4,570
Issuances of equity instruments for noncash benefits	-	1,250
Changes in assets and liabilities:		
Accounts receivable	(3,013)	1,886
Prepaid expenses and other current assets	(334)	(364)
Other assets	(531)	10
Accounts payable	(569)	134
Accrued compensation	84	141
Accrued liabilities	3	148
Deferred revenue	4,475	(2,708)
Other long-term liabilities	43	432
Net cash used in operating activities	(13,005)	(8,406)
Investing activities:		
Purchase of available-for-sale securities	(40,415)	(3,954)
Maturities of available-for-sale securities	18,240	-
Capital expenditures	(2,623)	(2,590)
Net cash used in investing activities	(24,798)	(6,544)
Financing activities:		
Proceeds from capital lease financing	1,748	2,122
Principal payments on capital lease obligations	(2,470)	(1,707)
Net proceeds from issuances of common stock	601	250
Net proceeds from issuances of convertible preferred stock	-	15,465
Net cash (used) provided by financing activities	(121)	16,130
Net (decrease) increase in cash and cash equivalents	(37,924)	1,180
Cash and cash equivalents at beginning of period	49,030	5,836
Cash and cash equivalents at end of period	$ 11,106	$ 7,016

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

Rigel Pharmaceuticals, Inc.
Notes to Condensed Financial Statements
(unaudited)

1. Nature of operations

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.

On December 4, 2000, the Company completed its initial public offering of shares of common stock at $7.00 per share, and all outstanding shares of preferred stock were converted into 24,895,957 shares of common stock. In connection with the initial public offering, the Company amended its certificate of incorporation to decrease the number of authorized shares of preferred stock to 10,000,000 and increase the number of authorized shares of common stock to 100,000,000.

2. Basis of presentation

The accompanying unaudited condensed financial statements of the Company have been prepared in accordance with generally accepted accounting principles for interim financial information and pursuant to the instructions to Form 10-Q and Article 10 of Regulation S-X. In the opinion of Rigel's management, these unaudited financial statements include all adjustments, consisting only of normal recurring adjustments, which we consider necessary to fairly state the Company's financial position and the results of its operations and its cash flows. Interim–period results are not necessarily indicative of results of operations or cash flows for a full-year period. The balance sheet at December 31, 2000 has been derived from audited financial statements at that date, but does not include all disclosures required by generally accepted accounting principles for complete financial statements.

These condensed financial statements and the notes accompanying them should be read in conjunction with the Company's Annual Report on Form 10-K for the year ended December 31, 2000. Stockholders are encouraged to review the Form 10-K for a broader discussion of the Company's business and the opportunities and risks inherent in the Company's business. Copies of the Form 10-K are available from the Company upon request.

Comprehensive loss did not materially differ from the net loss as reported.

3. 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. The calculation of diluted net loss per share excludes shares of potential common stock if the effect is anti-dilutive.

The Company's preferred stock converted into common stock upon the closing of the Company's initial public offering in December 2000. For informational purposes, the following unaudited pro forma net loss per share data reflects the assumed conversion of the Company's preferred stock into common stock at the beginning of each of the following periods (in thousands except per share information):

	Three months ended September 30,		Nine months ended September 30,	
	2001	2000	2001	2000
Net loss to common stockholders	$ (6,219)	$ (7,370)	$ (17,694)	$ (29,726)
Weighted–average shares of common stock outstanding	37,516	4,561	37,173	4,297
Pro forma adjustment to reflect weighted average effect of assumed conversion of preferred stock	—	24,734	—	24,412
Total weighted average shares outstanding pro forma	37,516	29,295	37,173	28,709
Basic and diluted pro forma loss per share	$ (0.17)	$ (0.25)	$ (0.48)	$ (1.04)

4. 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 is 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 pursuant to collaborative agreements upon the achievement of specified milestones.

5. Deemed dividend

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 $10.00 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 year ended December 31, 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 2000 as the useful life is less than one year.

6. Facility lease

On May 16, 2001, the Company entered into a 15-year non-cancelable lease for its future office and research facilities in South San Francisco, California. Under the terms of this lease, the Company will occupy these new facilities in late 2002 and will concurrently terminate its lease of the current facilities at Britannia Pointe Grand in South San Francisco. In addition, upon the execution of the new lease, the Company paid a $556,000 security deposit and issued a warrant to purchase 150,000 shares of common stock at $8.91 per share, a 15% premium to market at the time of issuance. This warrant will expire on May 16, 2006. The fair market value of this warrant, as determined by the Black–Scholes valuation model, was approximately $683,000. This amount has been capitalized in Other Long Term Assets and will be amortized into rent expense over the life of the lease. In connection with the termination of the current Britannia Pointe Grand lease, the Company will accelerate the amortization of existing tenant improvements over the expected remaining life of the lease. The change in estimated useful life of the tenant improvements will increase amortization by $0.7 million and $1.5 million over the remainder of fiscal 2001 and 2002, respectively. The Company expects to incur minimal costs in connection with the terminated lease.

7. Recent Accounting Pronouncements

In October 2001, the FASB issued Statement of Financial Accounting Standards No.144, “Accounting for the Impairment or Disposal of Long-Lived Assets” (“SFAS 144”), which is effective for fiscal periods beginning after December 15, 2001. SFAS 144 provides a single accounting model for, and supersedes previous guidance on, accounting and reporting for the impairment / disposal of long-lived assets. SFAS 144 sets new criteria for the classification of an assets held-for-sale and changes the reporting of discontinued operations. The Company does not believe that the adoption of SFAS 144 will have a significant impact on its financial statements.

Item 2. Management's Discussion and Analysis of Financial Condition and Results of Operations

This discussion and analysis should be read in conjunction with our financial statements and accompanying notes included in this report and the Company's 2000 audited financial statements and notes thereto included in our 2000 Annual Report on Form 10-K. Operating results for the three and nine months ended September 30, 2001 are not necessarily indicative of results that may occur in future periods.

Except for the historical information contained herein, the following discussion contains forward–looking statements that are based upon current expectations. Forward–looking statements involve risks and uncertainties. When used herein, the words "believe," "anticipate," "expect," "estimate" and similar expressions are intended to identify such forward–looking statements. There can be no assurance that these statements will prove to be correct. Our actual results and the timing of events could differ significantly from those discussed here. Factors that could cause or contribute to such differences include, but are not limited to, those discussed in "Risk Factors," as well as those discussed elsewhere in this report and in our 2000 Annual Report on Form 10-K as filed with the SEC. Rigel undertakes no obligation to update any of the forward–looking statements contained herein to reflect any future events or developments.

Overview

We are a drug discovery and development company that utilizes advanced functional genomics to discover novel drug targets and drug candidates that regulate these 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 begin to move drug candidates into and through preclinical and later stages of drug development and expand our research and development activities. To date, we have funded our operations primarily through the sale of equity securities, non-equity payments from collaborative partners and capital asset lease financings. We received our first funding from our collaborative partners in December 1998. As of September 30, 2001, including both research funding and equity investments, we had received an aggregate of $56.9 million from our collaborative partners, including $12.1 million in the nine months ended September 30, 2001. As of September 30, 2001, our accumulated deficit was approximately $71.7 million.

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

To date, we have entered into collaborations with three major pharmaceutical companies that are currently contributing to our revenues. On July 6, 2001, we expanded our collaboration with Novartis with the initiation of our angiogensis program. Pursuant to the expanded Novartis collaboration, we received a $4.0 million upfront payment from Novartis which will be taken to revenue ratably over the life of the contract. In addition, the expanded collaboration provides that the angiogensis research program will be carried out at Rigel and provides for research reimbursement over the next three years and milestones payments to Rigel.

A summary of these partnerships is as follows:

Partner	Research Program	Commencement Date
Janssen Pharmaceutica	Tumor Growth — Cell Cycle Inhibition	December 4, 1998
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
	Chronic Bronchitis (conducted at Novartis)	January 1, 2000
	Tumor Growth — Inhibition of Tumor Angiogensis	July 6, 2001

Under the terms of these collaborations, our partners have agreed to provide future research funding up to approximately $26.7 million over the next four years, $9.9 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 the exploration of new opportunities with existing and new potential collaborators. Our partnerships to date have generally focused on the early stages of drug discovery, specifically on target discovery and validation, while our collaboration with Janssen Pharmaceutica has been expanded to also include both chemistry and compound high throughput screening. 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, at an increased rate of spending, our own research programs to later stages of development prior to partnering with collaborative partners. Therefore, it is expected that future collaborative partnerships will have an expanded focus and could include cell pathway mapping, high throughput screening, combinatorial and medicinal 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 Janssen Pharmaceutica is a three-year agreement terminating on December 4, 2001, and our two-year collaboration with Pfizer, which has been extended one additional year, will terminate on January 31, 2002. Our Novartis programs are multiple-year agreements terminating in 2004 and 2005. As each collaboration reaches termination, the parties 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, 2001, we had deferred revenues of approximately $7.2 million.

In December 2000, we completed our initial public offering of 5,650,000 shares of common stock at $7.00 per share with net proceeds to us of approximately $35.6 million. Concurrent with the closing of the initial public offering in December, we issued an additional 1,428,571 shares of common stock at $7.00 per share to Novartis in a private placement for net proceeds of $10.0 million. Upon the closing of the Company's initial public offering in December 2000, all outstanding shares of preferred stock converted into 24,895,957 shares of common stock.

In September 2000, we entered into a Technology Transfer Agreement with Questcor Pharmaceuticals, Inc. and acquired the license and technology to a hepatitis C research program. Under the terms of this agreement, we paid a nonrefundable and noncreditable fee of $500,000, 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.

Deferred Stock Compensation

We recorded deferred stock compensation with respect to options granted to employees of approximately $4.9 million in the year ended December 31, 2000, and

$0.3 million for the nine months ended September 30, 2001, 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 $4.9 million in 2000, with $3.9 million recorded as research and development expense and $1.0 million as a general and administration expense. In the nine months ended September 30, 2001, we amortized deferred stock compensation of $2.1 million, with $1.7 million recorded as research and development expense and $0.4 million as a general and administration expense. At September 30, 2001, we had a total of $3.1 million remaining to be amortized over the vesting periods of the stock options.

Three Months Ended September 30, 2001 and 2000

Revenues. Contract revenues from collaborations were $4.2 million in the three months ended September 30, 2001, compared to $3.2 million in the three months ended September 30, 2000. The increase was primarily due to the commencement of the angiogensis program with Novartis on July 6, 2001. Revenues consisted primarily of research support and amortization of fees earned from the continuation of our collaborations with Pfizer, Janssen Pharmaceutica and Novartis. We expect contract revenues from collaborations to be a significant component of our total revenues for the foreseeable future.

Research and Development. Research and development expenses remained flat at $8.6 million for both the three-month periods ended September 30, 2001 and 2000. These costs include the stock compensation credit of $0.1 million and expense of $2.1 million in the three months ended September 30, 2001 and 2000, respectively. Excluding the stock compensation expenses, our research and development expenses were $8.8 million and $6.5 million in the three-month periods ending September 30, 2001 and 2000, respectively. This quarter-to-quarter increase of $2.3 million was primarily attributable to employee costs associated with our increase in scientific headcount as well as outside contract research organization costs offset by a reduction in technology license fees. In order to advance all of our non-partnered programs, including the advancement of some programs into preclinical and clinical stages of development, we expect research and development expenses to increase in future periods in connection with the addition of increased staffing and scientific program costs. In addition, our costs will increase with the advancement of our non-partnered programs into later stages of development. We also anticipate that research and development expenses may increase with the addition of new collaborations.

General and Administrative Expenses. For the three–month period ended September 30, 2001, general and administrative expenses increased nominally to $2.0 million from $1.9 million for the three–month period ended September 30, 2000. The general and administrative expenses in the three months ended September 30, 2001 and 2000 included $0.1 million and $0.3 million, respectively, related to the amortization of deferred stock in connection with options granted to employees. This increase, after excluding the effect of the amortization, was primarily attributable to increased employee headcount and infrastructure costs to support the growing research and development activities. We expect that general and administrative expenses will increase in the future to support the continued growth of our research and development efforts.

Net Interest Income/(Expense). Net interest income in the three months ended September 30, 2001 was $197,000, compared to a net interest expense of $14,000 in the three months ended September 30, 2000. Interest income increased to $437,000 in the three months ended September 30, 2001 from $208,000 in the comparable three months of 2000. The increase in interest income was due to the increased cash and investment balances resulting from our initial public offering in December of 2000. Interest expense, which results from our equipment financing agreements, was flat over the two periods.

Nine Months Ended September 30, 2001 and 2000

Revenues. Contract revenues from collaborations were $10.5 million in the nine months ended September 30, 2001, compared to $10.0 million in the nine months ended September 30, 2000. Revenues for the nine months ended September 30, 2001 consisted of research support and amortization of fees earned from the continuation of our collaborations with Pfizer, Janssen Pharmaceutica and Novartis.

Research and Development. Research and development expenses decreased to $23.4 million in the nine months ended September 30, 2001 from $24.6 million in the nine months ended September 30, 2000. This decrease was due primarily to a reduction in stock compensation expense as the fair value of the variable options issued to outside consultants decreased. Excluding the impact of stock based compensation, our research and development expenses increased from $17.0 million in the nine months ended September 30, 2000 to $22.2 million in the nine months ended September 30, 2001. This increase was primarily attributable to the increase in our scientific headcount.

General and Administrative Expenses. For the nine-month periods ended September 30, 2001 and 2000, general and administrative expenses increased to $5.9 million from $5.0 million, respectively. This increase was primarily attributable to higher employee headcount and infrastructure costs to support the growing research and development activities. The general and administrative expenses in the nine-month periods ended September 30, 2001 and 2000 include expenses of $0.4 million and $0.8 million, respectively, related to the amortization of deferred stock compensation in connection with options granted to employees.

Net Interest Income. Net interest income in the nine months ended September 30, 2001 was $1,062,000, an increase of $1,044,000 from the net interest income of $18,000 in the nine months ended September 30, 2000. The increase in interest income is due to the increased cash and investment balances resulting from our initial public offering in December of 2000. Interest expense, which results from our equipment financing agreements, was flat over the two periods.

Liquidity and Capital Resources

We have financed our operations from inception primarily through sales of equity securities, contract payments payable to us under our collaboration agreements and equipment financing arrangements. As of September 30, 2001, we have received $93.1 million in gross proceeds from the sale of equity securities, including $20.0 million from collaborators, and have received $36.9 million in research funding from collaborators. In addition, as of September 30, 2001, we had financed the purchase of equipment and leasehold improvements totaling approximately $15.2 million through leases and loans.

As of September 30, 2001, we had $37.3 million in cash, cash equivalents and available-for-sale securities, compared to $53.0 million as of December 31, 2000, a decrease of $15.7 million. The decrease was primarily attributable to the usage of $13.0 million for the funding of operations, the investment of $2.6 million in capital equipment and the usage of $2.5 million for payments associated with our equipment financing agreements. These payments were offset by the receipt of $1.7 million from our equipment financing arrangements and the proceeds of $0.6 million from the sale of equity securities.

As of September 30, 2001, we had $8.0 million in capitalized lease obligations in association with our financed purchase of equipment and leasehold improvements. All our equipment financing agreements are secured by the equipment financed, bear interest rates ranging from 7% to 15% and are due in monthly installments through 2005. In addition, three of these agreements have balloon payments at the end of each loan term.

In December 2000, we received approximately $35.6 million, net of issuance costs, in connection with our initial public offering of common stock at $7.00 per share and $10.0 million from the exercise of our right within the Novartis collaboration agreement to have Novartis purchase shares of our common stock in a private placement concurrent with the initial public offering at $7.00 per share. We believe that our existing capital resources, together with the proceeds from future and current collaborations, will be sufficient to support our current operating plan for at least the next 15 months. In the uncertain markets at the time of our initial public offering, the net proceeds to the Company from the initial public offering were less than originally intended. We, therefore, do anticipate efforts to raise additional equity capital within the next 12 months. Our future capital uses and requirements depend on numerous forward–looking factors. These factors include, but are not limited, to the following:

- our ability to maintain our existing collaboration partnerships;
- our ability to establish new collaborations and the scope of these new collaborations;
- the progress and number of research programs carried out at Rigel;
- the progress of the development efforts of our collaborators;

- our ability to meet the payment–triggering milestones identified in our collaborative agreements;
- 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 property rights;
- the costs and timing of regulatory approvals; and
- expenses associated with unforeseen litigation.

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

Risk Factors

Rigel's business faces significant risks. These risks include those described below and may include additional risks of which Rigel is not currently aware or which Rigel currently does not believe are material. If any of the following risks actually occurs, our business could be harmed. In addition, the risks that we now foresee might affect us to a greater or different degree than we currently expect. These risks should be read in conjunction with the other information set forth in this report.

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

Due in large part to the significant research and development expenditures required to identify and validate new drug candidates and move our programs toward later stages of drug development, 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, 2001, we had an accumulated deficit of approximately $71.7 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 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. Such 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 revenue 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.

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 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 obtaining 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 clinical trials, manufacturing, sales and marketing, and for licenses to technology rights. To date, we have entered into several such arrangements with corporate collaborators; however, we do not know if such third parties will dedicate sufficient resources or if any 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. 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 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.

Conflicts might also arise with respect to our various relationships with 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 expansion of 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 our existing capital resources, together with the proceeds from future and current collaborations, will be sufficient to support our current operations for at least the next 15 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;
- 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 is dependent on intellectual property rights held by us and third parties and our interest in such rights is complex and uncertain.

Our success will depend to a large part on our own, our licensees' and our licensors' ability to obtain and defend patents for each party's respective technologies and the compounds and other products, if any, resulting from the application of such technologies. Seven U.S. patents have been issued to us as of September 30, 2001, and we have numerous applications in the U.S. and abroad 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; or
- the patents of others will not have a negative effect on our ability to do business.

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

We are a party to certain in-license agreements 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 rights to publish data and information in which we have rights. If we cannot maintain the confidentiality of our technology and other confidential information in connection with our collaborations, then our ability to receive patent protection or protect our proprietary information will be impaired. In addition, some of the technology we have licensed relies on patented inventions developed using U.S. government resources. The U.S. government retains certain rights, as defined by law, in such patents, and may choose to exercise such rights.

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

Our success will also depend, in part, on our ability to operate without infringing or misappropriating the proprietary rights of others. There are many issued patents and patent applications filed by third parties relating to products or processes that are similar or identical to ours or our licensors, and others may be filed in the future. There can be no assurance that our activities, or those of our licensors, will not infringe patents owned by others. We believe that there may be significant litigation in the industry regarding patent and other intellectual property rights, and we do not know if we or our collaborators would be successful in any such litigation. Any legal action against our collaborators or us claiming damages or seeking to enjoin commercial activities relating to the affected products, our methods or processes could:

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

Pharmexa (formerly M&E Biotech) has notified us that they have received patent protection in some European countries and Australia for a process they assert is similar to certain aspects of our technologies. Pharmexa has notified us of its belief that we have infringed, and are contributorily infringing, certain claims of that European patent. In June 2001, we commenced administrative proceedings to oppose Pharmexa's European patent. Earlier in the year, Pharmexa commenced an administrative proceeding to oppose our Australian patent. Legal proceedings with respect to these patents 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 Pharmexa patent. In addition, any license or other transfer of rights to the patent by Pharmexa 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 Pharmexa has sought patent protection in other countries, including the U.S., and has the option to seek patent protection in other parts of the world. If Pharmexa 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.

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.

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 143 at September 30, 2001. 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.

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

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

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

The drugs we hope to develop may be rejected by the marketplace due to many factors, including cost. Our ability to commercially exploit a drug may be limited due to the continuing efforts of government and third–party payors to contain or reduce the costs of health care through various means. For example, in some foreign markets, pricing and profitability of prescription pharmaceuticals are subject to government control. In the United States, we expect that there will continue to be a number of federal and state proposals to implement similar government control. In addition, increasing emphasis on managed care in the United States will likely continue to put pressure on the

pricing of pharmaceutical products. Cost control initiatives could decrease the price that any of our collaborators would receive for any products in the future. Further, cost control initiatives could adversely affect our collaborators' ability to commercialize our products and our ability to realize royalties from this commercialization.

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

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

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

If 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 143 employees as of September 30, 2001, 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, 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 various scientific consultants and advisors for the success and continuation of our research efforts.

We work extensively with various scientific consultants and advisors. The potential success of our drug discovery programs depends, in part, on continued collaborations with these consultants and advisors. We, and various members of our management and research staff, rely on these consultants and advisors 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. We do not know if we will be able to maintain such consulting agreements or that such scientific advisors will not enter into consulting arrangements, exclusive or otherwise, with competing pharmaceutical or biotechnology companies, any of which would have a detrimental impact on our research objectives and could have a material adverse effect on our business, financial condition and results of operations.

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

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

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

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

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

Our directors, executive officers and principal stockholders and their affiliates beneficially own approximately 30.2% of our common stock, based on their beneficial ownership as of May 15, 2001. Accordingly, they collectively will have the ability to significantly affect the election of all of our directors and the outcome of most corporate actions requiring stockholder approval. They may exercise this ability in a manner that advances their best interests and not necessarily those of other stockholders.

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

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

- announcements of technological innovations or new commercial products by our competitors or us;
- developments concerning proprietary rights, including patents;

- developments concerning our collaborations;
- publicity regarding actual or potential medical results relating to products under development by our competitors or us;
- regulatory developments in the United States and foreign countries;
- litigation;
- economic and other external factors or other disaster or crisis; and
- period-to-period fluctuations in financial results.

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

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

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

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

Item 3. Quantitative and Qualitative Disclosures About Market Risk

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

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.

PART II OTHER INFORMATION

Item 2. Changes in Securities and Use of Proceeds

Our Registration Statement on Form S-1 (No. 333-45864), as amended, with respect to our initial public offering was declared effective by the SEC on November 28, 2000. We received net proceeds of approximately $35,560,000 after deducting offering expenses of $3,990,000, including underwriting discounts and commissions of $2,768,000 and other offering expenses of $1,222,000. We intend to continue to use the net proceeds of the offering for research and development, general corporate purposes and working capital and capital lease obligations. Rigel continually assesses the specific uses and allocations for these funds. As of September 30, 2001, approximately $35.6 million of the net proceeds remained available and were primarily invested in short-term marketable securities.

Item 6. Exhibits and Reports on Form 8-K.

a) Exhibits:

The exhibits listed on the accompanying index to exhibits are filed or incorporated by reference (as stated therein) as part of this Quarterly Report on Form 10-Q.

b) Reports on Form 8-K:

No reports on Form 8-K were filed during the three–month period ended September 30, 2001.

SIGNATURES

Pursuant to the requirements of the Securities Exchange Act of 1934, the registrant has duly caused this report to be signed on its behalf by the undersigned, thereunto duly authorized.

RIGEL PHARMACEUTICALS, INC.

By: /s/ JAMES H. WELCH
James H. Welch
Vice President, Chief Financial Officer and Corporate Secretary (Principal Financial and Accounting Officer)
Date: November 13, 2001

INDEX TO EXHIBITS

Exhibit Number	Description of Document
3.1	Amended and Restated Certificate of Incorporation. (1)
3.2	Amended and Restated Bylaws. (1)
4.1	Specimen Common Stock Certificate. (1)
10.18*	Second Amendment, dated July 6, 2001, to the Collaboration Agreement between Rigel and Novartis Pharma AG.
10.19*	License and Research Agreement (Amended and Restated) between Rigel and Cell Genesys, Inc., dated September 2, 1999, as first amended and restated on March 26, 2001 and again amended and restated on July 1, 2001.

* Confidential treatment requested for certain portions of this exhibit, which is filed herewith.

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

[*] = CERTAIN CONFIDENTIAL INFORMATION CONTAINED IN THIS DOCUMENT, MARKED BY BRACKETS, HAS BEEN OMITTED AND FILED SEPARATELY WITH THE SECURITIES AND EXCHANGE COMMISSION PURSUANT TO RULE 24b-2 OF THE SECURITIES EXCHANGE ACT OF 1934, AS AMENDED.

EXHIBIT 10.18

SECOND AMENDMENT TO COLLABORATION AGREEMENT

THIS SECOND AMENDMENT TO COLLABORATION AGREEMENT ("Amendment") is entered into as of July 6, 2001 ("Amendment Date") by and between **Rigel Pharmaceuticals, Inc**., a Delaware corporation ("Rigel") having offices at 240 East Grand Avenue, South San Francisco, CA 94080, and **Novartis Pharma AG**, a Swiss corporation ("Novartis") having offices at Lichtstrasse 35, CH-4058, Basel, Switzerland. Rigel and Novartis are referred to herein collectively as the "Parties," and each individually as a "Party."

RECITALS

WHEREAS, Rigel has, as of the Amendment Date, conducted significant research regarding the role of endothelial cell function in angiogenesis (some of which research Rigel has conducted pursuant to a collaborative program with Cell Genesys, Inc., a Delaware corporation ("Cell Genesys"), and has substantial expertise in the discovery of intracellular target molecules that modulate human disease states, which expertise is applicable to further research on endothelial cell function in angiogenesis;

WHEREAS, Novartis is engaged in the research, development, marketing and manufacture of pharmaceutical compounds useful in treating or preventing human diseases and conditions, including diseases and conditions which may affect or be affected by angiogenesis, and therefore desires to have access to the results of Rigel's research up to the Amendment Date in such area, as well as to cooperate with Rigel and employ Rigel technology to pursue further research in such area;

WHEREAS, Rigel and Novartis are parties to that certain Collaboration Agreement dated May 26, 1999 as amended by a First Amendment dated 18 May, 2001 (referred to as the "Collaboration Agreement") pursuant to which Novartis may have access to up to five (5) collaborative research projects with Rigel, as more completely described in the Collaboration Agreement, and in connection with research surrounding such process that Rigel has ongoing under its collaboration with Cell Genesys in order to benefit from the synergies and efficiencies of a combined research program;

WHEREAS, the Parties wish to conduct their further research regarding endothelial cell function in angiogenesis as a Joint Project within the framework of their existing collaboration pursuant to the Collaboration Agreement;

WHEREAS, the Parties have, as of the Amendment Date, initiated three (3) collaborative projects pursuant to the Collaboration Agreement, of which two (2) have been Joint Projects (as defined by the Collaboration Agreement) and one (1) has been an At-Novartis Projects (as defined by the Collaboration Agreement);

WHEREAS, the Collaboration Agreement provides for the Parties to conduct a maximum of three (3) At-Novartis Projects; and

[SIGNATURE PAGE]

WHEREAS, the Parties wish to amend the Collaboration Agreement as provided herein to accommodate conducting a collaborative project relating to endothelial cell function in angiogenesis as a Joint Project pursuant to the Collaboration Agreement in conjunction and consistent with Rigel's research for and responsibilities to Cell Genesys, as well as to provide for Rigel to be compensated for its prior work outside the scope of the Collaboration Agreement in such area of research.

NOW, THEREFORE, in consideration of the foregoing and the covenants and promises contained in this Amendment, the Parties agree as follows:

ARTICLE 1

DEFINITIONS

1.1 Terms Defined in Collaboration Agreement. Any initially capitalized terms not otherwise defined herein shall have the meanings given in the Collaboration Agreement.

1.2 Additional Defined Terms. As used herein and in the Collaboration Agreement, the following terms shall have the following meanings:

(a) "Angiogenesis Project" shall mean the Program of Research directed to the identification of Novel Validated Targets involved in endothelial cell function as part of the angiogenesis process, as such Program of Research is more fully described in Exhibit A.

(b) "CG Agreement" shall mean that certain License and Research Agreement made effective by and between Rigel and Cell Genesys as of September 2, 1999, as first amended and restated by such parties on March 26, 2001 and subsequently amended and restated by such parties effective July 1, 2001, a partially redacted copy of the signed CG Agreement being appended to this Amendment as Exhibit C.

(c) "Novel Validated Angiogenesis Project Target" shall mean a Novel Validated Target identified in the Angiogenesis Project.

1.3 Research Period. The Collaboration Agreement is hereby amended to replace the definition of "Research Period" in its entirety with the following:

""**Research Period"** shall mean, for each Joint Project and At-Novartis Project other than the Angiogenesis Project, five years commencing as of the corresponding Commencement Date, subject to earlier termination as permitted hereby.

With respect to the Angiogenesis Project, the Research Period shall mean three (3) years after its Commencement Date."

ARTICLE 2

NUMBER OF PROJECTS; ANGIOGENESIS PROJECT; RIGHTS IN NOVEL VALIDATED ANGIOGENESIS TARGETS

2.1 Number of Projects. The Collaboration Agreement is hereby amended to replace the text of Section 2.1 thereof in its entirety with the following:

"Novartis may have access to up to five (5) Programs of Research of which at least three (3) will be Joint Projects and no more than two (2) will be At-Novartis Projects."

2.2 Angiogenesis Project. The Collaboration Agreement is hereby amended to insert, after Section 2.5 thereof, a Section 2.6 entitled "Angiogenesis Project" having the following as its text:

"The Program of Research constituting the Angiogenesis Project is as described at Exhibit A to this Second Amendment. The Angiogenesis Project shall be conducted as a Joint Project as provided in Section 4.1 of the Agreement and is one of the Programs of Research referred to in Section 2.1 of the Agreement; *provided*, that Novartis acknowledges that the Program of Research for the Angiogenesis Project may describe, and the Angiogenesis Project may therefore include, research that is also covered by the CG Agreement. The number of FTEs for each of the first three years of the Angiogenesis Project are set forth in Exhibit B, row B-4."

2.3 Discretionary Termination of Research Period: Section 4.5.1 of the Collaboration Agreement is hereby amended to insert the phrase "if applicable" immediately after the phrases "given Joint Project" and "such Joint Project" in the sixth and eighth lines, respectively, of such Section.

2.4 Exclusivity Term: Section 5.2 of the Collaboration Agreement is hereby amended to insert the phrase "and, with respect to the Angiogenesis Project only, subject furthermore to the provisions of the CG Agreement," immediately after the phrase "and subject to the provisions of Section 5.5," in the third line of such Section.

2.5 Novel Validated Angiogenesis Project Target. A new Section 6.5 shall be added to the Collaboration Agreement with the following as its text:

"**Novel Validated Angiogenesis Project Target.** The Parties recognize and acknowledge that as a part of Rigel's ongoing relationship with Cell Genesys in the angiogenesis field, Rigel has certain obligations and has granted certain rights to Cell Genesys that are each described and defined in the CG Agreement. Such rights of Cell Genesys may include without limitation (i) the nonexclusive right to use Novel Validated Angiogenesis Targets to research and develop Therapeutic Candidates (within the meaning of such term as defined and used in the CG Agreement); and (ii) pursuant to Section 2.2(b)(i) of the CG Agreement, the "royalty-free, exclusive, worldwide license, with the right to grant and authorize sublicenses, under any Information and intellectual property created by Rigel (solely or jointly with Novartis) under the Novartis Angiogenesis Collaboration, to make, have made, use, sell, offer for sale and import Therapeutic Candidates within the CG Program Field". The rights with respect to Novel Validated Angiogenesis Targets and Project Technology granted Novartis pursuant to the Collaboration Agreement and this Amendment are hereby made subject to any conflicting rights granted Cell Genesys pursuant to the CG Agreement solely to the extent of the conflict with such rights of Cell Genesys."

ARTICLE 3

FINANCIAL TERMS

3.1 Milestone Payments to Rigel. Novartis will pay Rigel Milestone Payments in respect of achievements in the Angiogenesis Project in the amounts and upon the events specified in Section 7.2 of the Collaboration Agreement.

3.2 Access Payment.

(a) Section 7.3 of the Collaboration Agreement is hereby amended to insert the phrase "other than the Angiogenesis Project" immediately after the phrase "each Joint Project" in the second line of such Section.

(b) Novartis shall pay Rigel a project access fee in relation to the Angiogenesis Project of four million dollars ($4,000,000) within thirty (30) days after the receipt of an invoice from Rigel on or after the Amendment Date.

3.3 Extension Fee. The Extension Fee payable by Novartis to extend the Exclusivity Term with respect to any Novel Validated Angiogenesis Project Target shall be as specified (with respect to any Novel Validated Target) pursuant to Section 7.5 of the Collaboration Agreement.

3.4 Research Support of Angiogenesis Project. The Collaboration Agreement is hereby amended by replacing Exhibit B thereto with the amended and restated Exhibit B appended to this Amendment.

ARTICLE 4

CONFIDENTIALITY

4.1 The following Section 10.2.3 shall be added to the Collaboration Agreement:

"Novartis is aware and authorizes that Rigel may disclose to Cell Genesys under the CG Agreement Confidential Information generated by Rigel solely or jointly with Novartis under the Angiogenesis Project, such Confidential Information to be used by Cell Genesys exclusively as provided in the CG Agreement."

ARTICLE 5

MISCELLANEOUS

5.1 This Amendment shall become effective upon the Amendment Date and will form an integral part of the Collaboration Agreement.

5.2 Except as expressly amended hereby, all clauses of the Collaboration Agreement shall remain unchanged in full force and effect.

5.3 This Amendment may be executed in two (2) or more counterparts, each of which shall be deemed an original, but all of which together shall constitute one and the same instrument.

IN WITNESS WHEREOF, the Parties hereto have duly executed this Second Amendment.

RIGEL PHARMACEUTICALS, INC.		**NOVARTIS PHARMA AG**	
By:	/s/ Raul R. Rodriguez	By:	/s/ J. Heim
Name:	Raul R. Rodriguez	Name:	J. Heim
Title:	Vice President, Business Development	Title:	Sr. Scientific Expert MCB

EXHIBIT A

ANGIOGENESIS PROJECT

[*]

EXHIBIT B

Exhibit B to the Collaboration Agreement shall be deleted and replaced in its entirety with the following:

"EXHIBIT B

Project	Number of Rigel FTEs	Commencement Date	Type of Project
B-1: T-Cell Project	12	Effective Date	Joint Project
B-2: B-Cell Project	12	August 24, 1999	Joint Project
B-3: Epithelial Cell Project	n.a.	January 1, 2000	At-Novartis Project
B-4: Angiogenesis Project	12 in first and second year after Commencement Date	Amendment Date	Joint Project
	8 in third year after Commencement Date		

EXHIBIT C

RIGEL-CELL GENESYS AGREEMENT (REDACTED)

See Exhibit 10.19 to Rigel Pharmaceuticals, Inc.'s Quarterly Report on Form 10Q for the quarter ended September 30, 2001

[*] = CERTAIN CONFIDENTIAL INFORMATION CONTAINED IN THIS DOCUMENT, MARKED BY BRACKETS, HAS BEEN OMITTED AND FILED SEPARATELY WITH THE SECURITIES AND EXCHANGE COMMISSION PURSUANT TO RULE 24b-2 OF THE SECURITIES EXCHANGE ACT OF 1934, AS AMENDED.

[*] = CERTAIN CONFIDENTIAL INFORMATION CONTAINED IN THIS DOCUMENT, MARKED BY BRACKETS, HAS BEEN OMITTED AND FILED SEPARATELY WITH THE SECURITIES AND EXCHANGE COMMISSION PURSUANT TO RULE 24b-2 OF THE SECURITIES EXCHANGE ACT OF 1934, AS AMENDED.

EXHIBIT 10.19

LICENSE AND RESEARCH AGREEMENT
(Amended and Restated)

THIS LICENSE AND RESEARCH AGREEMENT (the "Agreement") is made and entered into as of September 2, 1999, (the "Effective Date"), as first amended and restated on March 26, 2001 and again amended and restated on July 1, 2001 (the "Restatement Date"), by and between Rigel Pharmaceuticals, Inc., a corporation organized under the laws of Delaware and having a principal place of business at 240 East Grand Avenue, South San Francisco, CA 94080 ("Rigel") and Cell Genesys, Inc., a corporation organized under the laws of Delaware and having a principal place of business at 342 Lakeside Drive, Foster City, CA 94404 ("CG"). Rigel and CG may be referred to collectively as the "Parties," or individually as a "Party."

RECITALS

WHEREAS, CG controls rights to certain patents relating to **[*]** cell lines **[*]** and **[*]** cell lines (Rockefeller), and related technology;

WHEREAS, Rigel has a license to the **[*]** cell lines, associated vectors and vector libraries under intellectual property rights owned by Stanford University;

WHEREAS, CG and Rigel desire to enter into an agreement granting each other licenses under such patents and other intellectual property rights as provided herein;

WHEREAS, Rigel is in the business of, among other things, providing services for identifying molecules which bind together in intracellular signaling pathways, and CG desires that Rigel perform such services for CG to identify peptides, proteins and/or Genetic Material (as defined below) that modulate angiogenesis in endothelial tissues;

WHEREAS, Rigel wishes to perform additional research in the Field of Research (as defined below) for CG and Novartis Pharma AG ("Novartis") funded by Novartis, as a combined program of research expanding upon the research that Rigel has already as of the Restatement Date conducted, such that Rigel will be able to continue its research effort in the Field of Research and the overall resources that Rigel will be able to devote to identifying peptides, proteins and/or Screened Genetic Material (as defined below) that modulate angiogenesis in endothelial tissues will be increased; and

WHEREAS, The Parties wish to confirm CG rights to all Therapeutic Candidates (as defined below) that Rigel identifies in the combined research program, but Rigel needs, in order to make such arrangement acceptable to Novartis, the unambiguous right pursuant to this Agreement to grant Novartis certain rights with respect to all Targets (as defined below) for Novartis's use as targets in Novartis's drug discovery efforts, and CG is willing to waive certain of its rights and to amend and restate this Agreement to assure Rigel such unambiguous right;

NOW THEREFORE, in consideration of the foregoing premises and the covenants and promises contained in this Agreement, the Parties agree as follows:

ARTICLE 1

DEFINITIONS

1.1 "Affiliate" shall mean, with respect to a Party to this Agreement, any other entity, whether de jure or de facto, which directly or indirectly controls, is controlled by, or is under common control with, such Party. A business entity or Party shall be regarded as in control of another business entity if it owns, or directly or indirectly controls, at least fifty percent (50%) (or such lesser percentage which is the maximum allowed to be owned by a foreign entity in a particular jurisdiction) of the voting stock or other ownership interest of the other entity, or if it directly or indirectly possesses the power to direct or cause the direction of the management and policies of the other entity by any lawful means whatsoever.

1.2 "CG Collaboration Partners" means those third parties which enter into a research or development agreement with CG under which CG conducts substantial research or development activities in collaboration with such third party and grants a license to such third party under patents and/or know-how owned or controlled by CG in addition to a sublicense under the Rigel Biological Materials or Rigel Know-How, which licenses and sublicense are for the further development and commercialization of the results of such collaborative research or development.

1.3 "CG [*] Field" means human Gene Therapy and animal Gene Therapy.

1.4 "CG Know-How" means all Information Controlled by CG as of the Effective Date that is necessary or useful for practicing the CG Patents.

1.5 "CG License" means the license agreement between CG and Rockefeller University as in effect as of the Effective Date and attached hereto as Appendix A.

1.6 "CG Patents" means the Patents and applications listed on Appendix B, to the extent the same are Controlled by CG.

1.7 "CG Program Field" means the research, development or commercialization of human or animal therapeutic products and services, which products and/or services are comprised of peptides, proteins or Gene Therapy.

1.8 "Control" or "Controlled" means ownership of, or a license to, a particular item, material or intellectual property right with the ability to grant to the other Party access to and/or a license or sublicense as provided for herein without violating the terms of any agreement with a Third Party under which such rights were acquired from such Third Party.

1.9 "Field of Research" means identification of peptides, proteins and/or Genetic Material that modulate angiogenesis in endothelial tissues.

1.10 "FTE" means a full-time employee or consultant of Rigel or the equivalent thereof.

1.11 "FTE Year" means the amount of time one FTE would spend working during one (1) calendar year.

1.12 "Gene Therapy" means a product or service for the treatment or prevention of a disease that utilizes *ex vivo* or *in vivo* delivery (via viral or nonviral gene transfer methods or systems) of Genetic Material, including any cell incorporating Genetic Material.

1.13 "Genetic Material" means a nucleotide sequence, including DNA, RNA and complementary and reverse complementary nucleotide sequences thereto, whether coding or noncoding and whether intact or a fragment.

1.14 "Information" means any and all information, including without limitation techniques, inventions, practices, methods, knowledge, know-how, skill, experience, test data, analytical and quality control data, compositions and assays, and any business, marketing, personnel or financial information or matters.

1.15 "Novartis Angiogenesis Collaboration" means Rigel's Collaboration Agreement with Novartis dated May 29, 1999, as amended, but solely to the extent covering a program of research directed to the field of target identification and validation as they relate to the role of endothelial cell function in angiogenesis, together with such research program and results obtained therein, but specifically excluding Novartis's research and research results using Targets identified by Rigel (or jointly by Rigel and Novartis) pursuant to such research program.

1.16 "Patent" means an issued, valid, unexpired patent, including any extension, registration, confirmation, reissue, re-examination or renewal thereof, or a pending application for a patent, in any country, region or jurisdiction.

1.17 "Program Know-How" shall mean any Information developed in the Research relating to the development of Therapeutic Candidates, excluding Information relating to Targets that are not Therapeutic Candidates.

1.18 "Program Patent" shall mean a Patent claiming inventions or discoveries in the Program Know-How.

1.19 "Program Technology" shall mean Program Know-How and Program Patents.

1.20 "Research" shall have the meaning provided in Section 3.1(a). For purposes of this Agreement, Rigel's activities in the Field of Research under the Novartis Angiogenesis Collaboration shall be included within "Research."

1.21 "Research Plan" shall have the meaning provided in Section 3.1(a).

1.22 "Rigel Biological Materials" means the **[*]** cell lines, associated vectors and vector libraries set forth in Appendix C.

1.23 "Rigel Collaboration Partners" means those third parties which enter into a research or development agreement with Rigel under which Rigel conducts substantial research or development activities in collaboration with such third party and grants a license to such third party under patents and/or know-how owned or controlled by Rigel in addition to a sublicense under CG Patents and/or CG Know-How, which licenses and sublicense are for the further development and commercialization of the results of such collaborative research or development.

1.24 "Rigel Field" means the creation and use of virally produced peptide and protein libraries for the screening of transdominant effector peptides and RNA molecules as claimed in the patent applications set forth on Appendix D as well as any processes, techniques and applications disclosed in the foregoing patent applications; it is understood that the foregoing technology is to be used for (a) the discovery, validation and development of targets for human or animal therapeutics, including without limitation Targets, and (b) the discovery, testing, development and commercialization of therapeutic, diagnostic and drug delivery products other than Therapeutic Candidates. For the purposes of this Section 1.23, "disclosed in" shall mean disclosed in the specifications of such patent applications as necessary to practice the invention claimed and not solely as part of the description of the prior art.

1.25 "Rigel Know-How" means all Information Controlled by Rigel as of the Effective Date necessary or useful for the use or modification of the Rigel Biological Materials.

1.26 "Rigel License" means the license agreements between Rigel and Stanford University as in effect as of the Effective Date and attached hereto as Appendix E.

1.27 "RMC" shall have the meaning provided in Section 3.2.

1.28 "Screened Genetic Material" shall mean Genetic Material identified via screening against a Target, but which Genetic Material is not a Therapeutic Candidate.

1.29 "Success Criteria" shall have the meaning provided in Section 3.1(b).

1.30 "Tail End Period" shall mean the period of six (6) months after the end of the Research Period, the purpose of which is to permit the RMC to identify Therapeutic Candidates; provided, however, that if this Agreement is terminated prior to or during the Tail End Period, the Tail End Period shall be deemed to end upon such termination date.

1.31 "Target" shall mean a molecule occurring naturally in the body that is shown in the Research (whether pursuant to this Agreement or the Novartis Angiogenesis Collaboration), to directly or indirectly cause or impede angiogenesis in endothelial tissue, to the extent such molecule (or its binding to another molecule) is agonized or antagonized by a Therapeutic Candidate. It is understood that a particular protein, peptide or Genetic Material could be both a Therapeutic Candidate and a Target, and in such case such molecule shall be treated as a "Target" hereunder to the extent that such molecule is used as a drug discovery target, and shall at the same time be treated as a "Therapeutic Candidate" hereunder to the extent such molecule is used as a drug or therapy. The rights of the Parties with respect to Targets that are also Therapeutic Candidates are as set forth in Section 2.4. Rigel's rights to grant Novartis sublicense rights hereunder to use Targets are as set forth in Section 2.1(b). The exclusion of Novartis' research and research results using Targets from the Novartis Angiogenesis Collaboration (and therefore the provisions of this Agreement) are as set forth in Section 1.15.

1.32 "Therapeutic Candidate" shall mean a peptide, protein or Genetic Material discovered, identified, produced or tested during the Research Period pursuant to the Research (whether pursuant to this Agreement or pursuant to the Novartis Angiogenesis Collaboration), or identified during the Tail End Period, by either Party, which meets the Success Criteria, and any homologues or derivatives thereof. For such purposes, it is understood that if a protein or peptide meets the Success Criteria, Genetic Material that codes for such protein or peptide (or homologues or derivatives of such Genetic Material) shall be within the definition of Therapeutic Candidate (and vice-versa). The rights of the Parties with respect to Therapeutic Candidates that are also Targets are as set forth in Section 2.4.

1.33 "[*] Patents" means the patents listed in Appendix F.

ARTICLE 2

LICENSES

2.1 CG License Grants.

(a) Subject to the terms of the CG License, CG hereby grants to Rigel a royalty-free, non-exclusive, worldwide license, with the right to sublicense to Rigel Collaboration Partners, under and to CG's right, title and interest in the CG Patents and CG Know-How, and under and to CG's right, title and interest in any Program Technology owned solely by CG, all for purposes solely within the Rigel Field; and hereby waives any claims against Rigel for the practice and use of the CG Patents and CG Know-How within the Rigel Field prior to the Effective Date. Any sublicense granted hereunder to Rigel Collaboration Partners shall be limited to the purposes of such collaboration (as such purposes are described in Section 1.22 above).

(b) Subject to Section 2.4 below, CG hereby grants to Rigel:

(i) a royalty-free, exclusive, worldwide license, with the right to grant and authorize sublicenses, under CG's right, title and interest in the Program Technology that is owned jointly by the Parties under Section 4.1(d) below, and Targets that are similarly owned jointly with Rigel, all to make and use the Targets for purposes outside the CG Program Field; and

(ii) a royalty-free, exclusive, worldwide license, under CG's right, title and interest in the Program Technology that is owned jointly by the Parties under Section 4.1(d) below, and Targets that are similarly owned jointly with Rigel, all to make and use the Targets as targets for the purposes of elucidating protein pathways and identifying, researching, developing and/or commercializing proteins, peptides, antibodies, Screened Genetic Material, other biological agents and synthetic organic molecules that are not themselves Therapeutic Candidates but that modulate angiogenesis in endothelial tissues solely in connection with the Novartis Angiogenesis Collaboration. Such license does not extend to the making or use of Targets for the purposes of development and/or commercialization of Therapeutic Candidates in the CG Program Field.

It is understood and agreed that the licenses granted above in this Section 2.1(b) shall specifically exclude the right to make or use any Target or Therapeutic Candidate as a therapeutic agent or for purposes relating to delivery of a Target or Therapeutic Candidate via Gene Therapy. The license set forth in Section 2.1(b)(ii) above shall include the right to grant a sublicense solely to Novartis under the Novartis Angiogenesis Collaboration and to authorize further sublicenses by Novartis solely in connection with Novartis's research and development programs; *provided* that any sublicense from Rigel to Novartis under the rights licensed to Rigel pursuant to Section 2.1(b)(ii) (and any further sublicense by Novartis under such rights) shall not exceed the scope of the license granted Rigel pursuant to Section 2.1(b)(ii). Rigel shall retain the right to grant to CG the licenses set forth in Section 2.2 of this Agreement. If Rigel fails to retain such right under the Novartis Angiogenesis Collaboration, the license granted Rigel under Section 2.1(b)(ii) shall terminate.

(c) CG has entered into a license agreement with the **[*]** concerning the **[*]** Patents which includes the right to sublicense (the "**[*]** Agreement"); as of the Effective Date, however, the terms under which CG may grant sublicenses under the **[*]** Agreement make impractical a sublicense to Rigel under the **[*]** Patents for purposes of the Rigel Field. In the event that CG successfully renegotiates the terms of the **[*]** Agreement such that such sublicense would be practical, CG agrees to discuss in good faith the grant of a sublicense to Rigel under the **[*]** Patents. The Parties understand and agree, however, that CG is not and shall not be obligated to enter into any agreement with Rigel concerning the **[*]** Patents, that failure to reach such an agreement for any reason shall not be deemed a breach of this Agreement and that this Section 2.1(c) shall not be deemed to preclude CG from entering into an agreement with a third party of any type or at any time concerning the **[*]** Patents.

2.2 Rigel License Grants.

(a) Subject to the terms and prior to the termination or expiration of the Rigel License, the Parties agree that Rigel shall grant to CG, at CG's sole option and upon CG's request, a royalty-free, non-exclusive, worldwide license, without the right to sublicense, under Rigel's right, title and interest in the Rigel Know-How and Rigel Biological Materials, to make, have made, use, sell, offer for sale and import products in the CG **[*]** Field. It is understood that in no event will CG have any obligation to obtain such license from Rigel. Rigel will give CG thirty (30) days prior written notice of the termination of the Rigel License by Rigel.

(b) Rigel hereby grants to CG:

(i) subject to Section 2.1(b) above, (y) a royalty-free, exclusive, worldwide license, with the right to grant and authorize sublicenses, under Rigel's right, title and interest in the Program Technology (including without limitation the Therapeutic Candidates) owned solely by Rigel or jointly with CG, to make, have made, use, sell, offer for sale and import products, and otherwise exploit the Program Technology, in each case for purposes solely within the CG Program Field, and (z) a royalty-free, exclusive, worldwide license, with the right to grant and authorize sublicenses, under any Information and intellectual property created by Rigel (solely or jointly with Novartis) under the Novartis Angiogenesis Collaboration, to make, have made, use, sell, offer for sale and import Therapeutic Candidates within the CG Program Field; and

(ii) subject to rights previously granted to third parties, a royalty-free, non-exclusive, worldwide license, with the right to grant sublicenses, under Rigel's right, title and interest in and to all Patents with priority dates prior to the Effective Date that claim Therapeutic Candidates, or the manufacture or use thereof, to make, have made, use and sell products in Gene Therapy incorporating such Therapeutic Candidates.

(c) In addition, Rigel hereby grants to CG (i) a royalty-free, non-exclusive license, with the right to sublicense to CG Collaboration Partners, under Rigel's right, title and interest in the Targets to make and use the Targets solely for the research and development of the Therapeutic Candidates in the Field of Research, and (ii) a royalty-free, non-exclusive license, with the right to sublicense to CG Collaboration Partners, under any Information and intellectual property created by Rigel (solely or jointly with Novartis) under the Novartis Angiogenesis Collaboration, to make and use the Targets solely for the research and development of the Therapeutic Candidates in the Field of Research. For clarity, it is understood and agreed that the licenses granted to CG under this Section 2.2 specifically exclude the performance by CG of research on or with a Target which is outside the Field of Research. Any sublicense granted hereunder to CG Collaboration Partners shall be limited to the purposes of such collaboration.

2.3 Rigel Covenant. Rigel hereby covenants that neither Rigel nor its Affiliates will make any claims against CG, its permitted sublicensees, distributors and customers in the chain of title with CG or its permitted sublicensees for Patent infringement as a result of activities which are explicitly permitted under the terms of this Agreement, nor shall Rigel or its Affiliates authorize a third party to make such a claim, and Rigel agrees to cooperate with CG in the defense against any such claim by licensees of Rigel.

2.4 Molecules That Are Both Targets and Therapeutic Candidates. With respect to each particular protein, peptide or Genetic Material that is both a Target and a Therapeutic Candidate (each a "Dual Molecule"), the parties agree that (i): CG shall have (y) the exclusive right to research, develop, make, have made, use, sell, offer for sale and import such Dual Molecule (including homologues and derivatives of such Genetic Material) as a therapeutic agent or such Dual Molecule (including homologues and derivatives of such Genetic Material) for Gene Therapy, and (z) to make and use such Dual Molecule in accordance with Sections 2.2(b) and (c); and (ii) Rigel shall have the exclusive right to research, develop, make, have made and use such Dual Molecule for the purposes set forth in Section 2.1(b)(i); and (iii) Rigel shall have the exclusive right to research, develop, make, have made and use such Dual Molecule for the purposes set forth in Section 2.1(b)(ii). For the sake of clarity, CG's exclusive rights as described in this Section 2.4 shall not be construed to exclude Rigel or its permitted licensees from making and using such molecule as a target in research to elucidate protein or other signal transduction pathways in which such Dual Molecule is involved, or to discover, generate, develop and commercialize proteins, peptides, antibodies, Screened Genetic Material, other biological agents and synthetic organic molecules that may or may not modulate the activity of such Target or pathways but are not themselves Therapeutic Candidates. All activities of Rigel with respect to the use of Targets shall remain subject to the provisions of Section 3.5.

2.5 No Other License. No right or license is granted by either Party to the other under any other intellectual property other than those items expressly included in the licenses granted in this Article 2. Accordingly, no license shall be deemed granted by implication, estoppel or otherwise, if such license is not expressly and specifically granted in this Article 2.

ARTICLE 3

RESEARCH

3.1 Research.

(a) Rigel agrees to (i) use diligent efforts to conduct research within the Field of Research (the "Research"), in accordance with the research plan (the "Research Plan") incorporated hereby in, and appended to, this Agreement as Appendix G, as amended from time to time by written agreement of the Parties; and (ii) use

diligent efforts to meet the goals of the Research Plan according to the timetables set forth therein. Without limiting the foregoing, the Research shall commence on the Effective Date and terminate upon the earlier of three (3) years after the Effective Date or the termination of the Agreement (the "Research Period"). Rigel will commit **[*]** during each year of the Research Period, or such other allocation as the RMC may decide, provided that in the event the RMC decides to reallocate FTEs between years, Rigel shall have no obligation to commit more than **[*]** in total over the entire Research Period. It is understood and agreed that the scope of CG's licenses under Section 2.2 shall not be limited by (x) the number of FTEs performing the Research, (y) whether such FTEs are performing research in accordance with the Research Plan or under the Novartis Angiogenesis Collaboration, or (z) whether such FTEs are funded by Rigel, Novartis, or some other entity. The individual FTEs who will initially conduct the Research are listed in Appendix H and may be replaced by Rigel, as reasonably agreed by the Parties, with other FTEs of comparable skill and expertise. Rigel agrees to test against the Success Criteria during the Research Period any proteins, peptides and Genetic Material produced or evaluated in connection with the Research as contemplated in the Research Plan.

(b) The Parties shall reasonably establish criteria for determining whether a particular peptide, protein or Genetic Material modulates angiogenesis in endothelial tissue in assays performed at Rigel, as such criteria are contemplated in the Research Plan (the "Success Criteria").

3.2 Research Management Committee. The Parties shall form a research management committee (the "RMC") comprised of four (4) individuals, two (2) being Rigel employees appointed and replaced by Rigel at its discretion, and two (2) being CG employees appointed and replaced by CG at its discretion. The size and composition of the RMC may be modified by mutual agreement of the Parties. The RMC shall evaluate the results of the Research set forth in the research reports pursuant to Section 3.4(a) to assess whether a peptide, protein or Genetic Material is a Therapeutic Candidate, and perform such other duties as specifically delegated to the RMC by mutual written agreement of the Parties.

3.3 RMC Meetings and Actions. RMC meetings shall take place at such times and places as shall be determined by the RMC in order for the RMC to fulfill its obligations under Section 3.2. It is expected that the meetings will alternate between appropriate offices of each Party, or at such other convenient locations as agreed. If agreed by its members, the RMC may conduct meetings by telephone or video conference or other acceptable electronic means, provided that any decisions made during such meeting are recorded in writing and confirmed by signature of at least one (1) of the RMC members from each of the Parties. All decisions of or actions taken by the RMC shall be by unanimous approval of all the members of the RMC, and voting on any matters shall be reflected in the minutes of the meeting at which the vote was taken. If the RMC is unable to reach unanimous decision on any particular matter or issue, such matter or issue shall be referred to the chief executive officer of each Party or their designees for resolution. It is understood that, for purposes of determining the Parties' rights and obligations under this Agreement, the authority of the RMC shall be limited to deciding those specific issues specifically delegated to the RMC in other Articles of this Agreement (i.e., other than the general matters described in this Article 3).

3.4 Reports; Disclosure.

(a) Rigel shall keep CG fully informed of the progress and results of the Research (including the discovery of Targets and/or Therapeutic Candidates made through its Research under the Novartis Angiogenesis Collaboration) and shall provide written reports at or before each RMC meeting describing its activities, the level of effort applied to, and the results of, the Research, specifically including Rigel's determination as to which peptides, proteins or Genetic Material as of the date of such report meet the Success Criteria. Such RMC reports shall be in such form and contain such detail as the RMC shall determine. Rigel agrees to fully disclose to CG the Program Technology and the Targets, and to provide CG with reasonable quantities of Targets and Therapeutic Candidates generated or utilized in connection with the Research.

(b) Rigel agrees to maintain records of its activities in performing the Research, in good scientific manner, and to permit CG to have access to such records upon ten (10) days written notice to Rigel and during regular business hours, to the extent reasonably necessary to verify that Rigel has met its obligations under this Section 3.4.

3.5 Exclusivity of Efforts. Except as explicitly set forth in this Section 3.5, Rigel agrees that neither Rigel nor any of its Affiliates shall directly or indirectly conduct or sponsor any research, develop or otherwise commercialize any products or technologies within the Field of Research, other than pursuant to the Research Plan, during the Research Period and for a period of one (1) year following the Research Period. Without limiting the foregoing, Rigel shall not appoint or license any third party to develop, market, sell or otherwise distribute such products until after the expiration of one (1) year following the Research Period. Notwithstanding the foregoing in this Section 3.5 and subject toSection 2.1(b), Rigel shall be entitled to enter into the Novartis Angiogenesis Collaboration.

ARTICLE 4

INTELLECTUAL PROPERTY MATTERS

4.1 Ownership and Prosecution. Subject to the terms of this Agreement, as between the Parties hereto:

(a) It is understood that CG retains its entire right, title and interest in the CG Patents and CG Know-How, subject only to the rights expressly granted to Rigel hereunder, and shall have the right, but not the obligation, to file, prosecute and maintain any Patents related thereto at its expense.

(b) It is understood that Rigel retains its entire right, title and interest in the Rigel Biological Materials and Rigel Know-How, subject only to the rights expressly granted to CG hereunder, and shall have the right, but not the obligation, to file, prosecute and maintain any Patents related thereto at its expense.

(c) It is understood that, subject only to the rights expressly granted to the other Party hereunder, each Party retains its entire right, title and interest in and to any inventions, discoveries, know-how, trade secrets, and other information made or developed solely by such Party and/or its consultants in the course of the performance of this Agreement ("Sole Inventions"), and, subject to subsection (e) below, shall have the right, but not the obligation, to file, prosecute and maintain any Patents claiming its Sole Inventions ("Sole Patents") in all countries of the world.

(d) Both Parties shall jointly own any inventions, discoveries, know-how, trade secrets, and other information, that are made jointly by the Parties in the course of the performance of this Agreement ("Joint Inventions"). Subject to subsection (e) below, the RMC shall designate the Party which shall be responsible for filing, prosecuting and maintaining Patents claiming Joint Inventions ("Joint Patents"). All costs and expenses of filing, prosecuting and maintaining such Joint Patents will be borne equally by the Parties. The Party designated by the RMC to perform patenting activities shall seek the comments of the other Party and shall keep the other informed of the progress of such prosecution by providing quarterly status reports and copies of all correspondence between their patent counsel and the patent offices of the countries where such applications were filed. Such other Party shall reasonably assist the Party designated by the RMC in the prosecution of Joint Patents, including, without limitation, by executing any necessary powers of attorney. Subject to the rights and licenses granted to the other Party in Section 2.1(b) and 2.2(b), it is understood that neither Party shall have any obligation to account to the other, or obtain the consent of the owner, with respect to the commercialization, licensing or enforcement of any Joint Inventions or Joint Patents, and hereby waives any right it may have under the laws of any country to require such accounting or consent.

(e) CG shall have the right but not the obligation (either itself or through its designee) to file, prosecute and maintain Patents claiming Therapeutic Candidates ("Candidate Patents"); provided, however, that for any molecule that is a Therapeutic Candidate and a Target: (i) CG shall have the right but not the obligation (either itself or through its designee) to file, prosecute and maintain Patents claiming uses of such molecule in the CG Program Field and such Patents also shall be Candidate Patents; and (ii) Rigel shall have the right, but not the obligation, to file, prosecute and maintain any Patents claiming the composition of matter of such molecule or claiming any use of the molecule outside the CG Program Field or in the Rigel Field. All costs and expenses of filing, prosecuting and maintaining Candidate Patents will be borne by the Party that undertakes such prosecution. The Party undertaking such prosecution shall seek the comments of the other Party and shall keep the other Party informed of the progress of such prosecution by providing quarterly status reports and copies of all correspondence between their patent counsel and the patent offices of the countries where such applications were filed. Each Party shall reasonably assist the other Party in the prosecution of Candidate Patents, including, without limitation, by executing any

necessary powers of attorney and other documents necessary for such prosecution.

(f) Each Party agrees to keep the other Party fully informed as to prosecution and maintenance (including without limitation any interference, opposition or other prosecution or other proceedings) with respect to patents claiming and disclosing subject matter within the Program Technology. In the event that a Party elects not to prosecute or maintain any patent rights in a Sole Invention comprising Program Technology, it shall promptly notify the other Party and authorize the other Party to seek or continue such prosecution and maintenance at such other Party's expense. In such case the owner of such Sole Invention shall cooperate fully with the other Party to facilitate such prosecution and maintenance.

4.2 Infringement and Similar Actions. As between the Parties hereto:

(a) CG shall have the sole and exclusive right, at its expense, to prosecute any and all infringement or wrongful use of the CG Patents and CG Know-How, and (subject to paragraph (c) below) Sole Patents owned by CG and/or to enter settlements, judgments or other arrangements respecting such infringement or wrongful use. CG may retain all damages and other amounts recovered as a result of any such action, settlement, judgment or other arrangement.

(b) Rigel shall have the sole and exclusive right, at its expense, to prosecute any and all infringement or wrongful use of the Rigel Know-How, the Rigel Biological Materials, and (subject to paragraph (c) below) Sole Patents owned by Rigel and/or to enter settlements, judgments or other arrangements respecting such infringement or wrongful use. Rigel may retain all damages and other amounts recovered as a result of any such action, settlement, judgment or other arrangement.

(c) With respect to infringement of any Program Patents in the CG Program Field, CG shall have the right, but not the obligation, (directly or through designees) to institute, prosecute and control at its own expense and for its own benefit, any action or proceeding with respect to such infringement. With respect to other infringement of any Program Patents (i.e., outside the CG Program Field), Rigel shall have the right, but not the obligation, (directly or through designees) to institute, prosecute and control, at its own expense and for its own benefit, any action or proceeding with respect to such infringement. If a Party with the right to do so fails to bring an action or proceeding against a suspected infringer within a reasonable period after receiving a written request by the other Party to do so, such other Party shall have the right to bring and control an action against such infringer by counsel of its own choice and retain for its own account any amounts recovered from third parties. If one Party brings any such action or proceeding, the other Party agrees to be joined as a Party plaintiff if necessary to prosecute the action and to give the first Party reasonable assistance and authority to file and prosecute the suit.

(d) Each Party shall promptly notify the other in writing of any alleged or threatened infringement of Joint Patents of which it becomes aware and which may adversely impact the rights of the Parties hereunder. Promptly upon such notification, the Parties shall meet to discuss the strategy and appropriate steps to be taken to deal with such infringement. Any recovery obtained by settlement or otherwise shall be disbursed as follows: first, any reasonable expenses incurred in connection with such action (including counsel fees) by both Parties are reimbursed; thereafter, the net recovery shall be shared between the Parties according to the ratio of their respective contributions to the litigation costs. This paragraph shall not be deemed to limit the Parties' respective rights to enforce Joint Patents, or to limit the rights granted under paragraph (c) above.

4.3 Third Party Claims.

(a) Except to the extent expressly warranted in Article 7, and subject to the indemnification obligation in Article 5, CG shall have no liability to Rigel with respect to any claim, suit or action alleging that the practice of the license rights granted by CG under Section 2.1 infringes any intellectual property or other right of a third party. Except to the extent expressly warranted in Article 7, and subject to the indemnification obligation in Article 5, Rigel shall have no liability to CG or its Affiliates with respect to any claim, suit or action alleging that the practice of the license rights granted under Section 2.2 infringes any intellectual property or other rights of a third party.

(b) Rigel hereby agrees to provide reasonable assistance to CG, at its request, in defending any action or claim initiated by a third party against CG arising from any claim that the use or practice of the Rigel Know-How, Rigel Biological Materials or the Target by CG or its Affiliates infringes that third party's proprietary rights. CG hereby agrees to provide Rigel reasonable assistance, at its request and expense, in defending any action or claim initiated by a third party against Rigel or its Affiliates arising from any claim that the use or practice of the CG Patents or CG Know-How by Rigel or its Affiliates infringes that third party's proprietary rights.

(c) If a third party asserts against CG that a patent, trademark or other intangible right owned by it is infringed by any product in the CG Program Field derived or resulting from or incorporating Program Technology, CG will be solely responsible for defending against any such assertions at its cost and expense. Each Party will give prompt written notice to the other of any such claim. Rigel will assist in the defense of any such claim as reasonably requested by CG, at CG's expense, and may retain separate counsel at its own expense at any time.

(d) Neither Party shall enter into any settlement of any claim which would admit the invalidity of Patents within the Program Technology without the other Party's prior written consent, which consent shall not be unreasonably withheld or delayed.

4.4 Pass-Through Royalties. In consideration for the licenses granted herein:

(a) Rigel agrees to pay any amounts which CG is required to pay to Rockefeller University under the CG License as a result of CG's grant to Rigel of license rights to CG Patents or CG Know-How to Rigel or the exercise of the license rights granted by CG under the CG License.

(b) Rigel agrees to pay CG (i) **[*]** for the license granted to Rigel hereunder to the CG Patents related to the **[*]** cell lines, and (ii) **[*]** for each sublicense granted by Rigel under this Agreement.

(c) CG agrees that in the event CG exercises its option to obtain a license pursuant to Section 2.2(a) above, CG will pay any amounts which Rigel is required to pay to Stanford University under the Rigel License as a result of Rigel's grant to CG of license rights to Rigel Biological Materials or Rigel Know-How to CG or the exercise of the license rights granted by Rigel under the Rigel License. It is understood that unless and until CG obtains such license rights from Rigel, CG shall not be obligated to pay to Rigel or to Stanford University any amounts that Rigel is required to pay to Stanford University under the Rigel License.

ARTICLE 5

INDEMNIFICATION

5.1 CG Indemnity. CG agrees to indemnify, hold harmless and defend Rigel, its Affiliates, agents and employees from and against any and all liabilities, losses, damages, costs, fees and expenses, including reasonable legal expenses and attorneys' fees (collectively, "Losses") arising out of suits, claims, actions, or demands, brought or made by a third party ("Third Party Claim") against Rigel, its Affiliates, agents and employees, based on (i) CG's use and practice of the Rigel Know-How, Rigel Biological Materials, the Program Technology or the Targets, or (ii) breach of CG's warranties under Article 7 below, or (iii) the manufacture, use, handling, storage, sale or other disposition of Rigel Biological Materials, Program Technology, the Targets or any products resulting or derived from the Rigel Biological Materials or the Program Technology by CG, its Affiliates, agents, employees or sublicensees, all except to the extent such Losses or Third Party Claims result from the negligence or willful misconduct of Rigel or a breach of Rigel's warranties under Article 7 below.

5.2 Rigel Indemnity. Rigel agrees to indemnify, hold harmless and defend CG, its Affiliates, agents and employees from and against any and all Losses arising out of any Third Party Claims against CG, its Affiliates, agents and employees based on (i) Rigel's use or practice of the CG Patents the CG Know-How or the

Program Technology, (ii) breach of Rigel's warranties under Article 7 below, or (iii) the manufacture, use, handling, storage, sale or other disposition of Program Technology, the Targets or any products resulting or derived from the Program Technology by Rigel, its Affiliates, agents, employees or sublicensees, all except to the extent such Losses or Third Party Claims result from the negligence or willful misconduct of CG, or a breach of CG's warranties under Article 7 below.

5.3 In the event that a Party is seeking indemnification under this Article 5, it shall inform the other Party of a claim or suit as soon as reasonably practicable after it receives notice of the claim or suit, shall permit the indemnifying Party to assume direction and control of the defense of the claim or suit (including the right to settle the claim or suit solely for monetary consideration), and shall cooperate as reasonably requested (at the expense of the indemnifying Party) in the defense of the claim or suit. Neither Party will enter into any settlement or claim pursuant to this Section 5.3 which is materially adverse to the rights of the other Party herein, without the other Party's prior written consent, which will not be unreasonably withheld or delayed.

ARTICLE 6

CONFIDENTIALITY

6.1 Confidentiality. Except to the extent expressly authorized by this Agreement or otherwise agreed in writing, the Parties agree that, for the term of this Agreement and for five (5) years thereafter, the Party receiving any Information or materials furnished to it by the other Party pursuant to this Agreement (collectively, "Confidential Information") shall keep confidential and shall not publish or otherwise disclose or use such Confidential Information for any purpose other than as provided for in this Agreement.

6.2 Exceptions. The obligations in Section 6.1 shall not apply to any Information or materials to the extent that the receiving Party can establish by competent proof that such Information or materials:

(a) was already known to the receiving Party, other than under an obligation of confidentiality, at the time of disclosure by the other Party;

(b) was generally available to the public or otherwise part of the public domain at the time of its disclosure to the receiving Party;

(c) became generally available to the public or otherwise part of the public domain after its disclosure and other than through any act or omission of the receiving Party in breach of this Agreement; or

(d) was disclosed to the receiving Party, other than under an obligation of confidentiality, by a Third Party who had no obligation to the disclosing Party not to disclose such information to others.

6.3 Authorized Disclosure. Each Party may disclose the other's Confidential Information to the extent such disclosure is reasonably necessary (i) to exercise the rights granted to such Party hereunder (including the right to grant sublicenses as permitted by this Agreement provided that prior to any disclosure to a sublicensee, such sublicensee has executed a confidentiality agreement with terms corresponding to this Article 6); and (ii) to file or prosecute patent applications, to prosecute or defend litigation, to comply with applicable governmental regulations or to conduct preclinical or clinical trials; provided that if a Party is required by law or regulation to make any such disclosure of the other Party's Confidential Information it will, except where impracticable for necessary disclosures, for example in the event of medical emergency, give reasonable advance notice to the other Party of such disclosure requirement and, except to the extent inappropriate in the case of patent applications, will use its best efforts to secure confidential treatment of such Confidential Information required to be disclosed.

6.4 Survival. This Article 6 shall survive the termination or expiration of this Agreement for a period of five (5) years.

ARTICLE 7

WARRANTY MATTERS

7.1 Limited Warranties. CG hereby represents and warrants to Rigel that CG has the full right and power to grant the licenses granted to Rigel under Section 2.1(a). Rigel hereby represents and warrants to CG that Rigel has the full right and power to grant the licenses granted to CG under Section 2.2.

7.2 General Warranties. Each of the Parties hereby represents and warrants to the other that (i) it is a corporation duly organized and validly existing in good standing under the laws of its state of incorporation, (ii) it is duly qualified and authorized to enter into and perform its obligations under this Agreement, (iii) it has full power, authority and legal right to enter into and perform this Agreement, and (iv) the execution, delivery, and performance of this Agreement has been duly authorized by all necessary corporate action on the part of each Party and does not contravene any law binding on it, its Articles of Incorporation or Bylaws, any indenture, mortgage, contract or other agreement to which it is a Party or by which it is bound or any laws, governmental rule, regulation or order.

7.3 Intellectual Property Warranties.

(a) Each of the Parties hereby represents and warrants to the other that (i) it does not Control any Patents that would dominate the Patents licensed to the other Party hereunder, (ii) it is not aware of any claims of a third party which would call into question the rights of such Party in the licensed subject matter or its right to grant the licenses granted to the other Party hereunder, (iii) it has provided the other Party with all information concerning royalty obligations pertinent to the licenses granted to the other Party hereunder; and (iv) it will use commercially reasonable efforts to keep in force any license agreement from which the license or sublicense granted to the other Party under this Agreement is derived to the extent that such license agreement does not provide for a survival of any sublicenses granted by such Party.

(b) Rigel further warrants to CG that as of the Effective Date (i) to the best of its knowledge, Rigel's conduct of the Research, and the manufacture, sale and use of Therapeutic Candidates will not infringe any third party intellectual property rights, and without limiting the foregoing, Rigel warrants that Rigel's conduct of the Research will not infringe any of the patents listed in Appendix I hereto; (ii) Rigel does not know of any third party other than Stanford University having a claim in the Rigel Biological Materials; and (iii) Rigel has the right to grant to CG a license under the Rigel Biological Materials and the Rigel Know-How to make, use and sell products in the CG **[*]** Field.

(c) CG further warrants to Rigel that CG has the right to grant to Rigel a license under the CG Patents and CG Know-How to make, use and sell products within the Rigel Field.

(d) Rigel warrants that it has not as of the Effective Date entered into an agreement with any third party licensing or granting rights to Rigel technology in the Field of Research.

7.4 Limitation on Warranties. EXCEPT AS PROVIDED IN SECTIONS 7.1, 7.2, AND 7.3 ABOVE, NEITHER PARTY MAKES ANY WARRANTIES TO THE OTHER PARTY, WHETHER EXPRESS OR IMPLIED, INCLUDING WITHOUT LIMITATION ANY WARRANTY OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE AS TO ANY PRODUCT OR PROCESS, OR AS TO THE VALIDITY OR SCOPE OF ANY PATENTS, OR THAT ANY LICENSED BIOLOGICAL MATERIALS, PATENTS OR KNOW-HOW WILL BE FREE FROM INFRINGEMENT OF PATENTS OF ANY THIRD PARTY, OR THAT NO THIRD PARTIES ARE INFRINGING SAME.

ARTICLE 8

TERM AND TERMINATION

8.1 Term of Agreement. Unless earlier terminated as otherwise provided in this Article 8, this Agreement shall remain in effect until the expiration of the last to expire of the CG Patents or Program Patents.

8.2 Termination for Breach. A Party may terminate this Agreement prior to the expiration of the Agreement in the event that the other Party is in breach of or default under a material term of the Agreement, and the breaching Party does not cure such breach or default within thirty (30) days of written notice thereof from the non-breaching Party. Subject to Section 8.3 below, upon any such termination, all the licenses granted by and between the Parties herein shall terminate; provided that any sublicense granted by a Party hereunder to a third party prior to such termination shall survive such termination, so long as the sublicensee agrees to be bound by the applicable terms of this Agreement.

8.3 Survival. Upon expiration or termination of this Agreement, the rights and obligations under Articles 5 and 6 and Sections 7.4, 8.3, 9.2, 9.3, 9.7 and 9.10 shall continue. In addition, upon expiration or termination of this Agreement after the end of the Research Period, the licenses granted under Article 2 above and the rights and obligations under Article 4 shall survive. Further, subject to Sections 2.1(b) and 2.2(b) if they survive the termination or expiration of this Agreement as provided above, neither Party shall have any obligation to account to the other, or obtain the consent of the owner, with respect to the commercialization, licensing or enforcement of any Joint Patents, and hereby waives any right it may have under the laws of any country to require such accounting or consent.

ARTICLE 9

MISCELLANEOUS

9.1 Relationship of the Parties. This Agreement creates only licensor-licensee and sublicensor-sublicensee relationships between Rigel and CG. No partnership or other legal relationship is created hereunder. Neither Party is, or will be deemed to be, an agent or legal representative of the other Party for any purpose. Neither Party will be entitled to enter into any contracts in the name of or on behalf of the other Party, and neither Party will be entitled to pledge the credit of the other Party in any way or hold itself out as having authority to do so.

9.2 Assignment. This Agreement may not be assigned by either Party without the prior written consent of the other Party, which consent shall not be unreasonably withheld; provided, however, that a Party may assign this Agreement without such consent to any Affiliate or to a successor in interest by way of merger, acquisition, sale or transfer of substantially all of its business or assets pertaining to the subject matter of this Agreement. The Agreement will be binding upon and inure to the benefit of all permitted successors and assignees of the Parties hereunder, and the name of each Party appearing herein will be deemed to include the names of such Party's successors and assignees.

9.3 Use of Names. No Party hereto may use the name of the other Party in public announcements without the prior consent of the other Party as required by law or regulation.

9.4 Amendment. No amendment, modification or supplement of any provision of the Agreement will be valid or effective unless made in writing and signed by a duly authorized officer of each Party.

9.5 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.

9.6 Headings. The headings for each article and section in this Agreement have been inserted for the convenience of reference only and are not intended to limit or expand on the meaning of the language contained in the particular article or section.

9.7 Notices. Any notice or other communication required or permitted to be given to either Party hereto shall be in writing unless otherwise specified and shall be deemed to have been properly given and to be effective on the date of delivery if delivered in person or by facsimile or three (3) days after mailing by registered or certified mail, postage paid, to the other Party at the following address:

If to Rigel:
Rigel, Inc.
240 East Grant Avenue
South San Francisco, CA 94080
Attn: Secretary
Fax: 650.624.1101

Copy to:
Cooley Godward, LLP
Five Palo Alto Square, 4th Floor
3000 El Camino Real
Palo Alto, CA 94306
Attn: Robert L. Jones, Esq.
Fax: 650.849.7400

If to CG:
Cell Genesys, Inc.
342 Lakeside Drive
Foster City, CA 94404
Attn: Chief Executive Officer
Fax: 650.358.0803

9.8 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.

9.9 Entire Agreement of the Parties. The Agreement will constitute and contain the complete, final and exclusive understanding and agreement of the Parties with respect to the subject matter hereof and cancels and supersedes any and all prior negotiations, correspondence, understandings and agreements, whether oral or written, between the Parties respecting the subject matter. Each Party hereto was represented by counsel in drafting and negotiating this Agreement, and all Parties are deemed to have contributed to the drafting hereof.

9.10 Governing Law. This Agreement shall be governed by and construed in accordance with the laws of the State of California excluding only laws and rules relating to "choice of law". All Parties to this Agreement hereby consent to the jurisdiction of the courts of the State of California and the Federal District Court for the Northern District of California for resolution of any disputes that arise hereunder.

9.11 Counterparts. This Agreement may be executed in any number of counterparts, each of which shall be an original, but all of which together shall constitute one instrument.

IN WITNESS WHEREOF, the Parties hereto have amended and restated this Agreement as of July 1, 2001.

CELL GENESYS, INC.		**RIGEL PHARMACEUTICALS, INC.**
By:	/s/ Robert Tidwell	By: /s/ Raul R. Rodriguez
Name:	Robert Tidwell	Name: Raul R. Rodriguez
Title:	VP Corporate Dev.	Title: VP Business Dev.

APPENDIX A
EXCLUSIVE LICENSE AGREEMENT

EXCLUSIVE LICENSE AGREEMENT made as of January 31, 1996 (the "Effective Date"), by and between Cell Genesys, Inc. ("Company"), a corporation organized and existing under the laws of the State of Delaware, having an office at 322 Lakeside Drive, Foster City, California 94404, and **THE ROCKEFELLER UNIVERSITY** ("Rockefeller"), a nonprofit education corporation organized and existing under the laws of the State of New York, having an office at 1230 York Avenue, New York, New York 10021-6395.

WITNESSETH:

WHEREAS, Rockefeller is the owner by assignment from Warren S. Pear, Martin L. Scott, Garry M. Nolan and David Baltimore ("Inventors") of the entire right, title and interest in United States Patent Application Serial No. 08/023,909, filed February 22, 1993, entitled Production of High Titer Helper-Free Retroviruses by Transient Transfection, and in the inventions described and claimed therein ("Licensed Patent Rights"), and in the Biological Materials and related Know-How, as defined below;

WHEREAS, Rockefeller and the Company entered into a license agreement effective as of October 25, 1994 (the "Prior Agreement"), pursuant to which Rockefeller granted to the Company a non-exclusive license to use the Licensed Patent Rights, Know-How and Biological Materials for research and commercial purposes;

WHEREAS, the parties have agreed to expand the scope of the license and rights granted to the Company and therefore have agreed to terminate the Prior Agreement as of the Effective Date, and enter into this Agreement;

WHEREAS, Rockefeller wishes to offer and grant the Company an exclusive license with regard to the Licensed Patent Rights, Know-How and the Biological Materials for research and commercial purposes, and seeks to be compensated for the transfer and use of such rights; and

WHEREAS, the Company wishes to license from Rockefeller the Licensed Patent Rights, Biological Materials and Know-How for commercial development and application as herein defined.

NOW, THEREFORE, in consideration of the mutual benefits to be derived hereunder, the parties hereto agrees as follows:

1. DEFINITIONS.

The following terms will have the meanings assigned to them below when used in this Agreement.

1.1 ***"Affiliate"*** shall mean:

(a) any entity owning or controlling, directly or indirectly, at least forty-nine percent (49%) of the stock normally entitled to vote for election of directors of a party; or

(b) any entity at least forty-nine percent (49%) of whose stock normally entitled to vote for election of directors is owned or controlled, directly or indirectly, by a party.

1.2 ***"Biological Materials"*** shall mean (i) the ecotropic producer cell line named **[*]** which producer cell line was deposited with the American Type Culture Collection as of **[*]** and has been assigned Accession No. **[*]**, and any viruses produced thereby; (ii) *{Not disclosed by Cell Genesys}* Biological Materials shall also include any direct progeny, mutant, or derivatives of the **[*]** *{Not disclosed by Cell Genesys}* cell lines and the viruses produced thereby.

1.3 ***"Improvement Technology"*** means all patent and other intellectual property rights, and materials relating to inventions, discoveries or improvements to the Licensed Technology licensed to Rockefeller by any academic institution, governmental and other not-for-profit entity to which Rockefeller grants a non-exclusive research license with regard to the Licensed Technology pursuant to Section 6.3 herein.

1.4 ***"Know-How"*** shall mean information and data not generally known which are owned and in the possession of or available to Rockefeller and which it is free to divulge as of the Effective Date regarding the preparation and use of Biological Materials, and pharmacological, biological and clinical properties of Biological Materials. It is understood that Know-How shall not include any information or data known by the Company prior to receipt of such information or data from Rockefeller, as shown by reasonable evidence.

1.5 ***"Licensed Patent Rights"*** shall mean:

(a) the patent application(s) concerning the subject matter of this Agreement which are listed on Exhibit A attached hereto;

(b) all patent applications which are divisions, substitutions, continuations, continuations-in-part, renewals, or additions of the patent applications described in (a) hereof,

(c) all foreign counterparts of the applications listed in (a) and (b) hereof; and

(d) all patents, including reissues, re-examinations and extensions, which may issue on any of the preceding.

1.6 ***"Licensed Products"*** shall mean any and all products the manufacture, use or sale of which but for the license granted herein would infringe a Valid Claim or are within the scope of a Pending Claim in the country in which such products are made or sold.

1.7 ***"Licensed Technology"*** shall mean the Licensed Patent Rights, Biological Materials and Know-How.

1.8 ***"Net Sales"*** shall mean **[*]**, where **[*]** shall mean the amount invoiced by the Company or its sublicensees to customers for Licensed Products less: (i) all trade, cash and quantity credits, discounts, refunds or government rebates, (ii) amounts for claims, allowances or credits for returns; retroactive price reductions; chargebacks or the like; (iii) packaging, handling fees and prepaid freight, sales taxes, duties and other governmental charges (including value added tax), but excluding what is commonly known as income taxes; and (iv) provisions for uncollectible accounts determined in accordance with reasonable accounting practices, consistently applied to all products of the selling party. **[*]** shall not include sales by the Company to its Affiliates for resale, provided that if the Company sells a Licensed Product to an Affiliate for resale, **[*]** shall include the amounts invoiced by such Affiliate to third parties on the resale of such Licensed Product. Notwithstanding the foregoing. **[*]** shall include charges for the separation, transduction and/or expansion of cells comprising Licensed Products, but notwithstanding any of the foregoing, shall not include charges for apheresis, reinfusion, surgical procedures, hospital stays or other charges not directly attributed to the Licensed Product or to the ex vivo preparation of the Licensed Product.

1.9 ***"Party"*** shall mean the Company or Rockefeller, and "Parties" shall mean both the Company and Rockefeller.

1.10 ***"Pending Claim"*** shall mean a claim of a pending patent application within the Licensed Patent Rights.

1.11 ***"Territory"*** shall mean the entire world.

1.12 ***"Valid Claim"*** shall mean a claim of an issued and unexpired patent included within the Licensed Patent Rights, which has not been held unenforceable or invalid by a court or other governmental agency of competent jurisdiction, and which has not been admitted to be invalid or unenforceable through reissue, disclaimer or otherwise.

2. LICENSED RIGHTS

2.1 Subject to Section 2.2 below, Rockefeller grants to the Company and its Affiliates the following licenses:

(a) an exclusive, worldwide, royalty-bearing license under the Licensed Technology, with the right to grant and authorize sublicenses, to make, have made, import, have imported, use, sell, offer for sale and otherwise exploit the Licensed Products in any country of the Territory; and

(b) a non-exclusive, worldwide, royalty-free, irrevocable license under the Improvement Technology, with the right to grant and authorize sublicenses, to make, have made, import, have imported, use, sell, offer for sale and otherwise commercialize products and services in any country of the Territory.

2.2 The licenses granted by Rockefeller in Section 2.1 (a) above are subject to any limitations on Rockefeller's rights arising under the provisions of the following:

(a) 35 United States, Section 201 et seq., and regulations and rules promulgated thereunder and any agreements implementing the provisions thereof, or

(b) other applicable laws or regulations to which Rockefeller may be subject; or

(c) Rockefeller's Institutional Patent Agreement with the United States Department of Health and Human Services, dated June 15, 1973, as amended, which is its formal agreement with the United States Government to implement the cited provisions of the U.S. Code.

2.3 Rockefeller shall promptly notify the Company of any Improvement Technology of which it acquires knowledge and provide the Company all available information relating thereto.

2.4 The licenses herein granted shall continue for the lives of any issued patents hereunder as the same or the effectiveness thereof may be extended by any governmental authority, rule or regulation applicable thereto.

3. TRANSFER OF BIOLOGICAL MATERIALS AND KNOW-HOW

3.1 The parties acknowledge that pursuant to the Prior Agreement, Rockefeller transferred to the Company a quantity of Biological Materials and such Know-How to allow the Company to establish a viable cell culture of said Biological Materials for the Company's purposes. The Company is permitted to cultivate and use said Biological Materials, subject to the terms and conditions of this Agreement. On the Effective Date, Rockefeller shall notify the American Type Culture Collection ("ATCC") that the Company is authorized to receive samples of the Biological Materials deposited with the ATCC and to deliver such materials to the Company at the Company's request, and that the Company has the right to authorize third parties to receive one or more samples of the Biological Materials, on such terms as the Company may indicate to the ATCC.

3.2 Should the Company exhaust the quantity of Biological Materials within six (6) months of the date of execution hereof, so that a viable cell culture of said Biological Materials no longer exists, Rockefeller shall authorize the ATCC to provide the Company with a quantity of Biological Materials sufficient to reestablish the Company's viable colony thereof.

3.3 Within sixty (60) days of the Effective Date, Rockefeller shall deliver to the Company tangible copies of all existing Know-How which it did not previously provide to the Company pursuant to the Prior Agreement.

4. PAYMENTS

4.1 In consideration of the rights and licenses granted hereunder, the Company shall pay or cause to be paid to Rockefeller amounts as follows:

(a) *{Not disclosed by Cell Genesys}*

(b) *{Not disclosed by Cell Genesys}*

(c) *{Not disclosed by Cell Genesys}*

(d) a royalty of **[*]** of Net Sales of Licensed Products sold by the Company within the scope of a Valid Claim within the Licensed Patent Rights in the country they are made or sold.

Notwithstanding the above, the royalty due Rockefeller on Net Sales of Licensed Products, the manufacture, use or sale of which would not infringe a Valid Claim in the country for which they are sold but which are within the scope of a Pending Claim in such country, shall be fifty percent (50%) of the royalty due under Section 4. l(d).

4.2 In the event that a Licensed Product is sold in combination as a single product with another product whose sale and use are not covered by the Licensed Patent Rights in the country for which the combination product is sold, Net Sales from such sales, for purposes of calculating the amounts due under Section 4.1 above, shall be calculated by multiplying the Net Sales of that combination by the fraction A/(A + B), where A is the gross selling price of the Licensed Product, as the case may be, sold separately, and B is the gross selling price of the other product sold separately. In the event that no such separate sales are made by the Company, Net Sales for royalty

determination shall be as reasonably allocated by the Company between such Licensed Product and such other product, based upon their relative importance and proprietary protection.

4.3 Licensed Products sold, leased or otherwise distributed by the Company's sublicensees shall be considered to be sales, leases or disposals of Licensed Products by the Company for purposes of royalty payments and reports under this Agreement. The obligation to pay royalties pursuant to this Agreement is imposed only once with respect to the sale of a particular Licensed Product regardless of the number of claims or patents that cover such Licensed Product. The Company shall have no obligation to pay royalties on Licensed Products used in research and development, in clinical trials or other noncommercial purposes, or distributed as samples.

4.4. The Company's obligation to pay royalties hereunder shall continue on a country-by-country basis until (i) the expiration of the last-to-expire issued patent within the Licensed Patent Rights in such country, or (ii) **[*]** following the first commercial sale of a Licensed Product in a country, if no patent covering such Licensed Product has been issued in such country. Thereafter, the Company shall have a fully paid up license under Licensed Patent Rights, Biological Materials and Know-How to make, have made, use, sell, lease, import, have imported, offer for sale or otherwise exploit the Licensed Product(s) for any use in that country.

4.5 *{Not disclosed by Cell Genesys}*

4.6 *{Not disclosed by Cell Genesys}*

4.7 Unless this Agreement is terminated earlier, within sixty (60) days following the first achievement by the Company or a sublicensee of the following milestones with respect to the first Licensed Product within the scope of a Valid Claim within the Licensed Patent Rights, the Company shall pay to Rockefeller **[*]** milestone payments as follows:

Event	Payment
Enrollment of first patient in a Company-sponsored **[*]** clinical trial of a Licensed Product	$ [*]
Enrollment of first patient in a Company-sponsored **[*]** clinical trial of a Licensed Product	$ [*]
Approval of NDA in U.S. of a Licensed Product	$ [*]

4.8 Upon commencement of commercial sales of any Licensed Products which generate a royalty to Rockefeller pursuant to this Agreement, the Company shall within ninety (90) days of the close of the fiscal semi-annual period, provide semi-annual reports to Rockefeller showing the total Net Sales of Licensed Products sold, leased or otherwise disposed of during such period and the calculation of royalties thereon. Any royalty then due and payable shall be included with such report. All reports provided hereunder by the Company shall be the Confidential Information of the Company, subject to Section 7 herein. The Company's records shall be open to inspection by an independent certified public accountant designated by Rockefeller for three (3) years from the submission of such reports and payments, subject to execution of a confidentiality agreement reasonably acceptable to the Company, once per calendar year at reasonable times, at Rockefeller's expense, for the sole purpose of verifying the accuracy of the reports and royalty payments made by the Company. The accountant shall report to Rockefeller only whether there has been an underpayment and, if so, the amount thereof.

5. TIMES AND CURRENCIES OF PAYMENT

5.1 Royalty payments shall be made in United States dollars or if sales are made in the currency of other countries, royalties shall be calculated in the currency of such other country and be converted into United States dollars using the applicable exchange rate for sale of U.S. dollars listed by the foreign exchange desk of the Bank of America on the last day of the applicable reporting period.

5.2 If at any time legal restrictions prevent the prompt remittance of part or all royalties by the Company with respect to any country where a Licensed Product is sold, the Company shall have the right and option to make such payment by depositing the amount thereof in local currency to an account in the name of Rockefeller in a bank or other depository in such country.

6. SUBLICENSEES

6.1 The Company and its Affiliates shall have the right to grant and authorize sublicenses under the Licensed Technology and Improvement Technology to commercial entities for research purposes and for commercial purposes, including without limitation, to make, have made, import, have imported, use, lease, offer for sale and sell Licensed Products in the Territory.

6.2 The Company shall have the sole discretion to determine the financial and other terms on which any sublicenses shall be granted under the Licensed Technology, subject to the provisions herein. Any sublicense(s) granted by the Company under this Agreement shall be subject and subordinate to the terms and conditions of this Agreement, except the financial terms of the sublicense(s) may require greater payments than the financial terms in this Agreement.

6.3 Notwithstanding Section 2.1 above, Rockefeller, on behalf of the Company, may continue to grant limited, non-transferable, research sublicenses to academic institutions, governmental and other not-for-profit entities using the form sublicense agreement attached hereto as Exhibit B. Rockefeller shall not enter into or agree to enter into any agreement with such an entity which deviates in any way from the form agreement set forth in Exhibit B, without the prior written consent of the Company. Rockefeller shall provide the Company with a copy of each such research license entered by Rockefeller promptly following the execution of such agreement.

6.4 In the event of any termination of this Agreement, any sublicenses granted under or this Agreement shall also terminate unless such sublicensees provide Rockefeller written notice that they will abide by the applicable terms of this Agreement.

6.5 In no event shall a default or breach of a sublicensee of a sublicense granted by the Company pursuant to this Agreement constitute by a default or breach by the Company of this Agreement or be deemed a valid basis for the termination of this Agreement.

7. CONFIDENTIAL INFORMATION

7.1 Each Party and its Affiliates and sublicensees shall treat as confidential all Confidential Information received from the other Party hereto, shall not use such Confidential Information except as expressly set forth herein or otherwise authorized in writing, shall implement reasonable procedures to prohibit the disclosure, unauthorized duplication, misuse or removal of such Confidential Information and shall not disclose such Confidential Information to any third party except as may be necessary and required in connection with the rights and obligations of such party under this Agreement, and subject to confidentiality obligations at least as protective as those set forth herein. Without limiting the foregoing, each of the parties shall use at least the same procedures and degree of care which it uses to prevent the disclosure of its own confidential information to prevent the disclosure of Confidential Information of the other Party. As used herein, the term "Confidential Information" shall mean any information expressly designated as Confidential Information in this Agreement and information disclosed by one Party to another pursuant to this Agreement which is in written, graphic, machine readable or other tangible form and is marked "Confidential" to indicate its confidential nature. Confidential Information may also include oral information disclosed by one Party to another pursuant to this Agreement, provided that such information is designated as confidential at the time of disclosure and within thirty (30) days after its oral disclosure is reduced to a written summary by the disclosing Party, which summary is marked in a manner to indicate its confidential nature and delivered to the receiving Party.

7.2 Notwithstanding the above, neither Party has any obligation of confidence under this Agreement with respect to any information which:

(i) may be demonstrated to have been known to the receiving Party prior to the time of disclosure thereof by the disclosing Party; or

(ii) without breach of this Agreement, has been published or is otherwise available to the public at any time whether before or after the time of disclosure to such Party; or

(iii) is at any time lawfully received by such Party from a third party who has no obligation of confidence to a Party in respect hereof.

7.3 Each Party hereto may disclose another's Confidential Information to the extent such disclosure is reasonably necessary in filing or prosecuting patent applications, prosecuting or defending litigation, complying with applicable governmental regulations or otherwise submitting information to tax or other government authorities, making a permitted sublicense or other exercise of its rights hereunder or conducting clinical trials, provided that if a Party is required to make any such disclosure of another Party's secret or Confidential Information, other than pursuant to a confidentiality agreement, it will give reasonable advance notice to the latter Party of such disclosure requirement and, will use its best efforts to secure confidential treatment of such information prior to its disclosure (whether through protective orders or otherwise).

8. REPRESENTATIONS AND WARRANTIES

8.1 Rockefeller represents and warrants that: (i) it is a nonprofit corporation duly organized, validly existing and in good standing under the laws of New York; (ii) the execution, delivery and performance of this Agreement have been duly authorized by all necessary action on the part of Rockefeller; (iii) it is the sole and exclusive owner of all right, title and interest in the Licensed Patent Rights; (iv) the Licensed Patent Rights are free and clear of any lien, security interest or restriction on transfer or license; (v) Rockefeller has not previously granted, and will not grant during the term of this Agreement, any right, license or interest in and to the Licensed Patent Rights, Biological Materials and Know-How, or any portion thereof, in conflict with the rights, exclusive license and interest granted to the Company herein; (vi) it has complied fully with all requirements of 35 U.S.C. § 201 et seq. and all implementing regulations with respect to perfecting its interest in the Licensed Patent Rights; (vii) Exhibit A contains a complete and accurate listing of all Licensed Patent Rights existing as of the Effective Date; and (viii) there are no actions, suits, investigations, claims or proceedings pending in any way relating to the Licensed Patent Rights, Biological Materials or Know-How.

8.2 The Company represents and warrants that: (i) it is a corporation duly organized, validly existing and in good standing under the laws of the State of Delaware; and (ii) the execution, delivery and performance of this Agreement have been duly authorized by all necessary corporate action on the part of the Company.

8.3 ROCKEFELLER EXPRESSLY DISCLAIMS ANY AND ALL IMPLIED OR EXPRESS WARRANTIES AND MAKES NO EXPRESS OR IMPLIED WARRANTIES OF MERCHANTABILITY OR FITNESS FOR ANY PARTICULAR PURPOSE OF BIOLOGICAL MATERIALS, LICENSED PROCESSES OR LICENSED PRODUCTS CONTEMPLATED BY THIS AGREEMENT. FURTHER, ROCKFELLER HAS MADE NO FORMAL INVESTIGATION AND THEREORE CAN MAKE NO REPRESENTATION THAT BIOLOGICAL MATERIALS SUPPLIED BY IT OR THE METHODS USED IN MAKING OR USING SUCH MATERIALS ARE NOW OR WILL REMAIN FREE FROM LIABILITY FOR PATENT INFRINGEMENT.

9. *{Not disclosed by Cell Genesys}*

9.1 *{Not disclosed by Cell Genesys}*

9.2 *{Not disclosed by Cell Genesys}*

10. PUBLICITY

The Company will not use either directly or by implication the name of Rockefeller, or the name of any member of the faculty or staff thereof for any commercial or promotional purposes without prior notification and written agreement of Rockefeller. Except as expressly provided herein, the Parties agree not to disclose the terms of this Agreement to any third party without the prior written consent of the other Party to the fact and form of such disclosure, except as required by securities or other applicable laws, to prospective investors and to such party's accountants, attorneys and other professional advisors. Notwithstanding the above, the Company may disclose the existence of this Agreement and issue a press release, reasonably acceptable to Rockefeller, describing this Agreement and the rights granted the Company by Rockefeller under this Agreement, and disclose to actual and potential sublicensees the rights granted the Company by Rockefeller under this Agreement.

11. PATENTS

11.1 Except as set forth in Section 11.4, the Company shall have the sole right to control the preparation, filing, prosecution and maintenance of the Licensed Patent Rights, and any interference or opposition proceeding relating thereto, using patent counsel of its choice. The Company shall consult with Rockefeller regarding the prosecution of any such patent applications, by providing Rockefeller a reasonable opportunity to review and comment on all proposed submissions to any patent office before submittal, and provided further that the Company shall keep Rockefeller reasonably informed as to the status of such patent applications by promptly providing Rockefeller copies of all communications relating to such patent applications that are received from any patent office. If the Company informs Rockefeller in writing that the Company no longer wishes to conduct such activities with regard to any such patent applications or patents in any country, then Rockefeller will be free, at its discretion and expense to either abandon the subject patent applications or to continue such activities, and the Company shall have no further rights with respect to the applicable patent applications or patents in such countries.

11.2 During the term of the Agreement, the Company shall be responsible for one hundred percent (100%) of the expenses incurred in connection with the activities set forth in Section 11.1. above. *{Not disclosed by Cell Genesys}* With respect to patent-related costs incurred after the Effective Date, the Company shall reimburse Rockefeller within thirty (30) days following invoice for such costs, in a form reasonably acceptable to the Company.

11.3 If either Party hereto becomes aware that any Licensed Patent Rights are being or have been infringed by any third party, such Party shall promptly notify the other Party hereto in writing describing the facts relating thereto in reasonable detail. The Company shall have the initial right, but not the obligation, to institute, prosecute and control any action, suit or proceeding (an "Action") with respect to such infringement, including any declaratory judgment action, at its expense, using counsel of its choice; provided, however, during the pendency of any such Action, the Company shall be entitled to place any royalties otherwise due Rockefeller hereunder in a separate account controlled by the Company. If the pertinent Licensed Patent Rights are found invalid or unenforceable in such an Action, or any appeal thereof, the Company may retain the amounts placed in such account without further obligation to Rockefeller with regard thereto. If the Licensed Patent Rights are not held invalid or unenforceable in such an Action, or any appeal thereof, the Company shall promptly pay the amounts deposited in such account to Rockefeller. Any amounts recovered from third parties in any such Action shall be retained by the Company. In the event the Company fails to initiate or defend any Action involving the Licensed Patent Rights within one (1) year of receiving notice of any commercially significant infringement, Rockefeller shall have the right, but not the obligation, to initiate and control such an Action, and the Company shall cooperate reasonably with Rockefeller, at Rockefeller's request, in connection with any such Action. Any amounts recovered in such Action shall be used first to reimburse the Company and Rockefeller for the expenses incurred in connection with such Action, and any remainder retained by Rockefeller.

11.4 In the event the parties believe an interference may be declared or an interference is declared between any patent application or patent within the Licensed Patent Rights and any patent application or patent owned or controlled by the Company relating to the production of high titer retroviruses, the parties agree to amicably settle any such prospective or actual interference in accordance with the procedure set forth on Exhibit C. The Company shall have the exclusive right to initiate such settlement procedure after consultation with Rockefeller. In the event of any such prospective or actual interference and the settlement thereof, each Party shall pay its own costs associated therewith and the parties shall equally share the costs of any arbitration, including without limitation, administration and arbitrator fees. It is understood and agreed that in the event an interference is declared, neither Patty shall have an obligation to participate in such a proceeding, but each hereby acknowledges that it understands that a

failure to participate may result in an adverse outcome which could have a material adverse impact on such Party. It is further understood and agreed that any patent applications and patents within the Licensed Patent Rights which are involved in any interference shall remain subject to the license granted the Company herein.

12. LICENSED PRODUCT LIABILITY

The Company agrees to indemnify, defend and hold harmless Rockefeller and its trustees, officers, agents, faculty, employees, and students (the "Indemnitees"), from any and all liability arising from injury or damage to persons or property resulting directly or indirectly from the Company's acquisition, use, manufacture, sublicense or sale of any Licensed Product covered by Licensed Patent Rights or Know-How licensed hereunder. Notwithstanding the foregoing, the Company expressly retains any and all claims it may have against Indemnitees arising from Indemnitees' negligence or willful misconduct. The Company's obligation to indemnify the Indemnitees under this Section 11 shall not apply unless the indemnified Party promptly notifies the Company of any claim or liability subject to this Section 12 and cooperates fully with the Company in the defense of any such claim or proceeding. The Company further agrees to obtain, prior to the first commercial sale of a Licensed Product, and maintain in force for at least fifteen (15) years following the last sale of a Licensed Product, product liability insurance coverage of at least one million ($1,000,000) dollars or a lesser amount as appropriate to the risk as determined by reference to reliable standards in the industry, such insurance to specifically name Rockefeller as an additional insured.

13. NOTICES

Any notice required to be given pursuant to this Agreement shall be in writing and may be made by personal delivery or by registered or certified mail, return receipt requested, by one Party to the other Party at the addresses noted below:

In the case of the Company, notice should be sent to:

Cell Genesys, Inc.
322 Lakeside Drive
Foster City, California 94404
Attn: Senior Vice President, Corporate Development

In the case of Rockefeller, notice should be sent to:

The Rockefeller University
1230 York Avenue
New York, New York 10021
Attn: Office of the General Counsel

14. LAW TO GOVERN

This Agreement shall be interpreted and governed in accordance with the laws of the State of New York.

15. ASSIGNMENT

This Agreement may not be assigned by either Party without the prior written consent of the other; *provided, however*, the Company may assign this Agreement in connection with the transfer of all or substantially all of its business relating to the subject matter of this Agreement whether by sale, merger, operation of law or otherwise.

16. TERMINATION

16.1 The Company shall have the right to terminate this Agreement at any time with respect to any Licensed Patent Right or any country upon ninety (90) days prior written notice to Rockefeller. Such termination shall automatically terminate the license rights provided in Section 2 with respect to such Licensed Patent Rights hereof in such country but shall not relieve the Company of the obligation to pay royalties for any period prior to the effective date of termination.

16.2 Either Party may terminate this Agreement in the event of a material breach by the other Party which is not cured within a reasonable time, provided only that the offending Party is given notice of the breach and not less than ninety (90) days in which to cure such breach.

16.3 Sections 2.4, 6.4 and 24.3 and Articles 7, 8, 10, 12, 14, 17 and 25 shall survive expiration or termination of this Agreement for any reason.

17. RESOLUTION OF DISPUTES

The Parties agree that in the event of it dispute between them arising from, concerning, or in any way relating to this Agreement, the Parties shall undertake good faith efforts to resolve the same amicably between themselves.

18. FORCE MAJEURE

The Parties shall not be liable in any manner for failure or delay in fulfillment of all or part of this Agreement, directly or indirectly caused by acts of God, governmental orders or restrictions, war, war-like conditions, revolution, riot, looting, strike, lockout, fire, earthquake, flood or other similar or dissimilar cause or circumstances beyond the nonperforming Party's control. The nonperforming Party shall promptly notify the other Party of the cause or circumstance and shall recommence its performance of its obligations as soon as practicable after the cause or circumstance ceases.

19. BINDING UPON SUCCESSORS AND ASSIGNS

Subject to the limitations on assignment herein, this Agreement shall be binding upon and inure to the benefit of successors in interest or assigns of Rockefeller and the Company. Any such successor or assignee of a Party's interest shall expressly assume in writing the performance of all the terms and conditions of this Agreement to be performed by said Party.

20. INDEPENDENT CONTRACTORS

The relationship between Rockefeller and the Company is that of independent contractors. Rockefeller and the Company are not joint venturers, partners, principal and agent, master and servant, employer or employee, and have no other relationship other than independent contracting parties. Rockefeller shall have no power to bind or obligate the Company in any manner, other than as is expressly set forth in this Agreement. Likewise, the Company shall have no power to bind or obligate Rockefeller in any manner, other than as is expressly set forth in this Agreement.

21. SEVERABILITY

If any provision of this Agreement is ultimately held to be invalid, illegal or unenforceable, the validity, legality and enforceability of the remaining provisions shall not in any way be affected or impaired thereby.

22. NO WAIVER

Any delay in enforcing a Party's rights under this Agreement or any waiver as to a particular default or other matter shall not constitute a waiver of such Party's rights to the future enforcement of its rights under this Agreement, excepting only as to an express written and signed waiver as to a particular matter for a particular period of time.

23. NO IMPLIED OBLIGATIONS

It is understood and agreed that nothing in this Agreement shall be deemed to prevent the Company from commercializing technology or products similar to or competitive with the Licensed Technology or the Licensed Products. Nor shall anything in this Agreement impair the right of the Company to independently acquire, license, develop or have others develop for it technology performing similar or equivalent functions as the Licensed Technology, or to develop, market or distribute products based on such technology in addition to or in lieu of the Licensed Products.

24. COMPLIANCE WITH LAWS. REGULATIONS AND STANDARDS

24.1 The Company recognizes that the use of Biological Materials carries with it certain safety risks to both the environment and the population that are inherent in such materials, and shall exercise prudent scientific laboratory procedures in the use of said Biological Materials.

24.2 The inventors and Rockefeller recognize and have advised that the Biological Materials may be used to create infectious retroviruses with a broad host range, that the supplied materials may be used to create retroviruses that can infect human cells in both vitro and in vivo, that the Biological Materials and all materials derived thereof should be handled and used with all due care in accordance with generally acceptable scientific guidelines establishing appropriate precautions and approved by the Institutional Biosafety Committee or similar authority at the Company.

24.3 The Company shall bear all risk to the Company and/or to any others resulting from use, directly or indirectly, to which the Company puts the Biological Materials or any progeny or cells or cell lines derived from it.

25. NO CONSEQUENTIAL DAMAGES

IN NO EVENT SHALL EITHER PARTY BE LIABLE FOR SPECIAL, INCIDENTAL OR CONSEQUENTIAL DAMAGES ARISING OUT OF ANY BREACH OF THIS AGREEMENT.

26. ENTIRE UNDERSTANDING

This Agreement with its Exhibits represents the entire understanding between the Parties with respect to the subject matter hereof and supersedes any other agreement, expressed or implied, by the Parties with respect to the Licensed Patent Rights, Biological Materials, Know-How and Improvement Technology, and supersedes and merges all prior negotiations, discussions and agreements, including without limitation, the Prior Agreement between the parties. This Agreement may not be amended or modified except in a written document signed by authorized representatives of the Parties.

IN WITNESS WHEREOF, the Parties have caused this Agreement to be duly executed as of the day and year first above written.

CELL GENESYS, INC.

By: /s/ R. Scott Greer

Title: Senior Vice President
Corporate Development

Date: February 2, 1996

THE ROCKEFELLER UNIVERSITY

By: /s/ William H. Griesar

Title: Vice President and General Counsel

Date: January 31, 1996

EXHIBIT "A"

LICENSED PATENT RIGHTS

United States Serial No. 08/023,909

PCT Application No. PCT/US94/01983

AMENDMENT TO EXCLUSIVE LICENSE AGREEMENT

This Amendment to Exclusive License Agreement ("Amendment"), effective as of November 3, 1998, by and between Cell Genesys, Inc.,("Company"), a corporation organized and existing under the laws of the State of Delaware, having an office at 342 Lakeside Drive, Foster City, California 94404, and The Rockefeller University ("Rockefeller"), a nonprofit education corporation organized and existing under the laws of the State of New York, having an office at 1230 York Avenue, New York, New York 10021-6395 (Company and Rockefeller collectively, the "Parties").

BACKGROUND

The Parties desire to amend that certain Exclusive License Agreement by and between Company and Rockefeller effective as of January 31, 1996 (the "Agreement") as set forth herein below.

NOW, THEREFORE, the Parties agree as follows:

1. **AMENDMENT.** This Amendment hereby amends the Agreement to incorporate the terms and conditions set forth in this Amendment. The relationship of the Parties shall continue to be governed by the terms and conditions of the Agreement, as amended herein; and in the event that there is any conflict between the terms and conditions of the Agreement and this Amendment, the terms and conditions of this Amendment shall control. As used in this Amendment, all capitalized terms shall have the meanings defined for such terms in this Amendment or, if not defined in the Amendment, the meanings defined in the Agreement.

MODIFICATION TO THE AGREEMENT.

Section 4.6 of the Agreement is hereby amended to read in its entirety as follows:

"**4.6 Commercial Sublicenses.** It is understood and agreed that Company shall have the right, at its sole discretion, to grant Commercial Sublicenses to third parties *{Not disclosed by Cell Genesys}*. As used herein, "Commercial Sublicense" shall mean Commercial Target Sublicenses and any other sublicense right granted under the Licensed Technology; provided, however, Commercial Sublicenses shall exclude rights granted by Company to a third party pursuant to an agreement substantially in the form of Exhibit D to this Agreement (i.e., research sublicenses)."

The Agreement is hereby amended to add the following new Section 4.9:

"**4.9 Commercial Target Sublicenses.** Subject to the terms and conditions set forth in this Section 4.9 below and without limiting the provisions of Section 4.6 above or Article 6 below, Company shall have the right to grant and authorize Commercial Target Sublicenses to third parties (each such third party, a "Commercial Target Sublicensee") on terms and conditions as Company deems appropriate in its sole discretion.

(a) Milestone and Maintenance Fees. In addition to amounts payable pursuant to Section 4.3 above and in consideration of Company's right to grant and authorize Commercial Target Sublicenses pursuant to this Section 4.9 *{Not disclosed by Cell Genesys}*. Payments due under this Section 4.9(a) shall be due and payable within sixty (60) days after the calendar quarter in which the Milestone Fee or Maintenance Fee, as applicable, is received by Company *{Not disclosed by Cell Genesys}.*

(b) Terms. For purposes of this Section 4.9 the following capitalized terms shall have the following meanings. "Commercial Target Sublicense" shall mean a sublicense under the Licensed Technology that includes the right to conduct Target Validation using the Licensed Technology. "Target Validation" shall mean the process by which the function of nucleotide sequences are identified, determined and/or confirmed; and/or the function of nucleotide sequences are identified, determined and/or confirmed as being significant in a disease or other biological pathway in which pharmacological or other intervention is sought to affect the function of that pathway. *{Not disclosed by Cell Genesys}*.

(c) Survival. Subject to Section 6.4 below, Commercial Sublicenses, including Commercial Target Sublicenses, shall survive the termination of this Agreement, provided that the Commercial Sublicensee or Commercial Target Sublicensee, as the case may be, agrees to be bound by the applicable terms and conditions of this Agreement."

ENTIRE AGREEMENT. Together the Agreement (including the Exhibits thereto) and this Amendment constitute the entire agreement between the Parties in connection with the subject matter thereof and supersede all prior and contemporaneous agreements, understandings, negotiations and discussions, whether oral or written, of the Parties.

IN WITNESS WHEREOF, the Parties have executed this Amendment.

CELL GENESYS, INC.

By: /s/ Bruce A. Hironaka

Title: Vice President, Corp. Devel.

Date: November 16, 1998

By: /s/ William A. Griesar

Title: Vice President and General Counsel

Date: 11/3/98

APPENDIX B

BOSC 23 CELL LINE

CGI Docket Number	Application, Patent Number or Publication Number	Filing Data, Grant date, or Publication Date	Title/Inventors
The Rockefeller University	**PCTWO94/19478 (US application corresponding to the PCT)**		**Production of High Titer Helper-Free Retroviruses by Transient Transfection Pear et al.**
The Rockefeller University	**US 08/693,160**	**6/12/96**	**Production of High Titer, Helper-Free Retroviruses by Transient Transfection Pear, et al.**

KATÔ

CGI Docket Number	Application, Patent Number or Publication Number	Filing Data, Grant date, or Publication Date	Title/Inventors

CELL 13.0	**US 5,834,256 (Patent)**	**November 10, 1998**	**Method for Production of High Titer Virus & High Efficiency of Retroviral Mediated Transduction of Mammalian Cells Finer et al.**
CELL 13.1	**US 5,686,279 (Patent)**	**November 11, 1997**	**Method for Production of High Titer Virus & High Efficiency of Retroviral Mediated Transduction of Mammalian Cells Finer et al.**
CELL 13.1 PCT	**WO 94/29438**	**December 22, 1994**	**Method for Production of High Titer Virus & High Efficiency of Retroviral Mediated Transduction of Mammalian Cells Finer et al.**
CELL 13.2	**US 5,858,740 (Patent)**	**January 12, 1999**	**Method of Production of High Titer Virus & High Efficiency of Retroviral Mediated Transduction of Mammalian Cells Finer et al.**
CELL 13.3	**US 08/517,488**	**August 21, 1995**	**Method for Production of High Titer Virus & High Efficency of Retroviral Mediated Transduction of Mammalian Cells Finer et al.**
CELL 13.3 PCT	**WO 97/07225**	**February 21, 1997**	**Method for Production of High Titer Virus & High Efficiency of Retroviral Mediated Transduction of Mammalian Cells Finer et al.**
CELL 13.5 (will be dropped if 13.3 is allowed)	**US 09/266,956**	**March 11, 1999**	**Method for Production of High Titer Virus & High Efficiency of Retroviral Mediated Transduction of Mammalian Cells Finer et al.**
	US 08/914,893	**8/20/97**	**Method of Production of High Titer Virus & High Efficiency of Retroviral Mediated Transduction of Mammalian Cells. Finer, et al.**

APPENDIX C

RIGEL BIOLOGICAL MATERIALS

[*] Vectors:

[*]

APPENDIX D

NOLAN AND NOLAN/ROTHENBERG PATENTS

U.S. Patent Application No. 08/589,109, entitled “Methods for Screening for Transdominant Effector Peptides and RNA Molecules” (the Nolan/Rothenberg Patent Application).

U.S. Patent Applications Nos. 08/789,333, 08/589,911 and 08/963,368, entitled, “Methods for Screening for Transdominant Intracellular Effector Peptides and RNA Molecules” (the Nolan Patent Application).

APPENDIX E

LICENSE AGREEMENT

BY AND BETWEEN

THE BOARD OF TRUSTEES OF THE LELAND STANFORD JUNIOR UNIVERSITY

AND

RIGEL PHARMACEUTICALS, INC.

TABLE OF CONTENTS

APPENDIX E

LICENSE AGREEMENT

Effective as of June 1, 1999 (the "Effective Date"), **THE BOARD OF TRUSTEES OF THE LELAND STANFORD JUNIOR UNIVERSITY**, a body having corporate powers under the laws of the State of California ("STANFORD") and **RIGEL PHARMACEUTICALS, INC**., a Delaware corporation having a principle place of business at 240 East Grand Avenue, South San Francisco, CA 94080 ("RIGEL"), agree as follows:

RECITALS

A. STANFORD owns certain **[*]** cell lines and derivatives thereof and biological components related thereto.

B. RIGEL desires to obtain a non-exclusive license to such materials for use in the Field, with the right to grant one non-exclusive sublicense to Cell Genesys, Inc.

1. DEFINITIONS.

1.1 "Cell Genesys" means Cell Genesys, Inc., a Delaware corporation, having a principal place of business at 342 Lakeside Drive, Foster City, CA 94404.

1.2 "Field" means any and all fields of use, including, without limitation, any research or commercial field of use.

1.3 "Licensed Biological Materials" means the materials listed on Exhibit A.

1.4 "Licensed Know-How" means:

(a) any and all tangible or intangible know-how, trade secrets, inventions (whether or not patentable), processes, data, and other information owned by STANFORD as of the Effective Date that are necessary or useful for the use of the Licensed Biological Materials; and

(b) any modifications or progeny of the information and materials in subsection (a) above that STANFORD may elect to provide to RIGEL at STANFORD's sole and exclusive discretion.

1.5 "Patent" shall mean all foreign and domestic patents (including, without limitation, extensions, reexaminations, reissues, renewals and inventors certificates) and patents issuing from patent applications (including substitutions, provisionals, divisionals, continuations and continuations-in-part).

2. GRANT; TRANSFER OF LICENSED BIOLOGICAL MATERIALS.

2.1 STANFORD hereby grants, and RIGEL hereby accepts, a worldwide, non-exclusive license (without the right to sublicense except to Cell Genesys in the field of human and/or animal gene therapy as provided in Article 8) under STANFORD's right, title and interest in the Licensed Biological Materials to conduct research and development and to use the Licensed Biological Materials to make, have made, use, import, offer for sale and sell products in the Field.

2.2 STANFORD hereby grants, and RIGEL hereby accepts, a worldwide, non-exclusive license (without the right to sublicense except to Cell Genesys in the field of human and/or animal gene therapy as provided in Article 8) under STANFORD's right, title and interest in the Licensed Know-How to use the Licensed Know-How in the Field.

2.3 STANFORD shall have the right to use the Licensed Know-How and the Licensed Biological Materials for its own bona fide research, including sponsored research and collaborations. In addition, STANFORD shall have the right to distribute the Licensed Biological Materials.

2.4 Promptly after the Effective Date, STANFORD shall transfer to RIGEL such quantities of the Licensed Biological Materials as RIGEL shall reasonably request. Thereafter, STANFORD shall transfer to RIGEL such additional quantities of Licensed Biological Materials as RIGEL shall reasonably request in the event that RIGEL's stock of the Licensed Biological Materials is destroyed or contaminated.

3. LICENSE ROYALTIES.

3.1 In partial consideration for the license granted by STANFORD to RIGEL under Section 2.1, RIGEL agrees to pay to STANFORD the following:

(a) An initial, nonrefundable license issue royalty of **[*]**, which amount shall be paid within thirty (30) days after the Effective Date.

(b) A royalty payment equal to **[*]** on each of the first three (3) anniversaries of the Effective Date.

After the third (3rd) anniversary of the Effective Date, the sublicense shall be considered perpetual and fully paid-up.

3.2 If RIGEL grants to Cell Genesys a sublicense under the Licensed Biological Materials to use and sell products in the field of human and/or animal gene therapy, RIGEL shall pay to STANFORD during the term of such sublicense a sublicense fee as follows:

Upon signing of the sublicense	**$**	**[*]**
On each of the first three (3) anniversaries of the effective date of such sublicense	$	**[*]**
On the 4th, 5th and 6th anniversaries of the effective date of such sublicense	$	**[*]**

After the sixth (6th) anniversary of the effective date of such sublicense, the sublicense shall be considered perpetual and fully paid-up.

4. PATENTS; NEW INVENTIONS.

Subject to the terms and conditions of this Agreement, any patentable inventions or discoveries conceived or reduced to practice by the employees, agents or consultants of one party during the course of the Agreement ("Sole Inventions") shall be the property of such party. Any patentable inventions or discoveries conceived or reduced to practice jointly by employees, agents or consultants of STANFORD and RIGEL as determined in accordance with United States rules of inventorship ("Joint Inventions") during the course of and pursuant to this Agreement shall be owned jointly by STANFORD and RIGEL, each to own an undivided one-half (1/2) interest in such Joint Invention. Each party shall cooperate with the other in completing any patent applications relating to Joint Inventions, and in executing and delivering any instrument required to assign, convey or transfer to such other party its undivided one-half (1/2) interest.

5. WARRANTIES.

5.1 STANFORD's Office of Technology Licensing represents and warrants that to the best of its knowledge as of the Effective Date, STANFORD has not sought or obtained patent protection of the Licensed Biological Materials or any use thereof in the Field.

5.2 STANFORD's Office of Technology Licensing represents and warrants that as of the Effective Date, it has no knowledge of claims by third parties that the use of the Licensed Biological Materials infringes any patents, copyrights or other rights of third parties.

5.3 STANFORD represents and warrants that it has all right, power and authority necessary to grant the licenses set forth in Article 2 to RIGEL.

5.4 RIGEL agrees that nothing in this Agreement grants RIGEL any express or implied license or right under or to:

(a) U.S. Patent 4,656,134, entitled "Amplification of Eucaryotic Genes" or any patent application corresponding thereto; or

(b) U.S. Patent 5,070,012, entitled "Monitoring of Cells and Trans-Activating Transcription Elements" or any patent application corresponding thereto; or

(c) U.S. Patent 5,804,387, entitled "FACS-Optimized Mutants of the Green Fluorescent Protein (GFP) or any patent application corresponding thereto.

5.5 STANFORD agrees that nothing in this Agreement grants STANFORD any express or implied license or right under or to U.S. Patent Application Nos. 08/789,333, 08/589,911, or 08/963,368, entitled "Method for Screening for Transdominant Intracellular Effector Peptides and RNA Molecules," or any continuations, divisionals or continuation-in-parts thereof or any patents which may issue therefrom.

5.6 Except as provided in Sections 5.1, 5.2 and 5.3 and as otherwise expressly set forth in this Agreement, nothing in this Agreement will be construed as a warranty or representation that anything made, used, sold, or otherwise disposed of under any license granted in this Agreement is or will be free from infringement of patents, copyrights, and trademarks of third parties; conferring rights to use in advertising, publicity, or otherwise any trademark or the name of "STANFORD"; or granting by implication, estoppel, or otherwise any licenses or rights under patents of STANFORD.

5.7 EXCEPT AS EXPRESSLY SET FORTH IN THE AGREEMENT, STANFORD MAKES NO REPRESENTATIONS AND EXTENDS NO WARRANTIES OF ANY KIND, EITHER EXPRESS OR IMPLIED. THERE ARE NO EXPRESS OR IMPLIED WARRANTIES OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE, OR THAT THE USE OF THE LICENSED BIOLOGICAL MATERIALS OR LICENSED KNOW-HOW WILL NOT INFRINGE ANY PATENT, COPYRIGHT, TRADEMARK, OR OTHER RIGHTS, OR ANY OTHER EXPRESS OR IMPLIED WARRANTIES.

6. INDEMNITY.

6.1 RIGEL agrees to indemnify, hold harmless, and defend STANFORD, UCSF-Stanford Health Care and Stanford Health Services and their respective trustees, officers, employees, students, and agents against any and all claims by third parties for death, illness, personal injury, property damage, and improper business practices arising out of the manufacture, use, sale, or other disposition of the Licensed Biological Materials or any products arising or derived from Licensed Biological Materials, by RIGEL or RIGEL's sublicensee(s) or customers.

6.2 STANFORD shall not be liable for any indirect, special, consequential or other damages whatsoever, whether grounded in tort (including negligence), strict liability, contract or otherwise. STANFORD shall not have any responsibilities or liabilities whatsoever with respect to products arising or derived from Licensed Biological Materials by RIGEL.

6.3 RIGEL shall at all times comply, through insurance or self-insurance, with all statutory workers' compensation and employers' liability requirements covering any and all employees with respect to activities performed under this Agreement.

6.4 In addition to the foregoing, RIGEL shall maintain Comprehensive General Liability Insurance, including Products Liability Insurance, with reputable and financially secure insurance carrier(s) to cover the activities of RIGEL and its sublicensee(s) in the amounts and during the periods specified herein. Such insurance shall provide minimum limits of liability of One Million Dollars ($1,000,000) as of the first anniversary of the date upon which RIGEL first leases a facility in which it will conduct research and development activities, and of Five Million Dollars ($5,000,000) as of the commencement of human clinical trials. Such insurance shall include STANFORD, UCSF-Stanford Health Care and Stanford Health Services, their trustees, directors, officers, employees, students, and agents as additional insureds. Such insurance shall be written to cover claims incurred, discovered, manifested or made during or after the expiration of this Agreement. At STANFORD's request, RIGEL shall furnish a Certificate of Insurance evidencing primary coverage and requiring thirty (30) days prior written notice of cancellation or material change to STANFORD. RIGEL shall advise STANFORD, in writing, that it maintains excess liability coverage (following form) over primary insurance for at least the minimum limits set forth above. All such insurance of RIGEL shall be primary coverage; insurance of STANFORD, UCSF-Stanford Health Care or Stanford Health Services shall be excess and noncontributory.

7. STANFORD NAMES AND MARKS.

RIGEL agrees not to identify STANFORD in any promotional advertising or other promotional materials to be disseminated to the pubic or any portion thereof or to use the name of any STANFORD faculty member, employee, or student or any trademark, service mark, trade name, or symbol of STANFORD, UCSF-Stanford Health Care or Stanford Health Services, or that is associated with any of them, without STANFORD's prior written consent, except as required by law. STANFORD shall not unreasonably withhold consent under this Section 7.

8. SUBLICENSE(S).

8.1 Subject to the provisions of this Article 8, RIGEL may grant a sublicense to the license rights granted to RIGEL by STANFORD in Sections 2.1 and 2.2 to Cell Genesys solely in the field of human and/or animal gene therapy.

8.2 Any sublicense granted by RIGEL to Cell Genesys under this Agreement shall be subject and subordinate to terms and conditions of this Agreement, except:

(a) Sublicense terms and conditions shall reflect that any sublicensee(s) shall not grant a sublicense to a third party; and

(b) The financial obligations of any sublicensee to RIGEL specified in the sublicense(s) may be different from those obligations set forth in this

Agreement.

Any such sublicense(s) also shall expressly include the provisions of Articles 5 and 6 for the benefit of STANFORD and shall survive any termination of this Agreement.

8.3 RIGEL agrees to provide STANFORD with a copy (with financial terms redacted) of any sublicense granted to Cell Genesys pursuant to this Article 8 and written notice of the effective date of any termination of such sublicense prior to the expiration of the Term (as defined in Section 9.1).

9. TERM AND TERMINATION.

9.1 The term of this Agreement shall commence upon the Effective Date and shall expire upon the later of: (a) the expiration of the last to expire of any Patents owned by STANFORD at any time which claim inventions in the Licensed Biological Materials or the Licensed Know-How; or (b) twenty (20) years from the Effective Date (the "Term"). In addition, RIGEL may terminate this Agreement prior to the expiration of the Term by giving STANFORD notice in writing at least thirty (30) days in advance of the effective termination date selected by RIGEL.

9.2 Either party may terminate this Agreement prior to the expiration of the Term if the other party is in material breach of any provision hereof and fails to remedy any such default or breach within thirty (30) days after written notice thereof to the breaching party.

9.3 Surviving the expiration of the Term are:

(a) Any cause of action or claim of RIGEL or STANFORD, accrued or to accrue, because of any breach or default by the other party prior to the expiration of the Term; and

(b) Articles 4, 5, 6, 7 and 11; and

(c) Article 8 and Sections 2.1 and 2.2; and the licenses granted thereunder shall be deemed perpetual and fully paid-up.

9.4 Surviving any termination of this Agreement are:

(a) Any cause of action or claim of RIGEL or STANFORD, accrued or to accrue, because of any breach or default by the other party prior to the termination of this Agreement; and

(b) Articles 4, 5, 6, 7, 8 and 11 and Section 3.2; and

(c) Sections 2.1 and 2.2 if RIGEL has fulfilled all of its payment obligations to STANFORD under Section 3.1 prior to such termination; and the licenses granted thereunder shall be deemed perpetual and fully paid-up.

10. ASSIGNMENT.

This Agreement may not be assigned by either party without the express written consent of the other party, except that RIGEL may assign the Agreement in connection with a merger, consolidation or sale of all or substantially all of RIGEL's assets.

11. ARBITRATION Error! Bookmark not defined..

11.1 Any controversy arising under or related to this Agreement, and any disputed claim by either party against the other under this Agreement excluding any dispute relating to patent validity or infringement arising under this Agreement, shall be settled by arbitration in accordance with the Licensing Agreement Arbitration Rules of the American Arbitration Association.

11.2 Upon request by either party, arbitration will be by a third party arbitrator mutually agreed upon in writing by RIGEL and STANFORD within thirty (30) days of such arbitration request. Judgment upon the award rendered by the arbitrator shall be final and nonappealable and may be entered in any court having jurisdiction thereof.

11.3 The parties shall be entitled to discovery in like manner as if the arbitration were a civil suit in the California Superior Court.

11.4 Any arbitration shall be held at Stanford, California, unless the parties hereto mutually agree in writing to another place.

12. NOTICES.

All notices under this Agreement shall be deemed to have been fully given when done in writing and deposited in the United States mail registered or certified, and addressed as follows:

To STANFORD:	Office of Technology Licensing Stanford University 900 Welch Road, Suite 350 Palo Alto, CA 94304-1850 Attention: Director
To RIGEL:	Rigel Pharmaceuticals, Inc. 240 East Grand Ave. South San Francisco, CA 94080 Attention: President

Either party may change its address upon written notice to the other party.

13. WAIVER.

None of the terms of this Agreement can be waived except by the written consent of the party waiving compliance.

14. APPLICABLE LAW.

This Agreement shall be governed by the laws of the State of California applicable to agreements negotiated, executed and performed wholly within California. Any claim or controversy arising out of or related to this Agreement or any breach hereof shall be submitted to a court of applicable jurisdiction in the State of California, and each party hereby consents to the jurisdiction and venue of such court.

15. DISCLAIMER OF AGENCY.

Neither party is, or will be deemed to be, the legal representative or agent of the other, nor shall either party have the right or authority to assume, create, or incur any third party liability or obligation of any kind, express or implied, against or in the name of or on behalf of another except as expressly set forth in this Agreement.

16. SEVERABILITY.

If any provision or provisions of this Agreement shall be held to be invalid, illegal or unenforceable, the validity, legality and enforceability of the remaining provisions shall not be in any way affected or impaired thereby.

17. ENTIRE AGREEMENT.

This Agreement, together with the Exhibit attached hereto, embodies the entire understanding of the parties and shall supersede all previous communications, representations or understandings, either oral or written, between the parties relating to the subject matter hereof. No amendment or modification hereof shall be valid or binding upon the parties unless made in writing and signed by duly authorized representatives of both parties.

18. COUNTERPARTS.

This Agreement may be executed in counterparts, with the same force and effect as if the parties had executed the same instrument.

IN WITNESS WHEREOF, the parties hereto have executed this Agreement in duplicate originals by their duly authorized officers or representatives.

THE BOARD OF TRUSTEES OF THE RIGEL PHARMACEUTICALS, INC.
LELAND STANFORD JUNIOR UNIVERSITY

By: /s/ Katherine Ku	By: /s/ Donald W. Perryman
Name: Katherine Ku	Name: Donald W. Perryman
Title: Director, Technology Licensing	Title: VP, Business Development

June 9,1999

EXHIBIT A

LICENSED BIOLOGICAL MATERIALS

[*] Vectors:

[*]

APPENDIX F

Application, Patent Number or Publication Number	Filing Date, Grant Date, or Publication Date	Title/Inventors
[*]	[*]	[*]
[*]	[*]	[*]
[*]	[*]	[*]
[*]	[*]	[*]
[*]	[*]	[*]
[*]	[*]	[*]
[*]	[*]	[*]
[*]	[*]	[*]

APPENDIX G

RESEARCH PLAN

[*]

(6 pages of text omitted here)

APPENDIX H

LIST OF FTEs

[*]
[*]
[*]

APPENDIX I

THIRD PARTY PATENTS

[*]

[*] = CERTAIN CONFIDENTIAL INFORMATION CONTAINED IN THIS DOCUMENT, MARKED BY BRACKETS, HAS BEEN OMITTED AND FILED SEPARATELY WITH THE SECURITIES AND EXCHANGE COMMISSION PURSUANT TO RULE 24b-2 OF THE SECURITIES EXCHANGE ACT OF 1934, AS AMENDED.