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, 2002.

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**	**94080**
(Address of principal executive offices)	(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 November 1, 2002, there were45,599,102 shares of the Registrant's common stock outstanding.

RIGEL PHARMACEUTICALS, INC.
QUARTERLY REPORT ON FORM 10-Q
FOR THE QUARTERLY PERIOD ENDED SEPTEMBER 30, 2002

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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, 2002 (unaudited)	December 31, 2001 (Note 1)
Assets		
Current assets:		
Cash and cash equivalents	$ 36,268	$ 11,488
Available-for-sale securities	250	21,927
Accounts receivable	107	1,153
Prepaid expenses and other current assets	2,728	1,965
Total current assets	39,353	36,533
Property and equipment, net	12,664	8,440
Other assets	1,814	1,475
	$ 53,831	$ 46,448
Liabilities and stockholders' equity		
Current liabilities:		
Accounts payable	$ 5,021	$ 1,952
Accrued compensation	941	671
Accrued liabilities	2,766	1,104
Deferred revenue	4,027	3,264
Capital lease obligations	3,706	3,171
Total current liabilities	16,461	10,162
Capital lease obligations	2,986	4,243
Long-term portion of deferred revenue	1,550	2,240
Other long-term liabilities	216	862
Commitments		
Stockholders' equity:		
Common stock, $0.001 par value; 100,000,000 shares authorized; 45,544,602 and 37,732,209 shares issued and outstanding on September 30, 2002 and December 31, 2001, respectively	46	38
Additional paid-in capital	140,386	109,095
Deferred stock compensation	(1,070)	(2,452)
Accumulated other comprehensive income	—	44
Accumulated deficit	(106,744)	(77,784)
Total stockholders' equity	32,618	28,941
	$ 53,831	$ 46,448

Note (1) The balance sheet at December 31, 2001 has been derived from the audited financial statements at that date included in the Company's Form 10-K for the fiscal year ended December 31, 2001.

See accompanying notes.

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

	Three Months Ended September 30,		Nine Months Ended September 30,	
	2002	2001	2002	2001
	(unaudited)		(unaudited)	
Revenues:				
Contract revenues from collaborations	$ 3,653	$ 4,206	$ 12,088	$ 10,524
Costs and expenses:				
Research and development	11,624	8,631	33,781	23,395
General and administrative	2,130	1,991	7,335	5,885
	13,754	10,622	41,116	29,280
Loss from operations	(10,101)	(6,416)	(29,028)	(18,756)
Interest income	172	437	732	1,662
Interest expense	(213)	(240)	(664)	(600)
Net loss	$ (10,142)	$ (6,219)	$ (28,960)	$ (17,694)
Net loss per share, basic and diluted	$ (0.22)	$ (0.17)	$ (0.65)	$ (0.48)
Weighted average shares used in computing net loss per common share, basic and diluted	45,515	37,516	44,735	37,173

See accompanying notes.

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

	Nine Months Ended September 30,	
	2002	2001
	(unaudited)	
Operating activities:		
Net loss	$ (28,960)	$ (17,694)
Adjustments to reconcile net loss to net cash used in operating activities:		
Depreciation and amortization	3,671	2,908
Amortization of deferred stock compensation	777	2,119
Noncash stock compensation recovery	(113)	(496)
Issuances of equity instruments for noncash benefits	15	—
Changes in assets and liabilities:		
Accounts receivable	1,046	(3,013)
Prepaid expenses and other current assets	697	(334)
Other assets	(36)	(531)
Accounts payable	1,608	(569)
Accrued compensation	270	84
Accrued liabilities	1,662	3
Deferred revenue	73	4,475
Other long-term liabilities	(646)	43
Net cash used in operating activities	(19,936)	(13,005)
Investing activities:		
Purchase of available-for-sale securities	(25,956)	(40,415)
Maturities of available-for-sale securities	22,625	18,240
Sale of available-for-sale securities	24,964	—
Capital expenditures	(7,895)	(2,623)
Net cash provided by (used in) investing activities	13,738	(24,798)
Financing activities:		
Proceeds from capital lease financing	1,999	1,748
Principal payments on capital lease obligations	(2,721)	(2,470)
Net proceeds from issuances of common stock	31,700	601
Net cash provided by (used in) financing activities	30,978	(121)
Net increase (decrease) in cash and cash equivalents	24,780	(37,924)
Cash and cash equivalents at beginning of period	11,488	49,030
Cash and cash equivalents at end of period	$ 36,268	$ 11,106

See accompanying notes.

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.

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 condensed financial statements include all adjustments, consisting only of normal recurring adjustments, which Rigel considers 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, 2001 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, 2001. 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 differ materially from the net loss as reported.

3. Net loss per share

Basic earnings per share excludes any dilutive effects of options or warrants. The calculation of diluted net loss per share excludes shares of potential common stock if the effect is anti-dilutive.

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 of continuing involvement, generally the research term.

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

contracts.

Milestones are recognized pursuant to collaborative agreements upon the achievement of these specified at-risk milestones and upon acknowledgement by the collaborator.

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

5. Equity financing

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

6. Equipment financing

In January 2002, the Company entered into an additional equipment lease line agreement for an aggregate total of $2.0 million. The Company also issued a warrant to purchase 23,810 shares of common stock at an exercise price of $4.20 per share in conjunction with the agreement. The fair market value of this warrant, as determined by the Black-Scholes valuation model, was approximately $66,000. This amount has been capitalized in other long-term assets and will be amortized into expense over the payment periods of the obligation. As of September 30, 2002, the Company had utilized all of this lease line. The lease period for this facility is three years with the interest rate on each lease line fixed at the time of draw down. As of September 30, 2002, the average interest rate on outstanding obligations was 11.5%. Obligations under this lease line are secured by assets financed under the leases.

7. Daiichi collaboration

In August 2002, the Company entered into a three-year collaborative research agreement with Daiichi Pharmaceuticals ("Daiichi") to discover and develop drug candidates related to a specific protein degradation target. Under the terms of the agreement, the initial stages of the collaboration will focus on the development of the assay for this specific target and the initiation of high-throughput screening to identify small molecules with therapeutic oncology applications. Upon signing of the agreement, Daiichi was obligated to pay a one-time, non-refundable, non-creditable up-front fee. Under the terms of the agreement, Daiichi will provide support for research for three years, as well as payment for various milestones and royalties if certain conditions are met.

8. Tenant improvements and equipment financing

In July 2002, the Company entered into a tenant improvement and equipment lease line agreement for an aggregate total of $15.0 million. The Company also issued a warrant to purchase 138,889 shares of common stock at an exercise price of $2.70 per share in conjunction with the agreement. The fair market value of this warrant, as determined by the Black-Scholes valuation model, was approximately $251,000. This amount has been capitalized in other long-term assets and will be amortized into expense over the payment periods of the obligation. Due to the master lease agreement amendment signed in October 2002 (see Note 9) the Company is reconsidering the need for the $15.0 million level of financing. Therefore, the Company is currently in negotiations with the lender to amend the agreement to substantially lower the aggregate amount of the line, remove the tenant improvement availability in the line, and remove certain liens that were required under the original agreement. As of September 30, 2002, the Company did not have access to any amount under the original tenant improvement and equipment lease line.

9. Subsequent event

On October 19, 2002, the Company amended its original master lease agreement for future research and office facilities, consisting of approximately 147,000 square feet in South San Francisco, California. The terms of the amendment provide for a delay of the rent commencement date until February 1, 2003, an increase in the tenant improvement allowance to cover the remaining construction obligations on the new facility, and an increase in future rental commitments to compensate for the delay of the rent commencement and the increase in the tenant improvement allowance. The Company also issued a warrant to purchase 500,000 shares of common stock at an exercise price of $1.97 per share in conjunction with the agreement. The fair market value of this warrant, as determined by the Black-Scholes valuation model, will be capitalized in other long-term assets and amortized into expense over the life of the amended lease.

Independent Accountants' Review Report

The Board of Directors
Rigel Pharmaceuticals, Inc.

We have reviewed the accompanying condensed balance sheet of Rigel Pharmaceuticals, Inc. as of September 30, 2002, and the related condensed statements of operations for the three-month and nine-month periods ended September 30, 2002 and 2001, and the condensed statements of cash flows for the nine-month periods ended September 30, 2002 and 2001. These financial statements are the responsibility of the Company's management.

We conducted our review in accordance with standards established by the American Institute of Certified Public Accountants. A review of interim financial information consists principally of applying analytical procedures to financial data, and making inquiries of persons responsible for financial and accounting matters. It is substantially less in scope than an audit conducted in accordance with auditing standards generally accepted in the United States, which will be performed for the full year with the objective of expressing an opinion regarding the financial statements taken as a whole. Accordingly, we do not express such an opinion.

Based on our review, we are not aware of any material modifications that should be made to the accompanying condensed financial statements referred to above for them to be in conformity with accounting principles generally accepted in the United States.

We have previously audited, in accordance with auditing standards generally accepted in the United States, the balance sheet of Rigel Pharmaceuticals, Inc. as of December 31, 2001, and the related statements of operations, stockholders' equity, and cash flows for the year then ended (not presented herein) and in our report dated January 25, 2002, (except for note 9, as to which the date is February 20, 2002), we expressed an unqualified opinion on those financial statements. In our opinion, the information set forth in the accompanying condensed balance sheet as of December 31, 2001, is fairly stated, in all material respects, in relation to the balance sheet from which it has been derived.

/s/ ERNST & YOUNG LLP

Palo Alto, California
October 15, 2002

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 2001 audited financial statements and accompanying notes included in our 2001 Annual Report on Form 10-K. Operating results for the three and nine months ended September 30, 2002 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 2001 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

Our mission is to become a source of novel, small-molecule drugs to meet large, unmet medical needs. Our business model is to develop a portfolio of drug candidates and to take these through phase II clinical trials, after which we intend to seek commercialization partners for completion of clinical evaluation, regulatory approval and marketing. We have incurred net losses since inception and expect to incur substantial and increasing losses for the next several years as we continue to move drug candidates into and through preclinical and clinical stages of drug development and expand our research and development activities. To date, we have funded our operations primarily through the sale of equity securities, non-equity payments from collaborative partners and capital asset lease financings.

We received our first funding from our collaborative partners in December 1998. As of September 30, 2002, including both research funding and equity investments, we have received cash proceeds totaling an aggregate of $74.8 million from our collaborative partners, including $12.7 million in the nine months ended September 30, 2002. As of September 30, 2002, our accumulated deficit was approximately $106.7 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 four major pharmaceutical companies: Johnson & Johnson, Pfizer, Novartis and Daiichi. Johnson & Johnson, Pfizer and Novartis have contributed nearly all of our revenues over the last three years.

In July 2001, we expanded our collaboration with Novartis with the initiation of our angiogenesis program, the fourth and final program in our Novartis collaboration. Pursuant to the expanded Novartis collaboration, we received a $4.0 million up-front payment from Novartis, which will be recognized as revenue ratably over the life of the contract. In addition, the expanded collaboration provides that the angiogenesis research program will be carried out at Rigel, and provides for research reimbursement over the next three years and includes potential future milestones and royalty payments to Rigel. In conjunction with the original collaboration, Novartis paid $4.0 million for 2,000,000 shares of our series D preferred stock that converted to 2,000,000 shares of common stock upon the completion of our initial public offering. The original collaboration also allowed for an additional equity investment by Novartis of up to $10.0 million that was callable by us until our initial public offering. We exercised this right and sold to Novartis 1,428,571 shares of common stock at $7.00 per share concurrent with the closing of the our initial public offering. As of April 16, 2002, Novartis still held all 3,428,571 of these shares.

In May 2002, Novartis elected to conclude the research phases of our two initial joint projects in the autoimmunity and transplant rejection areas, after 42 months each, effective in November 2002 and February 2003, respectively. Pursuant to the collaboration agreement, Novartis had the option to end the research phase on these programs after either 24 months or 42 months.

In December 2001, Johnson & Johnson elected to extend the research phase of our collaboration for an additional two years, resulting in additional research reimbursement through the end of 2003 of approximately $5.0 million.

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

In August 2002, we initiated a three-year collaborative research agreement with Daiichi Pharmaceuticals to discover and develop drug candidates related to a specific protein degradation target. Under the terms of the agreement, the initial stages of the collaboration

will focus on the development of the assay for this specific target and the initiation of high-throughput screening to identify small molecules with therapeutic oncology applications. Upon signing of the agreement, Daiichi was obligated to pay a one-time, non-refundable, non-creditable up-front fee. Under the terms of the agreement, Daiichi will provide support for research for three years, as well as payment for various milestones and royalties if certain conditions are met.

A summary of these partnerships is as follows:

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

Under the terms of these collaborations, our partners have agreed to provide up to approximately $13.8 million in future research funding over the next three years, $2.0 million of which is subject to possible cancellation. The cancellation amount relates to the Novartis Tumor Growth research program which allows for the research phase of the program to be terminated by Novartis after 24 months. In addition, we may receive additional payments upon the achievement of specific research and development milestones and royalties upon commercialization of any products.

In order to maintain and increase proceeds from collaborations, we are exploring new opportunities with existing and new potential collaborators. Our earliest

partnerships focused on the early stages of drug discovery, specifically on target discovery and validation, while our collaboration with Johnson & Johnson has been expanded to also include both chemistry and compound high-throughput screening, and our recent collaboration with Daiichi focuses on drug discovery and development. 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 may have an expanded focus and could include high-throughput screening, combinatorial and medicinal chemistry, pre-clinical evaluations and/or clinical development. For some programs, we may also seek to enter into collaborations for the development of compounds that we have discovered. The timing, the amount of funds received and the scope of any new 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. Our Novartis programs are multiple-year agreements with the research phases terminating in 2002, 2003 and 2004, while the Johnson & Johnson collaboration concludes its research phase at the end of 2003. As each collaboration reaches the conclusion of its research phase, the parties may evaluate the status of the collaboration and, if appropriate, seek to extend the research phase of the collaboration agreement or negotiate alternative terms.

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

Critical Accounting Policies and the Use of Estimates

Our discussion and analysis of our financial condition and results of operations is based upon our financial statements, which have been prepared in accordance with accounting principles generally accepted in the United States. The preparation of these financial statements requires us to make estimates and judgments that affect the reported amounts of assets, liabilities, revenues and expenses, and related disclosure of contingent assets and liabilities. On an on-going basis, we evaluate our estimates, including those related to terms of the research collaborations, investments, stock compensation, impairment issues, the estimated useful life of assets, income taxes, financing operations and contingencies. We base our estimates on historical experience and on various other assumptions that we believe to be reasonable under the circumstances, the results of which form the basis for making judgments about the carrying values of assets and liabilities that are not readily apparent from other sources. Actual results may differ from these estimates under different assumptions or conditions. We believe the following critical accounting policies affect our more significant judgments and estimates used in the preparation of our financial statements.

Revenue Recognition

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

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

Revenues resulting from the achievement of milestones are recognized pursuant to collaborative agreements upon the accomplishment of these specified at-risk milestones.

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

Stock-based Compensation

We recorded no deferred stock compensation with respect to stock options granted to employees in the first nine months of 2002 and approximately $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 $0.8 million and $2.1 million for the nine months ended September 30, 2002 and 2001, respectively. At September 30, 2002, we had a total of $1.1 million remaining to be amortized over the remaining vesting periods of the stock options.

In addition to the amortization of the deferred stock compensation, we also record charges associated with stock options granted to consultants in accordance with accounting principles generally accepted in the United States that involve the periodic revaluation of outstanding unvested consultant options based upon the current market value of our common stock and other assumptions, including the expected future volatility of our stock price. We recognized $113,000 and $496,000 in stock-based compensation recovery for revaluation of consultant options for the nine months ended September 30, 2002 and 2001, respectively. Even though the number of unvested outstanding options issued to consultants continues to decline, we expect to see continued fluctuations in the future as a portion of these options are revalued based on the current market price of our common stock through the application of the graded vesting method.

Three Months Ended September 30, 2002 and 2001

Revenues. Contract revenues from collaborations were approximately $3.7 million and $4.2 million for the three months ended September 30, 2002 and 2001, respectively. Revenues in both three-month periods primarily consisted of research support and amortization of upfront fees from the continuation of our collaborations with Novartis and Johnson & Johnson. The decrease in 2002 revenues of $0.5 million was primarily due to the conclusion of the research phase of the Pfizer collaboration in February 2002, offset by the initiation of the Daiichi collaboration in August 2002. We expect contract revenues from collaborations to be a significant component of our total revenues for the foreseeable future.

Research and Development. Research and development expenses were approximately $11.6 million and $8.6 million for the three months ended September 30, 2002 and 2001, respectively. The increase of $3.0 million reflects the costs associated with the commencement of clinical trials, the addition of both drug development and research headcount, and increased preclinical activities. In September 2002, we began the Phase I safety trial of our lead compound, labeled R112, in the United Kingdom and expect to file an IND application for this compound with the FDA, before the end of the year for the clinical indication of allergic rhinitis. We expect research and development expenses to increase in future periods, particularly as we continue to move our solely-owned product candidates through pre-clinical activities and into clinical trials.

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

Because of the number of research projects we have ongoing at any one time, and the ability to utilize resources across several projects, the majority of our research

and development costs are not directly tied to any individual project and are allocated among multiple projects. The management of our projects is driven primarily by scientific data, and to a lesser extent, by these cost allocations, which are based primarily on human resource time incurred on each project. As a result, the costs allocated to a project do not necessarily reflect the actual costs of the project. Accordingly, we do not maintain actual cost incurred information for our projects on a project-by-project basis.

General and Administrative Expenses. General and administrative expenses were approximately flat at $2.1 million and $2.0 million for the three months ended September 30, 2002 and 2001, respectively. We expect that general and administrative expenses will increase in the future to support the growth of our research and development efforts as our products continue to move into clinical trials.

Net Interest Expense/Income. Net interest expense was approximately $41,000 for the three months ended September 30, 2002, compared to net interest income of $197,000 for the three months ended September 30, 2001. Interest income results from our interest-bearing

balances, whereas interest expense is the result of our capital lease obligations associated with fixed asset purchases. A reduction in interest rates on our owned securities is primarily responsible for the net interest expense in the three months ended September 30, 2002, as compared to the net interest income in the same period in 2001.

Nine Months Ended September 30, 2002 and 2001

Revenues. Contract revenues from collaborations were approximately $12.1 million and $10.5 million for the nine months ended September 30, 2002 and 2001, respectively. Revenues in both nine-month periods primarily consisted of research support and amortization of up-front fees from the continuation of our collaborations with Novartis, Johnson & Johnson and Pfizer. In the nine months ended September 30, 2002, revenues included a milestone payment for a target accepted in accordance with our transplant rejection research program with Novartis and targets accepted in accordance with our Pfizer collaboration. The increase in 2002 revenues of $1.6 million was primarily due to the commencement of the angiogenesis program with Novartis in July 2001 and milestones achieved in the Novartis and Pfizer collaborations. We expect contract revenues from collaborations to be a significant component of our total revenues for the foreseeable future.

Research and Development. Research and development expenses were approximately $33.8 million and $23.4 million for the nine months ended September 30, 2002 and 2001, respectively. The increase of $10.4 million reflects primarily the continued expansion of our drug development infrastructure, the addition of both drug development and research headcount, increased outside contract efforts, increased preclinical activities, the commencement of clinical trials and costs associated with our intellectual property. In September 2002, we began the Phase I safety trial of our lead compound, labeled R112, in the United Kingdom and expect to file an IND application for this compound with the FDA before the end of the year for the clinical indication of allergic rhinitis. We expect research and development expenses to increase in future periods, particularly as we continue to move our solely-owned product candidates through pre-clinical activities and into clinical trials.

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

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

General and Administrative Expenses. General and administrative expenses were approximately $7.3 million and $5.9 million for the nine months ended September 30, 2002 and 2001, respectively. The increase was primarily attributable to higher employee costs and greater infrastructure costs to support our growing research and development activities. We expect that general and administrative expenses will increase in the future to support the growth of our research and development efforts as our products continue to move into clinical trials.

Net Interest Income. Net interest income was approximately $68,000 and $1,062,000 for the nine months ended September 30, 2002 and 2001, respectively. Interest income results from our interest-bearing balances, whereas interest expense is the result of our capital lease obligations associated with fixed asset purchases. The decrease in net interest income in 2002 was due to the reduction in interest rates on our owned securities.

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, 2002, we had received $126.1 million in gross proceeds from the sale of equity securities, including $20.0 million from collaborators, and had received $54.8 million in research funding from collaborators. In addition, as of September 30, 2002, we had financed, through leases and loans, the purchase of equipment and leasehold improvements totaling approximately $17.2 million.

As of September 30, 2002, we had approximately $36.5 million in cash, cash equivalents and available-for-sale securities, as compared to $33.4 million as of December 31, 2001, an increase of $3.1 million. The increase was attributable to proceeds of $31.2 million, net of commissions and offering costs, from the sale of 7,465,117 shares of our common stock to certain institutional investors in two offerings in January and February 2002 under our shelf registration statement, offset by approximately $19.9 million in net cash used in operating activities. We also invested $7.9 million in capital equipment and tenant improvements and had debt service payments of $2.7 million in conjunction with our equipment financing arrangements. These payments were offset by $2.0 million of proceeds from lease financings.

As of September 30, 2002, we had $6.7 million in capital lease obligations associated with our financed purchase of equipment and

leasehold improvements. All existing equipment financing agreements as of September 30, 2002 are secured by the equipment financed, bear interest rates in a range of 7% to 15% and are due in monthly installments through 2005. In addition, three of these agreements have balloon payments at the end of each loan term, while the fourth agreement allows us to purchase the assets financed at the fair market value or 20% of the original acquisition cost at the end of the financing term. In July 2002, we entered into a tenant improvement and equipment lease line agreement for an aggregate total of $15.0 million. Due to the master lease agreement amendment signed in October 2002 we are reconsidering the need for the $15.0 million level of financing. Therefore, we are currently in negotiations with the lender to amend the agreement to substantially lower the aggregate amount of the line, remove the tenant improvement availability in the line, and remove certain liens that were required under the original agreement. As of September 30, 2002, we did not have access to any amount under the original tenant improvement and equipment lease line.

In May 2001, we entered into a 15-year non-cancelable lease for future research and office facilities, consisting of approximately 147,000 square feet in South San Francisco, California. On October 19, 2002, we amended the lease. The terms of the amendment allow for a delay of the rent commencement date until February 1, 2003, an increase in the tenant improvement allowance to cover the remaining construction obligations on the new facility, and an increase in future rental commitments to compensate

for the delay of the rent commencement and the increase in the tenant improvement allowance.

Under the terms of this amended lease, we are expected to occupy these new facilities in early 2003 and concurrently terminate the lease of our current facilities at 240 East Grand Avenue in South San Francisco. The future research and office facilities are currently under construction as a build-to-suit facility. We have incurred approximately $6.6 million in pre-construction and construction costs associated with our new facility through September 30, 2002. We do not expect to incur any further construction costs due to the increased tenant improvement allowance in the amended lease. These costs are currently being capitalized on our balance sheet as construction-in-progress, a component of property and equipment. These leasehold improvements will be amortized ratably over the term of the lease, which is 15 years, upon occupation of the buildings.

The following are our contractual commitments (by fiscal year) as of October 20, 2002 associated with debt obligations, lease obligations, contracted research obligations and tenant improvement obligations:

	Total	2003	2004 - 2005	2006 - 2007	2008 - 2018
			(in thousands)		
Capital leases	$ 6,641	$ 3,977	$ 2,664	$ —	$ —
Facilities leases	198,128	7,169	21,438	26,546	142,975
Contracted research	500	500	—	—	—
Total	$ 205,269	$ 11,646	$ 24,102	$ 26,546	$ 142,975

We believe that our existing capital resources, together with the proceeds from our current collaborations as well as proceeds from future anticipated collaborations, will be sufficient to support our current operating plan for at least the next 12 months. We will require additional financing in the future to fund our operations. Our future funding requirements will depend on many factors, including, but not limited to:

- our ability to maintain our existing collaboration partnerships;
- our ability to establish, and the scope of, new collaborations;
- the progress and number of research programs carried out at Rigel;
- the progress of the research and development efforts of our collaborators;
- any changes in the breadth of our research and development programs;
- our ability to meet the milestones identified in our collaborative agreements that trigger payments;
- our ability to maintain and establish new corporate relationships and research collaborations;
- our ability to acquire or license other technologies or compounds, if any;
- the progress and success of preclinical studies and clinical trials of our drug candidates conducted by us or our collaborative partners or licensees;
- our ability to manage our growth;

- competing technological and market developments;
- the costs and timing of obtaining, enforcing and defending our patent and intellectual rights;
- the costs and timing of regulatory approvals; and
- expenses associated with unforeseen litigation.

In addition, we are constantly reviewing potential opportunities to expand our technologies or add to our portfolio of drug candidates. In the future, we may need further capital in order to acquire or invest in technologies, products or businesses. For the next several years, we do not expect our operations to generate the amount of cash required by our future cash needs. In December 2001, we filed a registration statement on Form S-3 to offer and sell equity and debt securities in one or more offerings up to a total dollar amount of $50 million. Currently, approximately $16.5 million remains available on the Form S-3, and we have no current commitments to offer and sell any securities that may be offered and sold pursuant to such registration statement. We expect to finance future cash needs through strategic collaborations, strategic financings, 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, such 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

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

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

Due in large part to the significant research and development expenditures required to identify and validate new drug candidates and advance our programs into clinical testing, we have not been profitable and have generated operating losses since we were incorporated in June 1996. 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, 2002, we had an accumulated deficit of approximately $106.7 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. Our ability to enter into new collaborations and the revenue, if any, that may be recognized under these collaborations is highly uncertain. If we are unable to enter into new collaborations, our business prospects could be harmed, which could have an immediate adverse effect on the trading price of our stock.

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

have an immediate adverse effect on the trading price of our stock.

Our business plan forsees 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, the majority of our operations are in the early stages of drug identification and development. To date, we have only identified a few potential drug compounds and only one of those compounds has made it into the clinical testing stage. In our industry, 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 one product in the clinic and our future leads for potential drug compounds will be subject to the risks and failures inherent in the development of pharmaceutical products based on new technologies. These risks include, but are not limited to, the inherent difficulty in selecting the right drug target and avoiding unwanted side effects as well as the unanticipated problems relating to product development, testing, regulatory compliance, manufacturing, marketing 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. We do not know whether we, or any of our collaborative partners, will be permitted to undertake clinical trials of potential products beyond the one trial already concluded. It may take us or our collaborative partners several years to complete any such testing, and failure can occur at any stage of testing. Interim results of trials do not necessarily predict final results, and acceptable results in early trials may not be repeated in later trials. A number of companies in the pharmaceutical industry, including biotechnology companies, have suffered significant setbacks in advanced clinical trials, even after achieving promising results in earlier trials. Moreover, when our projects reach clinical trials, we or our collaborative partners may decide to discontinue development of any or all of these projects at any time for commercial, scientific or other reasons. 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. For example, the funded research phase of our collaboration with Pfizer has been completed and the development portion of our collaboration is ongoing at Pfizer. In addition, in May 2002, Novartis elected to conclude the research phases of our two initial joint projects in the autoimmunity and transplant rejection areas, after 42 months each, effective February 2003. Pursuant to the collaboration agreement, Novartis had the option to end the research phase on these programs after 24 months or 42 months. More generally, our 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 its agreement with us or otherwise fail to conduct the collaborative activities successfully and in a timely manner, the preclinical or clinical development or commercialization of the affected product candidates or research programs could be delayed or terminated. We generally do not control the amount and timing of resources that our corporate collaborators devote to our programs or

potential products. We do not know whether current or future collaborative partners, if any, might pursue alternative technologies or develop alternative products either on their own or in collaboration with others, including our competitors, as a means for developing treatments for the diseases targeted by collaborative arrangements with us. 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.

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 our current collaborations as well as proceeds from future anticipated collaborations, will be sufficient to support our current operating plan for at least the next 12 months. We will require additional financing in the future to fund our operations. Our future funding requirements will depend on many factors, including, but not limited to:

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

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. Twelve U.S. patents have been issued to us as of October 15, 2002, 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 that are important to our business, and we generally do not control the prosecution of in-licensed technology. Accordingly, we are unable to exercise the same degree of control over this intellectual property as we exercise over our internally-developed technology. Moreover, some of our academic institution licensors, research collaborators and scientific advisors have rights to publish data and information in which we have rights. If we cannot maintain the confidentiality of our technology and other confidential information in connection with our collaborations, then our ability to receive patent protection or protect our proprietary information will be impaired. In addition, some of the technology we have licensed relies on patented inventions developed using U.S. government resources. The U.S. government retains certain rights, as defined by law, in such patents, and may choose to exercise such rights.

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

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

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

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

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

Before commencing clinical trials in humans in the United States, we, or our collaborative partners, will need to submit and receive approval from the FDA of an investigational new drug application (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 162 at September 30, 2002. 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 agencies for drug candidates more rapidly. Companies that complete clinical trials, obtain required regulatory agency approvals and commence commercial sale of their drugs before their competitors may achieve a significant competitive advantage, including certain patent and FDA marketing exclusivity rights that would delay or prevent our ability to market certain products. Any drugs resulting from our research and development efforts, or from our joint efforts with our existing or future collaborative partners, might not be able to compete successfully with competitors' existing or future products or products under development or obtain regulatory approval in the United States or elsewhere.

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

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

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

- government and health administration authorities;

- private health insurers; and
- other third-party payors.

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

If 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 162 employees as of September 30, 2002, our success depends on the continued contributions of our principal management and scientific personnel and on our ability to develop and maintain important relationships with leading academic institutions, scientists and companies in the face of intense competition for such personnel. In particular, our research programs depend on our ability to attract and retain highly skilled chemists, other scientists, and regulatory and clinical personnel. If we lose the services of any of our personnel, our research and development efforts could be seriously and adversely affected. 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 certain of these consultants and advisors. We, and various members of our management and research staff, rely on certain of these consultants and advisors for expertise in our research, regulatory and clinical efforts. Our scientific advisors are not employees of ours and may have commitments to, or consulting or advisory contracts with, other entities that may limit their availability to us. We do not know if we will be able to maintain such consulting agreements or that such scientific advisors will not enter into consulting arrangements, exclusive or otherwise, with competing pharmaceutical or biotechnology companies, any of which would have a detrimental impact on our research objectives and could have a material adverse effect on our business, financial condition and results of operations.

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

Our research and development activities involve the controlled use of potentially harmful biological materials as well as hazardous materials, chemicals and various radioactive compounds. We cannot completely eliminate the risk of accidental contamination or injury from the use, storage, handling or disposal of these materials. In the event of contamination or injury, we could be held liable for

damages that result, and such liability could exceed our resources. We are subject to federal, state and local laws and regulations governing the use, storage, handling and disposal of these materials and specified waste products. The cost of compliance with, or any potential violation of, these laws and regulations could be significant.

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

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

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

Our directors, executive officers and principal stockholders and their affiliates beneficially own approximately 47% of our common stock, based on their beneficial ownership as of April 16, 2002. 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 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 and government and non-government debt securities. In 2001 and the first nine months of 2002, we maintained an investment portfolio primarily in depository accounts and corporate commercial paper. Due to the short-term nature of these investments, we believe we do not have a material exposure to interest rate risk arising from our investments. Therefore, no quantitative tabular disclosure is provided.

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

Item 4. Controls and Procedures

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

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

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

PART II OTHER INFORMATION

Item 2. Changes in Securities and Use of Proceeds

c) On July 12, 2002, we issued a warrant to purchase 138,889 shares of common stock at an exercise price of $2.70 per share to Comerica Bank – California in connection with the execution of a tenant improvement and equipment lease line agreement. The warrant was issued in a private transaction pursuant to an exemption from registration in reliance upon Section 4(2) of the Securities Act of 1933, as amended.

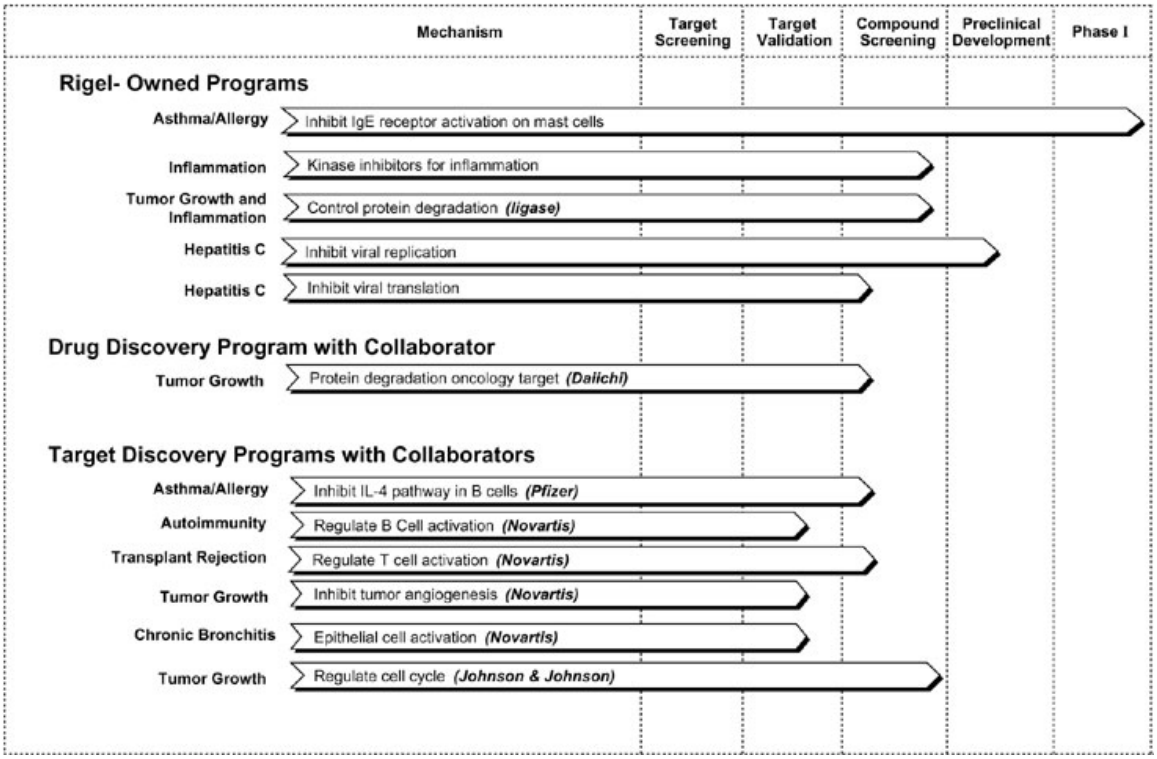
d) Our Registration Statement on Form S-1 (No. 333-45864), as amended, with respect to our initial public offering was declared effective by the SEC on November 28, 2000. We received net proceeds of approximately $35,560,000 after deducting offering expenses of $3,990,000, including underwriting discounts 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, 2002, approximately $4.9 million of the net proceeds remained available and were primarily invested in short-term marketable securities.

Item 5. Other Information

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 2001 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.

Product Development

The following table summarizes key information in the twelve programs being conducted by Rigel and its partners that focus on specific disease mechanisms:



(1) "Target Screening": Disease-modeled screening in cells using our advanced functional genomics technology.

(2) "Target Validation": Testing to establish a causal link between an intracellular protein target and a cellular response important in a disease process.

(3) "Compound Screening": The development of biochemical and cell-based assays for the purpose of screening collections of small molecule compounds to identify any compounds that bind to a functionally active site of a validated target and to determine which of those compounds to move into preclinical development.

(4) "Preclinical Development": Pharmacology and toxicology testing in animal models to gather data necessary to comply with applicable regulatory protocols prior to submission of an Investigational New Drug application to the FDA.

(5) "Phase I": Clinical testing in humans to determine toxicity.

Immune Disorders

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

Asthma/Allergy

Rigel-Owned Asthma/Allergy Programs

Inhibit IgE receptor activation on mast cells. The goal of this program is to identify compounds that inhibit the secretion of inflammatory factors resulting from IgE binding to its receptor on mast cells. Currently, we have identified several candidate compound series for development. Preliminary studies demonstrate that these compounds inhibit the ability of IgE to activate its receptor on mast cells. There is evidence in animal models and early clinical studies that blocking IgE mediated activation of mast cells can reduce allergic symptoms in multiple species, including humans. We believe that small molecule inhibitors of IgE signaling pathways could play an important role in the treatment of such chronic disorders. We have completed the Phase I safety trial on our lead compound labeled R112 in the United Kingdom and expect to file an investigational new drug, or IND, application for this compound with the United States Food and Drug Administration, or FDA, before the end of the year for the clinical indication of allergic rhinitis.

Asthma/Allergy Program with Pfizer

Inhibit IL-4 production in B Cells. In this program with Pfizer that began in 1999, we have completed work to identify and validate intracellular drug targets that

selectively control the production of IgE in B Cells. The program has generated seven validated targets that have been accepted by Pfizer, and several of these targets are now entering the compound screening phase at Pfizer.

Autoimmunity/Transplant Rejection

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

Rigel-Owned Kinase Inhibitor for Inflammation

Activation pathways are initiated by the binding of antigen (foreign protein) to specific surface receptors on T cells or B cells. This sets off an intracellular cascade of signals, resulting in changes in gene expression and the production of proteins that drive the immune response or lead to antibody production and secretion in B cells. We have identified several classes of small molecules that inhibit kinases that block the early signal transduction events controlling the activation of lymphocytes and other immune cells. These compounds are currently being evaluated in various models of immune disease.

Autoimmunity/Transplant Rejection Programs with Novartis

Regulate B cell activation. The goal of the B cell activation program is to prevent antibody secretion by activated B cells, an important mechanism in autoimmunity transplantation rejection. We have identified potential novel drug targets which we are currently validating. This program has been partnered with Novartis since August 1999. On May 15, 2002, Novartis notified us of its election to conclude the research phase of this collaboration on February 23, 2003.

Regulate T cell activation. The goal of our T cell activation program is to identify early steps in the process of T cell activation. T cells are responsible for cell-mediated inflammatory and humoral responses, both of which are important mechanisms of transplant rejection and autoimmune diseases. We have identified several novel drug targets in this program, of which one has been accepted by Novartis. The

program has been partnered with Novartis since May 1999. On May 15, 2002, Novartis notified us of its election to conclude the research phase of this collaboration on November 25, 2002.

Chronic Bronchitis

Chronic Bronchitis Program with Novartis – At Novartis Location

Epithelial cell activation. Using Rigel's technology, Novartis is pursuing a program at its facilities for which the goal is to inhibit epithelial cell activation for the possible treatment of chronic bronchitis. This program is in the target screening and validation stage and may be terminated any time at Novartis' discretion. Chronic bronchitis is a condition characterized by excessive mucus production that causes cough. It is associated with hyperplasia and hypertrophy of the mucus-producing glands found in the submucosa of large cartilaginous airways. Chronic bronchitis affects an estimated 5% of the U.S. population.

Cancer (Tumor Growth)

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

Cancer Programs with Collaborators

Regulate cell cycle (Johnson & Johnson). This program is directed at finding new targets that regulate the cell cycle and the cell cycle checkpoint pathways. The proliferation of normal cells is controlled by built-in safety mechanisms in the cell cycle, termed checkpoints, that ensure that only cells with normal genetic material can progress through the cell cycle and divide. Cells with genetic mutations are recognized and shunted into the apoptosis pathway to protect the organism from cancer and other genetic disorders. It is estimated that more than 50% of all human tumors contain cancer cells that have lost one or more crucial checkpoint genes. Cancer cells also can carry mutations in another group of normal cell genes that mimic extracellular proliferation signals, causing tumor cells to continue to divide even in the absence of normal cell growth signals. The net result of these genetic mutations is uncontrolled cell division and disease. We have collaborated with our partner since December 1998 to identify intracellular drug targets involved in cell cycle control. We have identified several novel drug targets in this program, three of which have been accepted by Johnson & Johnson as validated. Two of these targets have completed high-throughput screening at Rigel and Johnson & Johnson with some of the identified compounds advancing to the lead profiling stage.

Inhibit tumor angiogenesis (Novartis). This antitumor program is directed toward the angiogenesis pathway. Angiogenesis is defined as the growth of new blood vessels. In diseased circumstances or in oxygen deficient conditions, angiogenesis is stimulated by the synthesis and release of specific pro-angiogenic factors. In contrast to normal angiogenesis, tumor angiogenesis is a continuous process. As a significant proportion of tumors are dependent on continued angiogenesis, inhibition of this process blocks tumor growth which often leads to complete tumor deterioration. Thus, we believe therapeutic intervention of tumor–promoted angiogenesis represents an important form of antitumor therapy. We have established and initiated multiple screens in human capillary endothelial cells and have identified several potential targets in the angiogenesis pathway. This drug discovery program for finding new targets for the development of small molecule inhibitors has been ongoing at Rigel for approximately two years and the collaboration with Novartis was initiated in July 2001.

Protein degradation oncology target (Daiichi). On August 1, 2002, we initiated a collaboration with Daiichi Pharmaceuticals to discover and develop drug candidates related to a specific protein degradation target. Under terms of the agreement, the initial stages of the collaboration will focus on the development of the assay for this specific target and the initiation of high-throughput screening to identify small molecules with oncology therapeutic applications.

Hepatitis C (Infectious Diseases)

Rigel-Owned Hepatitis C Programs

Inhibit viral replication. We acquired a cell based screening system in June 2001 to screen for small molecule inhibitors blocking the hepatitis C replication mechanism. We have completed compound screening and have identified several potential small molecule inhibitors of the hepatitis C replication mechanism. We are nearing the completion of the preclinical evaluation and plan to begin clinical testing in the second half of 2003.

Inhibit viral translation. We have initiated a viral research program based upon technology acquired from Questcor in September 2000. Hepatitis C is a major cause of chronic hepatitis, cirrhosis and hepatocellular carcinoma. The goal of this program is to interfere with the IRES translation mechanism of the hepatitis C virus. This program is currently in the compound screening stage of development.

Under the terms of our agreement with Questcor, we are obligated to assign back to Questcor all of our rights in the technology and intellectual property to which we are entitled pursuant to the agreement if we commit a material breach of the agreement and if Questcor follows certain procedures set forth in the agreement.

Ligase Initiative

The goal of the Ligase Initiative is to identify and determine the function of all ubiquitin ligases and ubiquitin proteases. These ligases and proteases are a very large family of enzymes that regulate the destruction of specific proteins in cells. Inappropriate activity of these enzymes has been implicated in cancer and autoimmunity, metabolic, cardiovascular and neurodegenerative diseases. It is believed that disease processes may be treated by either up-regulating or down-regulating these key signaling enzymes as a means of developing multiple therapeutic solutions.

Rigel-Owned Ligase Program for Tumor Growth and Inflammation

Control protein degradation (ligase). This program is focused on characterizing and developing specific inhibitors of protein-degrading enzymes, named ubiquitin ligases. Many intracellular proteins that play a critical role in signaling pathways are regulated by this protein-degrading process.

Disease processes can be treated by up-regulating or down-regulating these key signaling proteins as a way to enhance or dampen specific cellular responses. This principle has been successfully used in the design of a number of therapeutics for the treatment of inflammation. In the area of tumor growth, this program is focused on the ubiquitin ligase pathway unique to malignancies. The goal is to use specific inhibitors of ubiquitin ligases that regulate mitosis, or cell division, to stop growth and induce apotosis in transformed cancer cell lines. We continue to screen our library of small molecules against several members of the ubiquitin ligase family in order to identify small molecule compounds which may be potent and specific inhibitors.

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

a) Exhibits:

The exhibits listed on the accompanying index to exhibits accompany or 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:

None.

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 M. GOWER
James M. Gower
Chief Executive Officer

Date: November 14, 2002

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

Date: November 14, 2002

CERTIFICATION

I, James M. Gower, Chief Executive Officer of Rigel Pharmaceuticals, Inc., certify that:

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

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

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

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

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

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

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

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

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

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

6. The registrant's other certifying officers and I have indicated in this quarterly report whether or not there were significant changes in internal controls or in other factors that could significantly affect internal controls subsequent to the date of our most recent evaluation, including any corrective actions with regard to significant deficiencies and material weaknesses.

Date: November 14, 2002

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

CERTIFICATION

I, James H. Welch, Chief Financial Officer of Rigel Pharmaceuticals, Inc., certify that:

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

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

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

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

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

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

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

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

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

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

6. The registrant's other certifying officers and I have indicated in this quarterly report whether or not there were significant changes in internal controls or in other factors that could significantly affect internal controls subsequent to the date of our most recent evaluation, including any corrective actions with regard to significant deficiencies and material weaknesses.

Date: November 14, 2002

/s/ James H. Welch
James H. Welch
Chief Financial Officer

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)
4.9	Warrant issued to Comerica Bank – California for the purchase of shares of common stock.
10.24	Loan and Security Agreement between Rigel and Comerica Bank - California, dated July 12, 2002.
10.25	Collaboration Agreement between Rigel and Daiichi Pharmaceutical Co., Ltd., dated August 1, 2002. (2)
15.1	Letter re unaudited interim financial information.
99.1	Certification pursuant to Section 906 of the Sarbanes-Oxley Act of 2002. (3)

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

(2) Confidential treatment requested as to specific portions, which portions are omitted and filed separately with the Securities and Exchange Commission.
(3) This certification accompanies this Quarterly Report on Form 10-Q and shall not be deemed "filed" by Rigel for purposes of Section 18 of the Securities Exchange Act of 1934, as amended.

THIS WARRANT AND THE SHARES ISSUABLE HEREUNDER HAVE NOT BEEN REGISTERED UNDER THE SECURITIES ACT OF 1933, AS AMENDED, AND MAY NOT BE SOLD, PLEDGED OR OTHERWISE TRANSFERRED WITHOUT AN EFFECTIVE REGISTRATION THEREOF UNDER SUCH ACT OR PURSUANT TO RULE 144 OR AN OPINION OF COUNSEL REASONABLY SATISFACTORY TO THE CORPORATION AND ITS COUNSEL THAT SUCH REGISTRATION IS NOT REQUIRED.

WARRANT TO PURCHASE STOCK

Corporation:	RIGEL PHARMACEUTICALS, INC., a Delaware Corporation
Number of Shares:	138,889
Class of Stock:	Common
Initial Exercise Price:	$2.70 per share
Issue Date:	July 12, 2002
Expiration Date:	July 12, 2012 (Subject to Section 4.1)

THIS WARRANT CERTIFIES THAT, for good and valuable consideration, the receipt of which is hereby acknowledged, COMERICA BANK - CALIFORNIA or its assignee ("Holder") is entitled to purchase the number of fully paid and nonassessable shares of the class of securities (the "Shares") of the corporation (the "Company") at the initial exercise price per Share (the "Warrant Price") all as set forth above and as adjusted pursuant to Article 2 of this warrant, subject to the provisions and upon the terms and conditions set forth in this warrant.

ARTICLE 1. EXERCISE.

1.1 Method of Exercise. Holder may exercise this warrant by delivering this warrant and a duly executed Notice of Exercise in substantially the form attached as Appendix 1 to the principal office of the Company. Unless Holder is exercising the conversion right set forth in Section 1.2, Holder shall also deliver to the Company a check for the aggregate Warrant Price for the Shares being purchased.

1.2 Conversion Right. In lieu of exercising this warrant as specified in Section 1.1, Holder may from time to time convert this warrant, in whole or in part, into a number of Shares determined by dividing (a) the aggregate fair market value of the Shares or other securities otherwise issuable upon exercise of this warrant minus the aggregate Warrant Price of such Shares by (b) the fair market value of one Share. The fair market value of the Shares shall be determined pursuant to Section 1.3.

1.3 Fair Market Value. If the Shares are traded regularly in a public market, the fair market value of the Shares shall be the average closing price of the Shares (or the closing price of the Company's stock into which the Shares are convertible) reported for the five business days immediately before Holder delivers its Notice of Exercise to the Company. If the Shares are not regularly traded in a public market, the Board of Directors of the Company shall determine fair market value in its reasonable good faith judgment.

1.4 Delivery of Certificate and New Warrant. Promptly after Holder exercises or converts this warrant, the Company shall deliver to Holder certificates for the Shares acquired and, if this warrant has not been fully exercised or converted and has not expired, a new warrant representing the Shares not so acquired.

1.5 Replacement of Warrants. On receipt of evidence reasonably satisfactory to the Company of the loss, theft, destruction or mutilation of this warrant and, in the case of loss, theft or destruction, on delivery of an indemnity agreement reasonably satisfactory in form and amount to the Company or, in the case of mutilation, on surrender and cancellation of this warrant, the Company at its expense shall execute and deliver, in lieu of this warrant, a new warrant of like tenor.

1.6 Repurchase on Sale, Merger, or Consolidation of the Company.

1.6.1 "Acquisition." For the purpose of this warrant, "Acquisition" means any sale, license, or other disposition of all or substantially all of the assets (including intellectual property) of the Company, or any reorganization, consolidation, or merger of the Company where the holders of the Company's securities before the transaction beneficially own less than 50% of the outstanding voting securities of the surviving entity after the transaction.

1.6.2 Assumption of Warrant. If upon the closing of any Acquisition the successor entity assumes the obligations of this warrant, then this warrant shall be exercisable for the same securities, cash, and property as would be payable for the Shares issuable upon exercise of the unexercised portion of this warrant as if such Shares were outstanding on the record date for the Acquisition and subsequent closing. The Warrant Price shall be adjusted accordingly. The Company shall use reasonable efforts to cause the surviving corporation to assume the obligations of this warrant.

1.6.3 Nonassumption. If upon the closing of any Acquisition the successor entity does not assume the obligations of this warrant and Holder has not otherwise exercised this warrant in full, then this warrant shall be deemed to have been automatically converted pursuant to Section 1.2 and thereafter Holder shall participate in the Acquisition on the same terms as other holders of the same class of securities of the Company.

ARTICLE 2. ADJUSTMENTS TO THE SHARES.

2.1 Stock Dividends, Splits, Etc. If the Company declares or pays a dividend on its common stock payable in common stock, or other securities, subdivides the outstanding common stock into a greater amount of common stock, then upon exercise of this warrant, for each Share acquired, Holder shall receive, without cost to Holder, the total number and kind of securities to which Holder would have been entitled had Holder owned the Shares of record as of the date the dividend or subdivision occurred.

2.2 Reclassification, Exchange or Substitution. Upon any reclassification, exchange, substitution, or other event that results in a change of the number and/or class of the securities issuable upon exercise or conversion of this warrant, Holder shall be entitled to receive, upon exercise or conversion of this warrant, the number and kind of securities and property that Holder would have received for the Shares if this warrant had been exercised immediately before such reclassification, exchange, substitution, or other event. The Company or its successor shall promptly issue to Holder a new warrant for such new securities or other property. The new warrant shall provide for adjustments which shall be as nearly equivalent as may be practicable to the adjustments provided for in this Article 2 including, without limitation, adjustments to the Warrant Price and to the number of securities or property issuable upon exercise of the new warrant. The provisions of this Section 2.2 shall similarly apply to successive reclassifications, exchanges, substitutions, or other events.

2.3 Adjustments for Combinations, Etc. If the outstanding Shares are combined or consolidated, by reclassification or otherwise, into a lesser number of shares, the Warrant Price shall be proportionately increased. If the outstanding Shares are combined or consolidated, by reclassification or otherwise, into a greater number of shares, the Warrant Price shall be proportionately decreased.

2.4 No Impairment. The Company shall not, by amendment of its Certificate of Incorporation or through a reorganization, transfer of assets, consolidation, merger, dissolution, issue, or sale of securities or any other voluntary action, avoid or seek to avoid the observance or performance of any of the terms to be observed or performed under this warrant by the Company, but shall at all times in good faith assist in carrying out all the provisions of this Article 2 and in taking all such action as may

be necessary or appropriate to protect Holder's rights under this Article against impairment.

2.5 Certificate as to Adjustments. Upon written request of the Holder following an adjustment of the Warrant Price, the Company at its expense shall promptly compute such adjustment, and furnish Holder with a certificate of its Chief Financial Officer setting forth such adjustment and the facts upon which such adjustment is

based. The Company shall, upon written request, furnish Holder a certificate setting forth the Warrant Price in effect upon the date thereof and the series of adjustments leading to such Warrant Price.

ARTICLE 3. REPRESENTATIONS AND COVENANTS OF THE COMPANY.

3.1 Representations and Warranties. The Company hereby represents and warrants to the Holder as follows:

(a) The initial Warrant Price referenced on the first page of this warrant is not greater than the fair market value of the Shares as of the date of this warrant.

(b) All Shares which may be issued upon the exercise of the purchase right represented by this warrant, and all securities, if any, issuable upon conversion of the Shares, shall, upon issuance, be duly authorized, validly issued, fully paid and nonassessable, and free of any liens and encumbrances except for restrictions on transfer provided for herein or under applicable federal and state securities laws.

3.2 Notice of Certain Events. If the Company proposes at any time (a) to declare any dividend or distribution upon its common stock, whether in cash, property, stock, or other securities and whether or not a regular cash dividend; (b) to offer for subscription pro rata to the holders of any class or series of its stock any additional shares of stock of any class or series or other rights; (c) to effect any reclassification or recapitalization of common stock; or (d) to merge or consolidate with or into any other corporation, or sell, lease, license, or convey all or substantially all of its assets, or to liquidate, dissolve or wind up, then, in connection with each such event, the Company shall give Holder (1) at least 20 days prior written notice of the date on which a record will be taken for such dividend, distribution, or subscription rights (and specifying the date on which the holders of common stock will be entitled thereto) or for determining rights to vote, if any, in respect of the matters referred to in (a) and (b) above; and (2) in the case of the matters referred to in (c) and (d) above at least 20 days prior written notice of the date when the same will take place (and specifying the date on which the holders of common stock will be entitled to exchange their common stock for securities or other property deliverable upon the occurrence of such event).

3.3 Information Rights. So long as the Holder holds this warrant and/or any of the Shares, unless (i) the Company is delivering financial information pursuant to a Loan Agreement between the Company and the Holder or (ii) at least one class of the Company's securities is traded in a public market, the Company shall deliver to the Holder (a) promptly after mailing, copies of all communiques to the shareholders of the Company, (b) within ninety (90) days after the end of each fiscal year of the Company, the annual audited financial statements of the Company certified by independent public accountants of recognized standing and (c) within forty-five (45) days after the end of each of the first three quarters of each fiscal year, the Company's quarterly, unaudited financial statements.

ARTICLE 4. REPRESENTATIONS AND COVENANTS OF THE HOLDER.

4.1 Representations and Warranties. The Holder hereby represents and warrants to the Company as follows:

(a) Acquisition of Warrant for Personal Account. The Holder represents and warrants that it is acquiring the warrant solely for its own and its affiliates' account for investment and not with a view to or for sale or distribution of said warrant or any part thereof. The Holder also represents that the entire legal and beneficial interests of the warrant and Shares the Holder is acquiring is being acquired for, and will be held for, its and its affiliates' account only.

(b) Securities Are Not Registered.

(i) The Holder understands that the warrant and the Shares have not been registered under the Act on the basis that no distribution or public offering of the stock of the Company is to be effected. The Holder realizes that the basis for the exemption may not be present if, notwithstanding its representations, the Holder has a present intention of acquiring the securities for a fixed or determinable period in the future, selling (in

connection with a distribution or otherwise), granting any participation in, or otherwise distributing the securities, other than to its affiliates. The Holder has no such present intention.

(ii) The Holder recognizes that the warrant and the Shares must be held indefinitely unless they are subsequently registered under the Act or an exemption from such registration is available. The Holder recognizes that the Company has no obligation to register the warrant or the Shares of the Company, or to comply with any exemption from such registration.

(iii) The Holder is aware that neither the warrant nor the Shares may be sold pursuant to Rule 144 adopted under the Act unless certain conditions are met, including, among other things, the existence of a public market for the shares, the availability of certain current public information about the Company, the resale following the required holding period under Rule 144 and the number of shares being sold during any three month period not exceeding specified limitations. Holder is aware that the conditions for resale set forth in Rule 144 have not been satisfied and that the Company presently has no plans to satisfy these conditions in the foreseeable future.

ARTICLE 5. MISCELLANEOUS.

5.1 Term: Notice of Expiration. This warrant is exercisable in whole or in part, at any time and from time to time on or before the Expiration Date set forth above. If this warrant has not been exercised prior to the Expiration Date, this warrant shall be deemed to have been automatically exercised on the Expiration Date by "cashless" conversion pursuant to Section 1.2.

5.2 Legends. This warrant and the Shares (and the securities issuable, directly or indirectly, upon conversion of the Shares, if any) shall be imprinted with a legend in substantially the following form:

THIS SECURITY HAS NOT BEEN REGISTERED UNDER THE SECURITIES ACT OF 1933, AS AMENDED, AND MAY NOT BE SOLD, PLEDGED OR OTHERWISE TRANSFERRED WITHOUT AN EFFECTIVE REGISTRATION THEREOF UNDER SUCH ACT OR PURSUANT TO RULE 144 OR AN OPINION OF COUNSEL REASONABLY SATISFACTORY TO THE CORPORATION AND ITS COUNSEL THAT SUCH REGISTRATION IS NOT REQUIRED.

5.3 Compliance with Securities Laws on Transfer. This warrant and the Shares issuable upon exercise of this warrant (and the securities issuable, directly or indirectly, upon conversion of the Shares, if any) may not be transferred or assigned in whole or in part without compliance with applicable federal and state securities laws by the transferor and the transferee (including, without limitation, the delivery of investment representation letters and legal opinions reasonably satisfactory to the Company).

The Company shall not require Holder to provide an opinion of counsel if the transfer is to an affiliate of Holder or if there is no material question as to the availability of current information as referenced in Rule 144(c), Holder represents that it has complied with Rule 144(d) and (e) in reasonable detail, the selling broker represents that it has complied with Rule 144(f), and the Company is provided with a copy of Holder's notice of proposed sale.

5.4 Transfer Procedure. Subject to the provisions of Section 4.3, Holder may transfer all or part of this warrant or the Shares issuable upon exercise of this warrant (or the securities issuable, directly or indirectly, upon conversion of the Shares, if any) by giving the Company notice of the portion of the warrant being transferred setting forth the name, address and taxpayer identification number of the transferee and surrendering this warrant to the Company for reissuance to the transferee(s) (and Holder, if applicable); provided, however, that Holder may transfer all or part of this warrant to its affiliates, including, without limitation, Comerica Incorporated, at any time without notice to the Company, and such affiliate shall then be entitled to all the rights of Holder under this warrant and any related agreements, and the Company shall cooperate fully in ensuring that any stock issued upon exercise of this warrant is issued in the name of the affiliate that exercises the warrant. The terms and conditions of this warrant shall inure to the benefit of, and be binding upon, the Company and the holders hereof and their respective permitted successors and assigns. The Company shall have the right to refuse to transfer any portion of this warrant to any person who directly competes with the Company, unless the Company is filing financial information with the SEC pursuant to the Securities Exchange Act of 1934.

5.5 Notices. All notices and other communications from the Company to the Holder, or vice versa, shall be deemed delivered and effective when given personally or mailed by first-class registered or certified mail, postage prepaid, at such address as may have been furnished to the Company or the Holder, as the case may be, in writing by the Company or such Holder from time to time. All notices to the Holder shall be addressed as follows:

Comerica Bank - California
Attn: Warrant Administrator
Technology and Life Sciences Division
P.O. Box 7279
San Francisco, CA 94120-7279

5.6 Waiver. This warrant and any term hereof may be changed, waived, discharged or terminated only by an instrument in writing signed by the party against which enforcement of such change, waiver, discharge or termination is sought.

5.7 Attorneys' Fees. In the event of any dispute between the parties concerning the terms and provisions of this warrant, the party prevailing in such dispute shall be entitled to collect from the other party all costs incurred in such dispute, including reasonable attorneys' fees.

5.8 Governing Law. This warrant shall be governed by and construed in accordance with the laws of the State of California, without giving effect to its principles regarding conflicts of law.

RIGEL PHARMACEUTICALS, INC.

By: /s/ James H. Welch

Name: James H. Welch

Title: Chief Financial Officer

APPENDIX 1

NOTICE OF EXERCISE

1. The undersigned hereby elects to purchase shares of the stock of **RIGEL PHARMACEUTICALS, INC.** pursuant to the terms of the attached warrant, and tenders herewith payment of the purchase price of such shares in full.

2. The undersigned hereby elects to convert the attached warrant into shares in the manner specified in the warrant. This conversion is exercised with respect to of the shares covered by the warrant.

[Strike paragraph that does not apply.]

3. Please issue a certificate or certificates representing said shares in the name of the undersigned or in such other name as is specified below:

Comerica Bank - California
Attn: Warrant Administrator
Technology and Life Sciences Division
P.O. Box 7279
San Francisco, CA 94120-7279

OR Registered Assignee

4. The undersigned represents it is acquiring the shares solely for its own account and not as a nominee for any other party and not with a view toward the resale or distribution thereof except in compliance with applicable securities laws.

COMERICA BANK – CALIFORNIA or Registered
Assignee

_____
(Signature)

_____
(Date)

RIGEL PHARMACEUTICALS, INC.

LOAN AND SECURITY AGREEMENT

This LOAN AND SECURITY AGREEMENT is entered into as of July 12, 2002, by and between COMERICA BANK - CALIFORNIA ("Bank") and RIGEL PHARMACEUTICALS, INC. ("Borrower").

RECITALS

Borrower wishes to obtain credit from time to time from Bank, and Bank desires to extend credit to Borrower. This Agreement sets forth the terms on which Bank will advance credit to Borrower, and Borrower will repay the amounts owing to Bank.

AGREEMENT

The parties agree as follows:

1. DEFINITIONS AND CONSTRUCTION.

1.1 Definitions. As used in this Agreement, the following terms shall have the following definitions:

"Accounts" means all presently existing and hereafter arising accounts, contract rights, and all other forms of obligations owing to Borrower arising out of the sale or lease of goods (including, without limitation, the licensing of software and other technology) or the rendering of services by Borrower, whether or not earned by performance, and any and all credit insurance, guaranties, and other security therefor, as well as all merchandise returned to or reclaimed by Borrower and Borrower's Books relating to any of the foregoing.

"Affiliate" means, with respect to any Person, any Person that owns or controls directly or indirectly such Person, any Person that controls or is controlled by or is under common control with such Person, and each of such Person's senior executive officers, directors, and partners.

"Bank Expenses" means all: reasonable costs or expenses (including reasonable attorneys' fees and expenses) incurred in connection with the preparation, negotiation, administration, and enforcement of the Loan Documents; reasonable Collateral audit fees; and Bank's reasonable attorneys' fees and expenses incurred in amending, enforcing or defending the Loan Documents (including fees and expenses of appeal), incurred before, during and after an Insolvency Proceeding, whether or not suit is brought.

"Borrower's Books" means all of Borrower's books and records including: ledgers; records concerning Borrower's assets or liabilities, the Collateral, business operations or financial condition; and all computer programs, or tape files, and the equipment, containing such information.

"Business Day" means any day that is not a Saturday, Sunday, or other day on which banks in the State of California are authorized or required to close.

"Change in Control" shall mean a transaction in which any "person" or "group" (within the meaning of Section 13(d) and 14(d)(2) of the Securities Exchange Act of 1934) becomes the "beneficial owner" (as defined in Rule 13d-3 under the Securities Exchange Act of 1934), directly or indirectly, of a sufficient number of shares of all classes of stock then outstanding of Borrower ordinarily entitled to vote in the election of directors, empowering such "person" or "group" to elect a majority of the Board of Directors of Borrower, who did not have such power before such transaction.

"Closing Date" means the date of this Agreement.

"Code" means the California Uniform Commercial Code.

"Collateral" means the property described on Exhibit A attached hereto.

"Contingent Obligation" means, as applied to any Person, any direct or indirect liability, contingent or otherwise, of that Person with respect to (i) any indebtedness, lease, dividend, letter of credit or other obligation of another, including, without limitation, any such obligation directly or indirectly guaranteed, endorsed, co-made or discounted or sold with recourse by that Person, or in respect of which that Person is otherwise directly or indirectly liable; (ii) any obligations with respect to undrawn letters of credit, corporate credit cards, or merchant services issued or provided for the account of that Person; and (iii) all obligations arising under any interest rate, currency or commodity swap agreement, interest rate cap agreement, interest rate collar agreement, or other agreement or arrangement designed to protect such Person against fluctuation in interest rates, currency exchange rates or commodity prices; provided, however, that the term "Contingent Obligation" shall not include endorsements for collection or deposit in the ordinary course of business. The amount of any Contingent Obligation shall be deemed to be an amount equal to the stated or determined amount of the primary obligation in respect of which such Contingent Obligation is made or, if not stated or determinable, the maximum reasonably anticipated liability in respect thereof as determined by such Person in good faith; provided, however, that such amount shall not in any event exceed the maximum amount of the obligations under the guarantee or other support arrangement.

"Credit Extension" means each Equipment Advance, or any other extension of credit by Bank for the benefit of Borrower hereunder.

"Daily Balance" means the amount of the Obligations owed at the end of a given day.

"Equipment" means all present and future machinery, equipment, tenant improvements, furniture, fixtures, vehicles, tools, parts and attachments in which Borrower has any interest.

"Equipment Advance" has the meaning set forth in Section 2.1(a).

"Equipment Line" means a credit extension of up to Fifteen Million Dollars ($15,000,000).

"Equipment Maturity Date" means January 12, 2006.

"ERISA" means the Employee Retirement Income Security Act of 1974, as amended, and the regulations thereunder.

"Event of Default" has the meaning assigned in Article 0.

"GAAP" means generally accepted accounting principles as in effect from time to time.

"Indebtedness" means (a) all indebtedness for borrowed money or the deferred purchase price of property or services, including without limitation reimbursement and other obligations with respect to surety bonds and letters of credit, (b) all obligations evidenced by notes, bonds, debentures or similar instruments, (c) all capital lease obligations and (d) all Contingent Obligations.

"Insolvency Proceeding" means any proceeding commenced by or against any person or entity under any provision of the United States Bankruptcy Code, as amended, or under any other bankruptcy or insolvency law, including assignments for the benefit of creditors, formal or informal moratoria, compositions, extension generally with its creditors, or proceedings seeking reorganization, arrangement, or other relief.

"Inventory" means all present and future inventory in which Borrower has any interest, including merchandise, raw materials, parts, supplies, packing and shipping materials, work in process and finished products intended for sale or lease or to be furnished under a contract of service, of every kind and description now or at any time hereafter owned by or in the custody or possession, actual or constructive, of Borrower, including such inventory as is temporarily out of its custody or possession or in transit and including any returns upon any accounts or other proceeds, including insurance proceeds, resulting from the sale or disposition of any of the foregoing and any documents of title representing any of the above, and Borrower's Books relating to any of the foregoing.

"Investment" means any beneficial ownership of (including stock, partnership interest or other securities) any Person, or any loan, advance or capital contribution to any Person.

"IRC" means the Internal Revenue Code of 1986, as amended, and the regulations thereunder.

"Landlord Accounts" means amounts owing to Borrower by Slough Estates pursuant to the Slough / Rigel Build-to-Suite Lease dated May 16, 2001, provided that such accounts shall represent unconditional obligations of landlord and shall have been outstanding less than 45 days from invoice date and provided further that the total amount of all "Landlord Accounts" cannot exceed $18,300,000 in aggregate at any given time.

"Lien" means any mortgage, lien, deed of trust, charge, pledge, security interest or other encumbrance.

"Loan Documents" means, collectively, this Agreement, any note or notes executed by Borrower, and any other agreement entered into between Borrower and Bank in connection with this Agreement, all as amended or extended from time to time.

"Material Adverse Effect" means a material adverse effect on (i) the business operations or condition (financial or otherwise) of Borrower and its Subsidiaries taken as a whole or (ii) the ability of Borrower to repay the Obligations or otherwise perform its obligations under the Loan Documents or (iii) the value or priority of Bank's security interests in the Collateral or (iv) the prospect of repayment of any portion of the Obligations.

"Negotiable Collateral" means all of Borrower's present and future letters of credit of which it is a beneficiary, notes, drafts, instruments, securities, documents of title, and chattel paper, and Borrower's Books relating to any of the foregoing.

"Obligations" means all debt, principal, interest, Bank Expenses and other amounts owed to Bank by Borrower pursuant to this Agreement or any other agreement, whether absolute or contingent, due or to become due, now existing or hereafter arising, including any interest that accrues after the commencement of an Insolvency Proceeding and including any debt, liability, or obligation owing from Borrower to others that Bank may have obtained by assignment or otherwise.

"Periodic Payments" means all installments or similar recurring payments that Borrower may now or hereafter become obligated to pay to Bank pursuant to the terms and provisions of any instrument, or agreement now or hereafter in existence between Borrower and Bank.

"Permitted Indebtedness" means:

(a) Indebtedness of Borrower in favor of Bank arising under this Agreement or any other Loan Document;

(b) Indebtedness existing on the Closing Date and disclosed in the Schedule;

(c) Indebtedness secured by a lien described in clause 0 of the defined term "Permitted Liens," provided such Indebtedness does not exceed the cost of the equipment financed with such Indebtedness;

(d) Subordinated Debt;

(e) Indebtedness not otherwise permitted by Section 7.4 incurred in the ordinary course of Borrower's business not exceeding $250,000 in the aggregate outstanding at any time; and

(f) Extensions, refinancings, modifications, amendments and restatements of any items of Permitted Indebtedness (a) through (e) above, provided that the principal amount thereof is not increased or the terms thereof are not modified to impose more burdensome terms upon Borrower or its Subsidiary, as the case may be, and provided that such extension, refinancing, modification, amendment or restatement is permitted by any applicable subordination agreement.

"Permitted Investment" means:

(a) Investments existing on the Closing Date disclosed in the Schedule;

(b) Investments in other entities in connection with acquisitions, joint ventures or other strategic transactions in the ordinary course of Borrower's business, provided that (A) no Event of Default has occurred which is continuing or would exist after giving effect to such Investment and (B) the consideration paid by Borrower in exchange for such Investments consists solely of (i) equity interests of the Borrower or its Subsidiaries, (ii) licenses, sublicenses, leases or subleases in the ordinary course of business, (iii) technical or scientific support or services, and/or (iv) the contribution of intellectual property;

(c) (i) marketable direct obligations issued or unconditionally guaranteed by the United States of America or any agency or any State thereof maturing within one (1) year from the date of acquisition thereof, (ii) commercial paper maturing no more than one (1) year from the date of creation thereof and currently having rating of at least A-2 or P-2 from either Standard & Poor's Corporation or Moody's Investors Service, (iii) certificates of deposit maturing no more than one (1) year from the date of investment therein issued by Bank and (iv) Bank's money market accounts;

(d) Investments consisting of notes receivable or, prepaid royalties and other credit extensions to customers and suppliers who are not Affiliates, in the ordinary course of business which do not exceed $250,000 in the aggregate at any given time;

(e) Investments which do not exceed $250,000 in the aggregate consisting of (i) travel advances, employee relocation loans and other employee loans and advances in the ordinary course of business and (ii) loans to employees, officers or directors relating to the purchase of equity securities of Borrower or its Subsidiaries pursuant to employee stock purchase plans or agreements approved by Borrower's Board of Directors;

(f) Investments (including debt obligations) received in connection with the bankruptcy or reorganization of customers or suppliers and in settlement of delinquent obligations of, and other disputes with, customers or suppliers arising in the ordinary course of business; and

(g) Investments not otherwise permitted by Section 7.7 not exceeding $250,000 in the aggregate outstanding at any time.

"Permitted Liens" means the following:

(a) Any Liens existing on the Closing Date and disclosed in the Schedule or arising under this Agreement or the other Loan Documents;

(b) Liens for taxes, fees, assessments or other governmental charges or levies, either not delinquent or being contested in good faith by appropriate proceedings, provided the same have no priority over any of Bank's security interests;

(c) Liens (i) upon or in any equipment which was not financed by Bank acquired or held by Borrower or any of its Subsidiaries to secure the purchase price of such equipment or indebtedness incurred solely for the purpose of financing the acquisition of such equipment, or (ii) existing on such equipment at the time of its acquisition, provided that the Lien is confined solely to the property so acquired and improvements thereon, and the proceeds of such equipment;

(d) Liens securing Subordinated Debt;

(e) Liens arising from judgments, decrees or attachments in circumstances not constituting an Event of Default under Section 8.8;

(f) Leases or subleases and licenses and sublicenses granted to others in the ordinary course of Borrower's business, not interfering in any material respect with the business of Borrower and its Subsidiaries taken as a whole, if the leases, subleases, license and sublicenses permit Bank by their terms or under applicable law to have a security interest in such leases, subleases, nonexclusive licenses, and sublicenses;

(g) Easements, reservations, rights-of-way, restrictions, minor defects or irregularities in title and other similar charges or encumbrances affecting real property not constituting a Material Adverse Effect;

(h) Deposits or Liens in the ordinary course of business under worker's compensation, unemployment insurance, social security and other similar laws, or to secure the performance of bids, tenders or contracts (other than for the repayment of borrowed money) or to secure indemnity, performance or other similar bonds for the performance of bids, tenders or contracts (other than for the repayment of borrowed money) or to secure statutory obligations (other than liens arising under ERISA or environmental liens) or surety or appeal bonds, or to secure indemnity, performance or other similar bonds, provided that all of the foregoing do not exceed $25,000 in the aggregate at any given time;

(i) Liens in favor of customs and revenue authorities arising as a matter of law to secure payments of custom duties in connection with the importation of goods;

(j) Liens of materialmen, mechanics, warehousemen, carriers, artisan's or other similar Liens arising in the ordinary course of Borrower's business or by operation of law, which are not past due or which are being contested in good faith by appropriate proceedings and for which reserves have been established in accordance with GAAP;

(k) Liens in favor of other financial institutions arising in connection with Borrower's accounts held at such institutions, provided that Bank has a perfected security interest in the amounts held in such accounts; and

(l) Liens incurred in connection with the extension, renewal or refinancing of the indebtedness secured by Liens of the type described in clauses (a) through (k) above, provided that any extension, renewal or replacement Lien shall be limited to the property encumbered by the existing Lien and the principal amount of the indebtedness being extended, renewed or refinanced does not increase.

"Person" means any individual, sole proprietorship, partnership, limited liability company, joint venture, trust, unincorporated organization, association, corporation, institution, public benefit corporation, firm, joint stock company, estate, entity or governmental agency.

"Prime Rate" means the variable rate of interest, per annum, most recently announced by Bank, as its "prime rate," whether or not such announced rate is the lowest rate available from Bank.

"Quick Assets" means, at any date as of which the amount thereof shall be determined, the sum of the unrestricted cash (excluding any cash specifically pledged to support any Obligation) plus cash-equivalents, plus net billed accounts receivable plus interest receivable on cash or short term investments plus 100% of Landlord Accounts, of Borrower each determined in accordance with GAAP.

"Responsible Officer" means each of the Chief Executive Officer, the Chief Operating Officer, the Chief Financial Officer and the Controller of Borrower.

"Schedule" means the schedule of exceptions attached hereto and approved by Bank, if any.

"Subordinated Debt" means any debt incurred by Borrower that is subordinated to the debt owing by Borrower to Bank on terms acceptable to Bank (and identified as being such by Borrower and Bank).

"Subsidiary" means any corporation, company or partnership in which (i) any general partnership interest or (ii) more than 50% of the stock or other units of ownership which by the terms thereof has the ordinary voting power to elect the Board of Directors, managers or trustees of the entity, at the time as of which any determination is being made, is owned by Borrower, either directly or through an Affiliate (other than an officer or director).

1.2 Accounting Terms. All accounting terms not specifically defined herein shall be construed in accordance with GAAP and all calculations made hereunder shall be made in accordance with GAAP. When used herein, the terms "financial statements" shall include the notes and schedules thereto.

2. LOAN AND TERMS OF PAYMENT.

2.1 Credit Extensions.

Borrower promises to pay to the order of Bank, in lawful money of the United States of America, the aggregate unpaid principal amount of all Credit Extensions made by Bank to Borrower hereunder. Borrower shall also pay interest on the unpaid principal amount of such Credit Extensions at rates in accordance with the terms hereof.

(a) Equipment Advances.

(i) Subject to and upon the terms and conditions of this Agreement, at any time from the date hereof through July 12, 2003, Bank agrees to make advances (each an "Equipment Advance" and, collectively, the "Equipment Advances") to Borrower in an aggregate amount not to exceed the Equipment Line. Each Equipment Advance shall not exceed one hundred percent (100%) of the invoice amount of equipment, software, tenant improvements, and soft costs (which Borrower shall, in any case, have purchased within 90 days of the date of the corresponding Equipment Advance), including taxes, shipping, warranty charges, freight discounts and installation expense.

(ii) Interest shall accrue from the date of each Equipment Advance at the rate specified in Section 2.2(a), and shall be payable monthly on the twelfth (12th) day of each month so long as any Equipment Advances are outstanding. Any Equipment Advances that are outstanding on January 13, 2003 shall be payable in thirty six (36) equal monthly installments of principal, plus accrued interest, beginning on February 12, 2003, and continuing on the same day of each month thereafter through the Equipment Maturity Date. Any Equipment Advances extended on or after January 13, 2003 that are outstanding on July 13, 2003 shall be payable in thirty (30) equal monthly installments of principal, plus accrued interest, beginning on August 12, 2003, and continuing on the same day of each month thereafter through the Equipment Maturity Date, at which time all amounts owing under this Section 2.1(a) and any other amounts owing under this Agreement shall be immediately due and payable. Equipment Advances, once repaid, may not be reborrowed. Borrower may prepay any Equipment Advances or portion thereof at any time without penalty or premium.

(iii) When Borrower desires to obtain an Equipment Advance, Borrower shall notify Bank (which notice shall be irrevocable) by facsimile transmission to be received no later than 3:00 p.m. Pacific time one (1) Business Day before the day on which the Equipment Advance is to be made. Such notice shall be substantially in the form of Exhibit B. The notice shall be signed by a Responsible Officer or its designee and include a copy of the invoices (including invoices for progress payments) for any Equipment to be financed.

(iv) Borrower shall maintain a money market account or a certificate of deposit with Bank in an amount equal to or greater than the amount by which the outstanding principal balance of

the Equipment Advances exceeds $7,500,000 (the "Equipment Cash Collateral") at all times. Sufficient Equipment Cash Collateral shall be deposited with Bank as a condition precedent to the issuance of any Equipment Advance which shall cause the aggregate outstanding principal balance of all Equipment Advances to exceed $7,500,000.

2.2 Interest Rates, Payments, and Calculations.

(a) Interest Rates.

(i) Equipment Advances. Except as set forth in Section 2.2(b), the portion of the outstanding Equipment Advances which are not cash secured pursuant to Sections 2.1(a)(iv), 6.9 and 4.4 shall bear interest, on the outstanding Daily Balance thereof, at a rate equal to six percent (6.0%) above the Prime Rate. Except as set forth in Sections 2.1(a)(iv), 6.9 and 4.4, the portion of the outstanding Equipment Advances which are cash secured pursuant to Section 4.4 shall bear interest, on the outstanding Daily Balance thereof, at a rate equal to the Prime Rate.

(b) Late Fee; Default Rate. If any payment is not made within ten (10) days after the date such payment is due, Borrower shall pay Bank a late fee equal to the lesser of (i) five percent (5%) of the amount of such unpaid amount or (ii) the maximum amount permitted to be charged under applicable law. All Obligations shall bear interest, from and after the occurrence and during the continuance of an Event of Default, at a rate equal to five (5) percentage points above the interest rate applicable immediately prior to the occurrence of the Event of Default.

(c) Payments. Interest hereunder shall be due and payable on the twelfth (12th) calendar day of each month during the term hereof. Bank shall, at its option if an Event of Default has occurred which is continuing, (i) charge such interest, all Bank Expenses, and all Periodic Payments against any of Borrower's deposit accounts or (ii) against the Equipment Line, in which case those amounts shall thereafter accrue interest at the rate then applicable hereunder. Any interest not paid when due shall be compounded by becoming a part of the Obligations, and such interest shall thereafter accrue interest at the rate then applicable hereunder. All payments shall be free and clear of any taxes, withholdings, duties, impositions or other charges, to the end that Bank will receive the entire amount of any Obligations payable hereunder, regardless of source of payment.

(d) Computation. In the event the Prime Rate is changed from time to time hereafter, the applicable rate of interest hereunder shall be increased or decreased, effective as of the day the Prime Rate is changed, by an amount equal to such change in the Prime Rate. All interest chargeable under the Loan Documents shall be computed on the basis of a three hundred sixty (360) day year for the actual number of days elapsed.

2.3 Crediting Payments. Prior to the occurrence of an Event of Default, Bank shall credit a wire transfer of funds, check or other item of payment to such deposit account or Obligation as Borrower specifies. After the occurrence of an Event of Default, the receipt by Bank of any wire transfer of funds, check, or other item of payment shall be immediately applied to conditionally reduce Obligations, but shall not be considered a payment on account unless such payment is of immediately available federal funds or unless and until such check or other item of payment is honored when presented for payment. Notwithstanding anything to the contrary contained herein, any wire transfer or payment received by Bank after 12:00 noon Pacific time shall be deemed to have been received by Bank as of the opening of business on the

immediately following Business Day. Whenever any payment to Bank under the Loan Documents would otherwise be due (except by reason of acceleration) on a date that is not a Business Day, such payment shall instead be due on the next Business Day, and additional fees or interest, as the case may be, shall accrue and be payable for the period of such extension.

2.4 Fees. Borrower shall pay to Bank the following:

(a) Facility Fee. On the Closing Date, a Facility Fee equal to $56,250, which shall be nonrefundable and has been received by the Bank prior to the date of this Agreement;

(b) Additional Fee. On the date on which Borrower requests its first Equipment Advance (and as a condition precedent to the making of such Equipment Advance), an Additional Fee equal to Twenty Five Thousand Dollars ($25,000) if Borrower does not have cash balances at Bank or Comerica Securities, Inc. of at least Ten Million Dollars ($10,000,000) in the aggregate at the time such Equipment Advance is requested;

(c) Bank Expenses. On the Closing Date, all Bank Expenses incurred through the Closing Date, including reasonable attorneys' fees and expenses and, after the Closing Date, all Bank Expenses, including reasonable attorneys' fees and expenses, as and when they become due.

2.5 Additional Costs. In case any law, regulation, treaty or official directive or the interpretation or application thereof by any court or any governmental authority charged with the administration thereof or the compliance with any guideline or request of any central bank or other governmental authority (whether or not having the force of law):

(a) subjects Bank to any tax with respect to payments of principal or interest or any other amounts payable hereunder by Borrower or otherwise with respect to the transactions contemplated hereby (except for taxes on the overall net income of Bank imposed by the United States of America or any political subdivision thereof);

(b) imposes, modifies or deems applicable any deposit insurance, reserve, special deposit or similar requirement against assets held by, or deposits in or for the account of, or loans by, Bank; or

(c) imposes upon Bank any other condition with respect to its performance under this Agreement, and the result of any of the foregoing is to increase the cost to Bank, reduce the income receivable by Bank or impose any expense upon Bank with respect to the Obligations, Bank shall notify Borrower thereof. Borrower agrees to pay to Bank the amount of such increase in cost, reduction in income or additional expense as and when such cost, reduction or expense is incurred or determined, upon presentation by Bank of a statement of the amount and setting forth Bank's calculation thereof, all in reasonable detail, which statement shall be deemed true and correct absent manifest error.

2.6 Term. This Agreement shall become effective on the Closing Date and, subject to Section 0, shall continue in full force and effect for so long as any Obligations remain outstanding or Bank has any obligation to make Credit Extensions under this Agreement. Notwithstanding the foregoing, Bank shall have the right to terminate its obligation to make Credit Extensions under this Agreement immediately and without notice upon the occurrence and during the continuance of an Event of Default. Notwithstanding termination, Bank's Lien on the Collateral shall remain in effect for so long as any Obligations are outstanding.

3. CONDITIONS OF LOANS.

3.1 Conditions Precedent to Initial Credit Extension. The obligation of Bank to make the initial Credit Extension is subject to the condition precedent that Bank shall have received, in form and substance satisfactory to Bank, the following:

(a) this Agreement;

(b) a certificate of the Secretary of Borrower with respect to incumbency and resolutions authorizing the execution and delivery of this Agreement;

(c) a financing statement (Form UCC-1);

(d) agreement to provide insurance;

(e) a warrant to purchase stock;

(f) payment of the fees and Bank Expenses then due specified in Section 0 hereof; and

(g) such other documents, and completion of such other matters, as Bank may reasonably deem necessary or appropriate.

3.2 Conditions Precedent to all Credit Extensions. The obligation of Bank to make each Credit Extension, including the initial Credit Extension, is further subject to the following conditions:

(a) timely receipt by Bank of the Payment/Advance Form as provided in Section 0; and

(b) the representations and warranties contained in Section 0 shall be true and correct in all material respects on and as of the date of such Payment/Advance Form and on the effective date of each Credit Extension as though made at and as of each such date, and no Event of Default shall have occurred and be continuing, or would exist after giving effect to such Credit Extension (provided, however, that those representations and warranties expressly referring to another date shall be true, correct and complete in all material respects as of such date). The making of each Credit Extension shall be deemed to be a representation and warranty by Borrower on the date of such Credit Extension as to the accuracy of the facts referred to in this Section 0.

4. CREATION OF SECURITY INTEREST.

4.1 Grant of Security Interest. Borrower grants and pledges to Bank a continuing security interest in all presently existing and hereafter acquired or arising Collateral in order to secure prompt repayment of any and all Obligations and in order to secure prompt performance by Borrower of each of its covenants and duties under the Loan Documents. Except as set forth in the Schedule and Permitted Liens, such security interest constitutes a valid, first priority security interest in the presently existing Collateral, and will constitute a valid, first priority security interest in Collateral acquired after the date hereof. Borrower also hereby agrees not to sell, transfer, assign, mortgage, pledge, lease, grant a security interest in, or encumber any of its intellectual property, except in the ordinary course of Borrower's business.

4.2 Delivery of Additional Documentation Required. Borrower shall from time to time execute and deliver to Bank, at the request of Bank, all Negotiable Collateral, all financing statements and other documents that Bank may reasonably request, in form satisfactory to Bank, to perfect and continue the perfection of Bank's security interests in the Collateral and in order to fully consummate all of the transactions contemplated under the Loan Documents.

4.3 Right to Inspect. Bank (through any of its officers, employees, or agents) shall have the right, upon reasonable prior notice, from time to time during Borrower's usual business hours but no more than twice a year (unless an Event of Default has occurred and is continuing), to inspect Borrower's Books and to make copies thereof and to check, test, and appraise the Collateral in order to verify Borrower's financial condition or the amount, condition of, or any other matter relating to, the Collateral.

4.4 Cash Collateral. Borrower grants and pledges to Bank a continuing security interest in all presently existing and hereafter acquired or arising money market accounts or certificates of deposit opened by Borrower or on Borrower's behalf at Bank pursuant to Section 2.1(a)(iv) or Section 6.9 hereof, including without limitation the Liquidity Cash Collateral and the Equipment Cash Collateral (collectively, the "Cash Collateral") in order to secure prompt repayment of any and all Obligations and in order to secure prompt performance by Borrower of each of its covenants and duties under the Loan Documents. Such security interest constitutes a valid,

first priority security interest in the Cash Collateral, and will constitute a valid, first priority security interest in Cash Collateral acquired after the date hereof. Borrower hereby authorizes Bank to place a "hold" or similar restriction on the Cash Collateral which is required pursuant to Section 2.1(a)(iv) or Section 6.9 of this Agreement to be held at Bank to ensure that Borrower maintains such Cash Collateral at Bank pursuant to the terms and conditions of this Agreement. Prior to the maturity of any Cash Collateral held by Bank pursuant hereto, Borrower and Bank shall agree upon a security or instrument similar in form, quality and substance to the original Cash Collateral in which the proceeds of the Cash Collateral can be reinvested on maturity. Upon maturity of the Cash Collateral in accordance with its terms, or in the event the Cash Collateral otherwise becomes payable during the term of this Agreement, such maturing Cash Collateral may be presented for payment, exchange, or otherwise marketed by Bank on behalf of Borrower and the proceeds therefrom used to purchase the security or instrument agreed to by Borrower and Bank in accordance with the immediately preceding sentence. If no agreement has been made, such proceeds shall be placed into an interest bearing account offered by Bank in which Bank has a first priority security interest until such time as an agreement as to the security replacing the original Cash Collateral can be reached. Bank may retain its Lien on any such successor collateral and the proceeds therefrom as Cash Collateral in accordance with the terms of this Agreement for so long as any Obligations are owing from Borrower to Bank unless otherwise provided in Sections 2.1(a)(iv) and 6.9. Notwithstanding termination of this Agreement, Bank's Lien on the Cash Collateral shall remain in effect for so long as any Obligations are outstanding. Borrower shall execute and deliver to Bank such pledge agreements as are reasonably requested by Bank to perfect or continue the perfected status of Bank's Lien on the Cash Collateral contained in this Section 4.4.

5. REPRESENTATIONS AND WARRANTIES.

Borrower represents and warrants as follows:

5.1 Due Organization and Qualification. Borrower and each Subsidiary is a corporation duly existing under the laws of its state of incorporation and qualified and licensed to do business in any state in which the conduct of its business or its ownership of property requires that it be so qualified except where the failure to do so could not reasonably be expected to cause a Material Adverse Effect.

5.2 Due Authorization; No Conflict. The execution, delivery, and performance of the Loan Documents are within Borrower's powers, have been duly authorized, and are not in conflict with nor constitute a breach of any provision contained in Borrower's Certificate of Incorporation or Bylaws, nor will they constitute an event of default under any material agreement to which Borrower is a party or by which Borrower is bound. Borrower is not in default under any material agreement to which it is a party or by which it is bound.

5.3 No Prior Encumbrances. Borrower has good and marketable title to its property, free and clear of Liens, except for Permitted Liens.

5.4 Bona Fide Accounts. The Accounts are bona fide existing obligations. The property and services giving rise to Eligible Accounts has been delivered or rendered to the account debtor or to the account debtor's agent for immediate and unconditional acceptance by the account debtor.

5.5 Merchantable Inventory. All Inventory is in all material respects of good and marketable quality, free from all material defects, except for Inventory for which adequate reserves have been made.

5.6 Intellectual Property. Borrower is the sole owner of its federally registered patents, trademarks, and copyrights, except for licenses granted by Borrower to its customers, collaborators, joint venturers and strategic partners in the ordinary course of business. To Borrower's knowledge, each of Borrower's issued patents is valid and enforceable, and no part of its intellectual property has been judged invalid or unenforceable, in whole or in part, and no claim has been made that any part of its intellectual property violates the rights of any third party, except, in each case, as disclosed in the Borrower's filings with the Securities and Exchange Commission.

5.7 Name; Location of Chief Executive Office. Except as disclosed in the Schedule, Borrower has not done business under any name other than that specified on the signature page hereof. The chief

executive office of Borrower is located at the address indicated in Section 0 hereof. Except as disclosed in the Schedule, all Borrower's Inventory and Equipment is located only at the location set forth in Section 10 hereof.

5.8 Litigation. Except as set forth in the Schedule, there are no actions or proceedings pending by or against Borrower or any Subsidiary before any court or administrative agency in which an adverse decision could reasonably be expected to have a Material Adverse Effect.

5.9 No Material Adverse Change in Financial Statements. All consolidated and consolidating financial statements related to Borrower and any Subsidiary that Bank has received from Borrower fairly present in all material respects Borrower's financial condition as of the date thereof and Borrower's consolidated and consolidating results of operations for the period then ended. There has not been a material adverse change in the consolidated or the consolidating financial condition of Borrower since the date of the most recent of such financial statements submitted to Bank.

5.10 Solvency, Payment of Debts. Borrower is solvent and able to pay its debts (including trade debts) as they mature.

5.11 Regulatory Compliance. Borrower and each Subsidiary have met the minimum funding requirements of ERISA with respect to any employee benefit plans subject to ERISA, and no event has occurred resulting from Borrower's failure to comply with ERISA that could reasonably be expected to result in Borrower's incurring any material liability. Borrower is not an "investment company" or a company "controlled" by an "investment company" within the meaning of the Investment Company Act of 1940. Borrower is not engaged principally, or as one of the important activities, in the business of extending credit for the purpose of purchasing or carrying margin stock (within the meaning of Regulations T and U of the Board of Governors of the Federal Reserve System). Borrower has complied with all material provisions of the Federal Fair Labor Standards Act. Borrower has not violated any statutes, laws, ordinances or rules applicable to it, violation of which could reasonably be expected to have a Material Adverse Effect.

5.12 Environmental Condition. Except as disclosed in the Schedule, none of Borrower's or any Subsidiary's properties or assets has ever been used by Borrower or any Subsidiary or, to the best of Borrower's knowledge, by previous owners or operators, in the disposal of, or to produce, store, handle, treat, release, or transport, any hazardous waste or hazardous substance other than in accordance with applicable law; to the best of Borrower's knowledge, none of Borrower's properties or assets has ever been designated or identified in any manner pursuant to any environmental protection statute as a hazardous waste or hazardous substance disposal site, or a candidate for closure pursuant to any environmental protection statute; no lien arising under any environmental protection statute has attached to any revenues or to any real or personal property owned by Borrower or any Subsidiary; and neither Borrower nor any Subsidiary has received a summons, citation, notice, or directive from the Environmental Protection Agency or any other federal, state or other governmental agency concerning any action or omission by Borrower or any Subsidiary resulting in the releasing, or otherwise disposing of hazardous waste or hazardous substances into the environment.

5.13 Taxes. Borrower and each Subsidiary have filed or caused to be filed all tax returns required to be filed, and have paid, or have made adequate provision for the payment of, all taxes reflected therein, except those taxes being contested in good faith with adequate reserves under GAAP.

5.14 Subsidiaries. Borrower does not own any stock, partnership interest or other equity securities of any Person, except for Permitted Investments and except as disclosed on the Schedule.

5.15 Government Consents. Borrower and each Subsidiary have obtained all consents, approvals and authorizations of, made all declarations or filings with, and given all notices to, all governmental authorities that are necessary for the continued operation of Borrower's business as currently conducted, the failure to obtain which could reasonably be expected to have a Material Adverse Effect.

5.16 Accounts. Except as set forth on the Schedule, none of Borrower's nor any Subsidiary's cash or cash equivalents or investment property is maintained or invested with a Person other than Bank.

5.17 Full Disclosure. No representation, warranty or other statement made by Borrower in any certificate or written statement furnished to Bank contains any untrue statement of a material fact or omits to state a material fact necessary in order to make the statements contained in such certificates or statements not misleading.

6. AFFIRMATIVE COVENANTS.

Borrower covenants and agrees that, until payment in full of all outstanding Obligations, and for so long as Bank may have any commitment to make a Credit Extension hereunder, Borrower shall do all of the following:

6.1 Good Standing. Borrower shall maintain its and each of its Subsidiaries' corporate existence and good standing in its jurisdiction of incorporation and maintain qualification in each jurisdiction in which it is required under applicable law except where the failure to do so could not reasonably be expected to have a Material Adverse Effect. Borrower shall maintain, and shall cause each of its Subsidiaries to maintain, in force all licenses, approvals and agreements, the loss of which could reasonably be expected to have a Material Adverse Effect.

6.2 Government Compliance. Borrower shall meet, and shall cause each Subsidiary to meet, the minimum funding requirements of ERISA with respect to any employee benefit plans subject to ERISA to the extent that not meeting them could reasonably be expected to have a Material Adverse Effect. Borrower shall comply, and shall cause each Subsidiary to comply, with all statutes, laws, ordinances and government rules and regulations to which it is subject, noncompliance with which could reasonably be expected to have a Material Adverse Effect.

6.3 Financial Statements, Reports, Certificates. Borrower shall deliver the following to Bank: (a) as soon as available, but in any event within thirty (30) days after the end of each calendar month, a company prepared consolidated balance sheet, income, and cash flow statement covering Borrower's consolidated operations during such period, prepared in accordance with GAAP, consistently applied, in a form acceptable to Bank and certified by a Responsible Officer; (b) as soon as available, but in any event within one hundred twenty (120) days after the end of Borrower's fiscal year, audited consolidated financial statements of Borrower prepared in accordance with GAAP, consistently applied, together with an unqualified opinion on such financial statements of an independent certified public accounting firm reasonably acceptable to Bank; (c) if applicable, copies of all statements, reports and notices sent or made available generally by Borrower to its security holders or to any holders of Subordinated Debt and all reports on Forms 10-K and 10-Q filed with the Securities and Exchange Commission; (d) promptly upon receipt of notice thereof, a report of any legal actions pending or threatened against Borrower or any Subsidiary that could result in damages or costs to Borrower or any Subsidiary of Two Hundred Fifty Thousand Dollars ($250,000) or more; and (e) such budgets, sales projections, operating plans or other financial information as Bank may reasonably request from time to time generally prepared by Borrower in the ordinary course of business.

Borrower shall deliver to Bank with the monthly financial statements a Compliance Certificate signed by a Responsible Officer in substantially the form of Exhibit C hereto.

6.4 Inventory; Returns. Borrower shall keep all Inventory in good and marketable condition, free from all material defects except for ordinary wear and tear and Inventory for which adequate reserves have been made. If applicable, returns and allowances, if any, as between Borrower and its account debtors shall be on the same basis and in accordance with the usual customary practices of Borrower, as they exist at the time of the execution and delivery of this Agreement. Borrower shall promptly notify Bank of all returns and recoveries and of all disputes and claims, where the return, recovery, dispute or claim involves more than Two Hundred Fifty Thousand Dollars ($250,000).

6.5 Taxes. Borrower shall make, and shall cause each Subsidiary to make, due and timely payment or deposit of all material federal, state, and local taxes, assessments, or contributions required of it by law, and will execute and deliver to Bank, within a reasonable period of time after demand by Bank, appropriate certificates attesting to the payment or deposit thereof; and Borrower will make, and will cause each Subsidiary to make, timely payment or deposit of all material tax payments and withholding taxes required of it by applicable

laws, including, but not limited to, those laws concerning F.I.C.A., F.U.T.A., state disability, and local, state, and federal income taxes, and will, upon request within a reasonable period of time, furnish Bank with proof satisfactory to Bank indicating that Borrower or a Subsidiary has made such payments or deposits; provided that Borrower or a Subsidiary need not make any payment if the amount or validity of such payment is contested in good faith by appropriate proceedings and is reserved against (to the extent required by GAAP) by Borrower.

6.6 Insurance.

(a) Borrower, at its expense, shall keep the Collateral insured against loss or damage by fire, theft, explosion, sprinklers, and all other hazards and risks, and in such amounts, as ordinarily insured against by other owners in similar businesses conducted in the locations where Borrower's business is conducted on the date hereof. Borrower shall also maintain insurance relating to Borrower's business, ownership and use of the Collateral in amounts and of a type that are customary to

businesses similar to Borrower's.

(b) All such policies of insurance shall be in such form, with such companies, and in such amounts as reasonably satisfactory to Bank. All such policies of property insurance shall contain a lender's loss payable endorsement, in a form satisfactory to Bank, showing Bank as an additional loss payee thereof, and all liability insurance policies shall show the Bank as an additional insured and shall specify that the insurer must give at least twenty (20) days notice to Bank before canceling its policy for any reason. Upon Bank's request, Borrower shall deliver to Bank certified copies of such policies of insurance and evidence of the payments of all premiums therefor. All proceeds payable under any such policy shall, at the option of Bank, be payable to Bank to be applied on account of the Obligations.

6.7 Accounts. Borrower shall maintain and shall cause each of its Subsidiaries to maintain its primary operating accounts with Bank, provided that Borrower shall have up to 30 days after the Closing Date to move such accounts to Bank.

6.8 Quick Ratio. Borrower shall maintain, measured as of the last day of each calendar month, a ratio of (i) Quick Assets to (ii) total current liabilities, less non-cancelable deferred revenue, plus all long term bank and lease debt minus any cash held at Bank which is specifically pledged to support any Obligation of at least 1.50 to 1.00.

6.9 Liquidity; Cash Burn. Borrower shall maintain, measured as of the last day of each calendar month, a balance of unrestricted cash and cash equivalents plus net billed accounts receivable (collectively, "Liquidity") in an amount of at least eight (8) times Borrower's Average Cash Burn. As used herein, "Average Cash Burn" means the change in Borrower's cash during the three months immediately preceding the date of measurement, net of any changes in debt, equity, minority interests, and capital expenditures financed by Bank under the Equipment Line, divided by three (3).

If at any time Borrower's Liquidity is less than eight (8) times its Cash Burn, Borrower shall at its sole option either (i) immediately repay all Obligations in full and Bank shall have no further obligation to make Credit Extensions to Borrower or (ii) immediately open and thereafter maintain a money market account or a certificate of deposit account with Bank in an amount equal to or greater than 100% of the aggregate balance of all outstanding Obligations (the "Liquidity Cash Collateral") pursuant to Section 4.4 so long and only for such period as Borrower's Liquidity is less than eight (8) times its Cash Burn (provided that during such time period, Bank shall have no further obligation to make Credit Extensions to Borrower).

6.10 Intellectual Property. Borrower shall use commercially reasonable efforts to (i) protect, defend and maintain the validity and enforceability of its trademarks, patents and copyrights, (ii) detect infringements of its trademarks, patents and copyrights and promptly advise Bank in writing of material infringements detected and (iii) not allow any of its material trademarks, Patents or copyrights to be abandoned, forfeited or dedicated to the public except where Borrower may determine such abandonment, forfeiture or dedication to the public to be commercially reasonable.

6.11 Further Assurances. At any time and from time to time Borrower shall execute and deliver such further instruments and take such further action as may reasonably be requested by Bank to effect the purposes of this Agreement.

7. NEGATIVE COVENANTS.

Borrower covenants and agrees that, so long as any credit hereunder shall be available and until payment in full of the outstanding Obligations or for so long as Bank may have any commitment to make any Credit Extensions, Borrower will not do any of the following:

7.1 Dispositions. Convey, sell, lease, transfer or otherwise dispose of (collectively, a "Transfer"), or permit any of its Subsidiaries to Transfer, all or any part of its business or property other than: (i) Transfers of Inventory in the ordinary course of business; (ii) Transfers of licenses and similar arrangements for the use of the property of Borrower or its Subsidiaries in the ordinary course of business; (iii) Transfers of worn-out or obsolete Equipment which was not financed by Bank; (iv) Transfers of intellectual property in the ordinary course of Borrower's business; or (v) Transfers permitted in clause (b) of the definition of Permitted Investments.

7.2 Change in Business; Change in Control or Executive Office. Engage in any business, or permit any of its Subsidiaries to engage in any business, other than the businesses currently engaged in by Borrower and any business substantially similar or related thereto (or incidental thereto); or conduct business in a manner materially different than the manner conducted by Borrower as of the Closing Date which manner could reasonably be expected to have an adverse effect on Borrower; or suffer or permit a Change in Control; or without thirty (30) days prior written notification to Bank within thirty (30) days, relocate its chief executive office or state of incorporation; or without prior written notice to Bank, change the date on which its fiscal year ends.

7.3 Mergers or Acquisitions. Merge or consolidate, or permit any of its Subsidiaries to merge or consolidate, with or into any other business organization, or acquire, or permit any of its Subsidiaries to acquire, all or substantially all of the capital stock or property of another Person. Notwithstanding the foregoing, this Section 7.3 shall not apply to transactions in which the sole consideration is Borrower's stock, Borrower is the surviving entity, and, after giving effect to such transaction, there is no Change in Control, provided that at the time of any such transaction an Event of Default has not occurred which is continuing and no Event of Default would exist after giving effect to any such transaction.

7.4 Indebtedness. Create, incur, assume or be or remain liable with respect to any Indebtedness, or permit any Subsidiary so to do, other than Permitted Indebtedness.

7.5 Encumbrances. Create, incur, assume or suffer to exist any Lien with respect to any of its property, including its intellectual property, or assign or otherwise convey any right to receive income, including the sale of any Accounts, or permit any of its Subsidiaries so to do, except for Permitted Liens.

7.6 Distributions. Pay any dividends or make any other distribution or payment on account of or in redemption, retirement or purchase of any capital stock, or permit any of its Subsidiaries to do so, except that Borrower may repurchase the stock of former employees or directors pursuant to stock repurchase plans or agreements as long as an Event of Default does not exist prior to such repurchase or would not exist after giving effect to such repurchase.

7.7 Investments. Directly or indirectly acquire or own, or make any Investment in or to any Person, or permit any of its Subsidiaries so to do, other than Permitted Investments; or maintain or invest any of its cash, cash equivalents, or investment property with a Person other than Bank or permit any of its Subsidiaries to do so unless such Person has entered into an account control agreement with Bank in form and substance reasonably satisfactory to Bank (provided that such account control agreement requirement shall not be applicable until 30 days after the Closing Date); or suffer or permit any Subsidiary to be a party to, or be bound by, an agreement that restricts such Subsidiary from paying dividends or otherwise distributing property to Borrower.

7.8 Transactions with Affiliates. Directly or indirectly enter into or permit to exist any material transaction with any Affiliate of Borrower except for transactions that are in the ordinary course of Borrower's business, upon fair and reasonable terms that are no less favorable to Borrower than would be obtained in an arm's length transaction with a non-affiliated Person.

7.9 Subordinated Debt. Make any payment in respect of any Subordinated Debt, or permit any of its Subsidiaries to make any such payment, except

in compliance with the terms of such Subordinated Debt, or amend any provision contained in any documentation relating to the Subordinated Debt without Bank's prior written consent.

7.10 Inventory and Equipment. Store the Inventory or the Equipment with a bailee, warehouseman, or other third party unless the third party has been notified of Bank's security interest and Bank (a) has received an acknowledgment from the third party that it is holding or will hold the Inventory or Equipment for Bank's benefit or (b) is in pledge possession of the warehouse receipt, where negotiable, covering such Inventory or Equipment. Store or maintain any Equipment or Inventory at a location other than the location set forth in Section 10 of this Agreement.

7.11 Compliance. Become an "investment company" or be controlled by an "investment company," within the meaning of the Investment Company Act of 1940, or become principally engaged in, or undertake as one of its important activities, the business of extending credit for the purpose of purchasing or carrying margin stock, or use the proceeds of any Credit Extension for such purpose. Fail to meet the minimum funding requirements of ERISA, permit a Reportable Event or Prohibited Transaction, as defined in ERISA, to occur, fail to comply with the Federal Fair Labor Standards Act or violate any law or regulation, which violation could reasonably be expected to have a Material Adverse Effect, or permit any of its Subsidiaries to do any of the foregoing.

8. EVENTS OF DEFAULT.

Any one or more of the following events shall constitute an Event of Default by Borrower under this Agreement:

8.1 Payment Default. If Borrower fails to pay, when due, any of the Obligations and such failure continues for 3 days or more after the due date, provided that within such 3 day cure period, the failure to pay shall not be deemed an Event of Default, but no Credit Extensions will be made;

8.2 Covenant Default. If Borrower fails to perform any obligation under Article 0 or violates any of the covenants contained in Article 0 of this Agreement, or fails or neglects to perform, keep, or observe any other material term, provision, condition, covenant, or agreement contained in this Agreement, in any of the Loan Documents, or in any other present or future agreement between Borrower and Bank and as to any default under such other term, provision, condition, covenant or agreement that can be cured, has failed to cure such default within ten (10) days after Borrower receives notice thereof or any officer of Borrower becomes aware thereof; provided, however, that if the default cannot by its nature be cured within the ten (10) day period or cannot after diligent attempts by Borrower be cured within such ten (10) day period, and such default is likely to be cured within a reasonable time, then Borrower shall have an additional reasonable period (which shall not in any case exceed thirty (30) days) to attempt to cure such default, and within such reasonable time period the failure to have cured such default shall not be deemed an Event of Default (provided that no Credit Extensions will be required to be made during such cure period);

8.3 Material Adverse Effect. If there occurs any circumstance or circumstances that could reasonably be expected to have a Material Adverse Effect;

8.4 Attachment. If any material portion of Borrower's assets is attached, seized, subjected to a writ or distress warrant, or is levied upon, or comes into the possession of any trustee, receiver or person acting in a similar capacity and such attachment, seizure, writ or distress warrant or levy has not been removed, discharged or rescinded within ten (10) Business Days, or if Borrower is enjoined, restrained, or in any way prevented by court

order from continuing to conduct all or any material part of its business affairs, or if a judgment or other claim becomes a lien or encumbrance upon any material portion of Borrower's assets, or if a notice of lien, levy, or assessment is filed of record with respect to any of Borrower's assets by the United States Government, or any department, agency, or instrumentality thereof, or by any state, county, municipal, or governmental agency, and the same is not paid within ten (10) Business Days after Borrower receives notice thereof, provided that none of the foregoing shall constitute an Event of Default where such action or event is stayed or an adequate bond has been posted pending a good faith contest by Borrower (provided that no Credit Extensions will be required to be made during such cure period);

8.5 Insolvency. If an Insolvency Proceeding is commenced by Borrower, or if an Insolvency Proceeding is commenced against Borrower and is not dismissed or stayed within sixty (60) days (provided that no Credit Extensions will be made prior to the dismissal of such Insolvency Proceeding);

8.6 Other Agreements. If there is a default or other failure to perform in any agreement to which Borrower is a party or by which it is bound resulting in a right by a third party or parties, whether or not exercised, to accelerate the maturity of any Indebtedness in an amount in excess of Two Hundred Fifty Thousand Dollars ($250,000); or which could reasonably be expected to have a Material Adverse Effect;

8.7 Subordinated Debt. If Borrower makes any payment on account of Subordinated Debt, except to the extent such payment is allowed under any subordination agreement entered into with Bank;

8.8 Judgments. If a judgment or judgments for the payment of money in an amount, individually or in the aggregate, of at least Two Hundred Fifty Thousand Dollars ($250,000) shall be rendered against Borrower and shall remain unsatisfied and unstayed for a period of thirty (30) days (provided that no Credit Extensions will be made prior to the satisfaction or stay of such judgment); or

8.9 Misrepresentations. If any material misrepresentation or material misstatement exists now or hereafter in any warranty or representation set forth herein or in any certificate delivered to Bank by any Responsible Officer pursuant to this Agreement or to induce Bank to enter into this Agreement or any other Loan Document.

9. BANK'S RIGHTS AND REMEDIES.

9.1 Rights and Remedies. Upon the occurrence and during the continuance of an Event of Default, Bank may, at its election, without notice of its election and without demand, do any one or more of the following, all of which are authorized by Borrower:

(a) Declare all Obligations, whether evidenced by this Agreement, by any of the other Loan Documents, or otherwise, immediately due and payable (provided that upon the occurrence of an Event of Default described in Section 0, all Obligations shall become immediately due and payable without any action by Bank);

(b) Cease advancing money or extending credit to or for the benefit of Borrower under this Agreement or under any other agreement between Borrower and Bank;

(c) Settle or adjust disputes and claims directly with account debtors for amounts, upon terms and in whatever order that Bank reasonably considers advisable;

(d) Make such payments and do such acts as Bank considers necessary or reasonable to protect its security interest in the Collateral. Borrower agrees to assemble the Collateral if Bank so requires, and to make the Collateral available to Bank as Bank may reasonably designate. Borrower authorizes Bank to enter the premises where the Collateral is located, to take and maintain possession of the Collateral, or any part of it, and to pay, purchase, contest, or compromise any encumbrance, charge, or lien which in Bank's determination appears to be prior or superior to its security interest and to pay all reasonable expenses incurred in connection therewith. With respect to any of Borrower's owned premises, Borrower hereby grants Bank a license

upon the occurrence and during the continuance of an Event of Default to enter into possession of such premises and to occupy the same, without charge, in order to exercise any of Bank's rights or remedies provided herein, at law, in equity, or otherwise;

(e) Set off and apply to the Obligations any and all (i) balances and deposits of Borrower held by Bank, or (ii) indebtedness at any time owing to or for the credit or the account of Borrower held by Bank;

(f) Ship, reclaim, recover, store, finish, maintain, repair, prepare for sale, advertise for sale, and sell (in the manner provided for herein) the Collateral. Bank is hereby granted a license or other right, solely pursuant to the provisions of this Section 0, to use, without charge, Borrower's labels, patents, copyrights, rights of use of any name, trade secrets, trade names, trademarks, service marks, and advertising matter, or any property of a similar nature, as it pertains to the Collateral, in completing production of, advertising for sale, and selling any Collateral and, in connection with Bank's exercise of its rights under this Section 0, Borrower's rights under all licenses and all franchise agreements shall inure to Bank's benefit;

(g) Dispose of the Collateral by way of one or more contracts or transactions, for cash or on terms, in such manner and at such places (including Borrower's premises) as Bank determines is commercially reasonable, and apply any proceeds to the Obligations in whatever manner or order Bank deems appropriate;

(h) Bank may credit bid and purchase at any public sale; and

(i) Any deficiency that exists after disposition of the Collateral as provided above will be paid immediately by Borrower.

9.2 Power of Attorney. Effective only upon the occurrence and during the continuance of an Event of Default, Borrower hereby irrevocably appoints Bank (and any of Bank's designated officers, or employees) as Borrower's true and lawful attorney to: (a) send requests for verification of Accounts or notify account debtors of Bank's security interest in the Accounts; (b) endorse Borrower's name on any checks or other forms of payment or security that may come into Bank's possession; (c) sign Borrower's name on any invoice or bill of lading relating to any Account, drafts against account debtors, schedules and assignments of Accounts, verifications of Accounts, and notices to account debtors; (d) dispose of any Collateral; (e) make, settle, and adjust all claims under and decisions with respect to Borrower's policies of insurance; (f) settle and adjust disputes and claims respecting the accounts directly with account debtors, for amounts and upon terms which Bank determines to be reasonable; and (g) to file, in its sole discretion, one or more financing or continuation statements and amendments thereto, relative to any of the Collateral without the signature of Borrower where permitted by law; provided Bank may exercise such power of attorney to sign the name of Borrower on any of the documents described in Section 4.2 to perfect and continue the perfection of Bank's security interests in the Collateral regardless of whether an Event of Default has occurred. The appointment of Bank as Borrower's attorney in fact, and each and every one of Bank's rights and powers, being coupled with an interest, is irrevocable until all of the Obligations have been fully repaid and performed and Bank's obligation to provide Credit Extensions hereunder is terminated.

9.3 Accounts Collection. Upon the occurrence and during the continuance of an Event of Default, Bank may notify any Person owing funds to Borrower of Bank's security interest in such funds and verify the amount of such Account. Upon the occurrence and during the continuance of an Event of Default, Borrower shall collect all amounts owing to Borrower for Bank, receive in trust all payments as Bank's trustee, and, upon Bank's request, immediately deliver such payments to Bank in their original form as received from the account debtor, with proper endorsements for deposit.

9.4 Bank Expenses. If Borrower fails to pay any amounts or furnish any required proof of payment due to third persons or entities, as required under the terms of this Agreement, then Bank may do any or all of the following after reasonable notice to Borrower: (a) make payment of the same or any part thereof; (b) set up such reserves under a facility in Section 2.1 as Bank reasonably deems necessary to protect Bank from the exposure created by such failure; or (c) obtain and maintain insurance policies of the type discussed in Section 0 of this Agreement, and take any action with respect to such policies as Bank reasonably deems prudent. Any amounts so

paid or deposited by Bank shall constitute Bank Expenses, shall be immediately due and payable, and shall bear interest at the then applicable rate hereinabove provided, and shall be secured by the Collateral. Any payments made by Bank shall not constitute an agreement by Bank to make similar payments in the future or a waiver by Bank of any Event of Default under this Agreement.

9.5 Bank's Liability for Collateral. So long as Bank complies with reasonable banking practices, Bank shall not in any way or manner be liable or responsible for: (a) the safekeeping of the Collateral; (b) any loss or damage thereto occurring or arising in any manner or fashion from any cause; (c) any diminution in the value thereof; or (d) any act or default of any carrier, warehouseman, bailee, forwarding agency, or other person whomsoever. All risk of loss, damage or destruction of the Collateral shall be borne by Borrower. Notwithstanding the foregoing, Bank shall be responsible for its own gross negligence or willful conduct.

9.6 Remedies Cumulative. Bank's rights and remedies under this Agreement, the Loan Documents, and all other agreements shall be cumulative. Bank shall have all other rights and remedies not inconsistent herewith as provided under the Code, by law, or in equity. No exercise by Bank of one right or remedy shall be deemed an election, and no waiver by Bank of any Event of Default on Borrower's part shall be deemed a continuing waiver. No delay by Bank shall constitute a waiver, election, or acquiescence by it. No waiver by Bank shall be effective unless made in a written document signed on behalf of Bank and then shall be effective only in the specific instance and for the specific purpose for which it was given.

9.7 Demand; Protest. Borrower waives demand, protest, notice of protest, notice of default or dishonor, notice of payment and nonpayment, notice of any default, nonpayment at maturity, release, compromise, settlement, extension, or renewal of accounts, documents, instruments, chattel paper, and guarantees at any time held by Bank on which Borrower may in any way be liable.

10. NOTICES.

Unless otherwise provided in this Agreement, all notices or demands by any party relating to this Agreement or any other agreement entered into in connection herewith shall be in writing and (except for financial statements and other informational documents which may be sent by first-class mail, postage prepaid) shall be personally delivered or sent by a recognized overnight delivery service, certified mail, postage prepaid, return receipt requested, or by telefacsimile to Borrower or to Bank, as the case may be, at its addresses set forth below:

If to Borrower:
RIGEL PHARMACEUTICALS, INC.
240 East Grand Avenue
South San Francisco, CA 94080
Attn: Chief Financial Officer
FAX: (650) 624-1101

If to Bank:
COMERICA BANK - CALIFORNIA
333 W. Santa Clara St.
San Jose, CA 95113

Attn: Corporate Banking Center

with a copy to: COMERICA BANK - CALIFORNIA
Five Palo Alto Square - 8th Floor
3000 El Camino Real
Palo Alto, CA 94306
Attn: Jonathan H. Norris
FAX: (650) 213-1710

The parties hereto may change the address at which they are to receive notices hereunder, by notice in writing in the foregoing manner given to the other.

11. CHOICE OF LAW AND VENUE; JURY TRIAL WAIVER.

This Agreement shall be governed by, and construed in accordance with, the internal laws of the State of California, without regard to principles of conflicts of law. Each of Borrower and Bank hereby submits to the exclusive jurisdiction of the state and Federal courts located in the County of Santa Clara, State of California. BORROWER AND BANK EACH HEREBY WAIVE THEIR RESPECTIVE RIGHTS TO A JURY TRIAL OF ANY CLAIM OR CAUSE OF ACTION BASED UPON OR ARISING OUT OF ANY OF THE LOAN DOCUMENTS OR ANY OF THE TRANSACTIONS CONTEMPLATED THEREIN, INCLUDING CONTRACT CLAIMS, TORT CLAIMS, BREACH OF DUTY CLAIMS, AND ALL OTHER COMMON LAW OR STATUTORY CLAIMS. EACH PARTY RECOGNIZES AND AGREES THAT THE FOREGOING WAIVER CONSTITUTES A MATERIAL INDUCEMENT FOR IT TO ENTER INTO THIS AGREEMENT. EACH PARTY REPRESENTS AND WARRANTS THAT IT HAS REVIEWED THIS WAIVER WITH ITS LEGAL COUNSEL AND THAT IT KNOWINGLY AND VOLUNTARILY WAIVES ITS JURY TRIAL RIGHTS FOLLOWING CONSULTATION WITH LEGAL COUNSEL.

12. GENERAL PROVISIONS.

12.1 Successors and Assigns. This Agreement shall bind and inure to the benefit of the respective successors and permitted assigns of each of the parties; provided, however, that neither this Agreement nor any rights hereunder may be assigned by Borrower without Bank's prior written consent, which consent may be granted or withheld in Bank's sole discretion. Bank shall have the right without the consent of or notice to Borrower to sell, transfer, negotiate, or grant participation in all or any part of, or any interest in, Bank's obligations, rights and benefits hereunder.

12.2 Indemnification. Borrower shall defend, indemnify and hold harmless Bank and its officers, employees, and agents against: (a) all obligations, demands, claims, and liabilities claimed or asserted by any other party in connection with the transactions contemplated by this Agreement; and (b) all losses or Bank Expenses in any way suffered, incurred, or paid by Bank as a result of or in any way arising out of, following, or consequential to transactions between Bank and Borrower whether under this Agreement, or otherwise (including without limitation reasonable attorneys' fees and expenses), except for losses caused by Bank's gross negligence or willful misconduct.

12.3 Time of Essence. Time is of the essence for the performance of all obligations set forth in this Agreement.

12.4 Severability of Provisions. Each provision of this Agreement shall be severable from every other provision of this Agreement for the purpose of determining the legal enforceability of any specific provision.

12.5 Amendments in Writing, Integration. Neither this Agreement nor the Loan Documents can be amended or terminated orally. All prior agreements, understandings, representations, warranties, and negotiations between the parties hereto with respect to the subject matter of this Agreement and the Loan Documents, if any, are merged into this Agreement and the Loan Documents.

12.6 Counterparts. This Agreement may be executed in any number of counterparts and by different parties on separate counterparts, each of which, when executed and delivered, shall be deemed to be an original, and all of which, when taken together, shall constitute but one and the same Agreement.

12.7 Survival. All covenants, representations and warranties made in this Agreement shall continue in full force and effect so long as any Obligations remain outstanding. The obligations of Borrower to indemnify Bank with respect to the expenses, damages, losses, costs and liabilities described in Section 0 shall survive until all applicable statute of limitations periods with respect to actions that may be brought against Bank have run.

12.8 Confidentiality. In handling any confidential information Bank and all employees and agents of Bank, including but not limited to accountants, shall exercise the same degree of care that it exercises with respect to its own proprietary information of the same types to maintain the confidentiality of any non-public

information thereby received or received pursuant to this Agreement except that disclosure of such information may be made (i) to the subsidiaries or affiliates of Bank in connection with their present or prospective business relations with Borrower, provided that they are subject to the same confidentiality restrictions as Bank, (ii) to prospective transferees or purchasers of any interest in the Loans, provided that they have entered into a comparable confidentiality agreement in favor of Borrower and have delivered a copy to Borrower, (iii) as required by law, regulations, rule or order, subpoena, judicial order or similar order, (iv) as may be required in connection with the examination, audit or similar investigation of Bank and (v) as Bank may reasonably determine in connection with the enforcement of any remedies hereunder. Confidential information hereunder shall not include information that either: (a) is in the public domain or in the knowledge or possession of Bank when disclosed to Bank because it was disclosed to Bank by a third party provided Bank does not have actual knowledge that such third party is prohibited from disclosing such information, or becomes part of the public domain after disclosure to Bank through no fault of Bank; or (b) is disclosed to Bank by a third party, provided Bank does not have actual knowledge that such third party is prohibited from disclosing such information.

IN WITNESS WHEREOF, the parties hereto have caused this Agreement to be executed as of the date first above written.

RIGEL PHARMACEUTICALS, INC.

By: /s/ James H. Welch

Title: Chief Financial Officer

COMERICA BANK - CALIFORNIA

By: /s/ John Norris

Title: VP, Technology & Life Sciences Group

DEBTOR **RIGEL PHARMACEUTICALS, INC.**

SECURED PARTY: **COMERICA BANK - CALIFORNIA**

EXHIBIT A

COLLATERAL DESCRIPTION ATTACHMENT
TO LOAN AND SECURITY AGREEMENT

All personal property of Borrower (herein referred to as "Borrower" or "Debtor") whether presently existing or hereafter created or acquired, and wherever located, including, but not limited to:

(a) all accounts (including health-care-insurance receivables), chattel paper (including tangible and electronic chattel paper), deposit accounts, documents (including negotiable documents), equipment (including all accessions and additions thereto), general intangibles (including payment intangibles and software), goods (including fixtures), instruments (including promissory notes), inventory (including all goods held for sale or lease or to be furnished under a contract of service, and including returns and repossessions), investment property (including securities and securities entitlements), letter of credit rights, money, and all of Debtor's books and records with respect to any of the foregoing, and the computers and equipment containing said books and records; and

(b) any and all cash proceeds and/or noncash proceeds of any of the foregoing, including, without limitation, insurance proceeds, and all supporting obligations and the security therefor or for any right to payment. All terms above have the meanings given to them in the California Uniform Commercial Code, as amended or supplemented from time to time, including revised Division 9 of the Uniform Commercial Code-Secured Transactions, added by Stats. 1999, c.991 (S.B. 45), Section 35, operative July 1, 2001.

Notwithstanding the foregoing, the Collateral shall not include any copyrights, patents, trademarks, servicemarks, trade styles, trade names, logos, business names, applications for any of the foregoing, data, know-how, confidential or proprietary information, derivative works, inventions, blueprints, mask works, designs, design rights, trade secrets, software, rights in software, goodwill, proprietary information on computer discs, computer tapes, literature, and catalogs, now owned or hereafter acquired, or any claims for damages by way of any past, present and future infringement of any of the foregoing (collectively, the "Intellectual Property"); provided, however, that the Collateral shall include (i) all equipment financed by Bank and (ii) all accounts and general intangibles that consist of rights to payment and proceeds from the sale, licensing or disposition of all or any part, or rights in, the foregoing (the "Rights to Payment"). Notwithstanding the foregoing, if a judicial authority (including a U.S. Bankruptcy Court) holds that a security interest in the underlying Intellectual Property is necessary to have a security interest in the Rights to Payment, then the Collateral shall automatically, and effective as of the Closing Date, include the Intellectual Property to the extent necessary to permit perfection of Bank's security interest in the Rights to Payment.

Notwithstanding the foregoing, the term "Collateral" shall not include any Equipment not financed by Bank, proceeds of such Equipment, or rights of Borrower as a licensee to the extent the granting of a security interest therein (i) would be contrary to applicable law or (ii) is prohibited by or would constitute a default under any agreement or document governing such property (but only to the extent such prohibition is enforceable under applicable law); provided that upon the termination or lapsing of any such prohibition, such property shall automatically be part of the Collateral; and provided further that the provisions of this paragraph shall in no case exclude from the definition of "Collateral" any Accounts, proceeds of the disposition of any property, or general intangibles consisting of rights to payment (other than proceeds of such excluded Equipment), all of which shall at all times constitute "Collateral"; and provided further that any Equipment financed by Bank will at all times constitute "Collateral".

EXHIBIT B

LOAN PAYMENT/ADVANCE TELEPHONE REQUEST FORM

DEADLINE FOR SAME DAY PROCESSING IS 3:00 P.M., PACIFIC TIME

TO: TECHNOLOGY AND LIFE SCIENCES DIVISION DATE:

FAX #: 650-846-6840 TIME:

FROM: RIGEL PHARMACEUTICALS, INC.
CLIENT NAME (BORROWER)

REQUESTED BY: _____
AUTHORIZED SIGNER'S NAME

AUTHORIZED SIGNATURE: _____

PHONE NUMBER: _____

FROM ACCOUNT # _____ TO ACCOUNT # _____

REQUESTED TRANSACTION TYPE	REQUEST DOLLAR AMOUNT
	$
PRINCIPAL INCREASE (ADVANCE)	$
PRINCIPAL PAYMENT (ONLY)	$
INTEREST PAYMENT (ONLY)	$
PRINCIPAL AND INTEREST (PAYMENT)	$

OTHER INSTRUCTIONS: _____

All representations and warranties of Borrower stated in the Loan and Security Agreement are true, correct and complete in all material respects as of the date of the telephone request for an Advance confirmed by this Borrowing Certificate; provided, however, that those representations and warranties expressly referring to another date shall be true, correct and complete in all material respects as of such date.

BANK USE ONLY

TELEPHONE REQUEST:

The following person is authorized to request the loan payment transfer/loan advance on the advance designated account and is known to me.

Authorized Requester — Phone #

Received By (Bank) — Phone #

Authorized Signature (Bank)

EXHIBIT C

COMPLIANCE CERTIFICATE

TO: COMERICA BANK - CALIFORNIA

FROM: RIGEL PHARMACEUTICALS, INC.

The undersigned authorized officer of RIGEL PHARMACEUTICALS, INC. hereby certifies on behalf and in the name of the Borrower that in accordance with the terms and conditions of the Loan and Security Agreement between Borrower and Bank (the "Agreement"), (i) Borrower is in complete compliance for the period ending with all required covenants except as noted below and (ii) all representations and warranties of Borrower stated in the Agreement are true and correct in all material respects as of the date hereof. Attached herewith are the required documents supporting the above certification. The Officer further certifies that these are prepared in accordance with Generally Accepted Accounting Principles (GAAP) and are consistently applied from one period to the next except as explained in an accompanying letter or footnotes.

Please indicate compliance status by circling Yes/No under "Complies" column.

Reporting Covenant	Required	Complies	
Monthly financial statements	Monthly within 30 days	Yes	No
Annual (CPA Audited)	FYE within 120 days	Yes	No
10K and 10Q	(as applicable)	Yes	No
Total amount of Borrower's cash and investments	Amount: $	Yes	No
Total amount of Borrower's cash and investments maintained with Bank	Amount: $	Yes	No

Financial Covenant	Required	Actual	Complies	
On a monthly basis:				
Adjusted Quick Ratio	1.50:1.00	:1.00	Yes	No
Minimum RML	8.00:1.00	:1.00	Yes	No
If RML falls below 8.00 to 1.00	100% Cash Security	$	Yes	No

Comments Regarding Exceptions: See Attached.

No

Received by: _____

Sincerely, AUTHORIZED SIGNER

RIGEL PHARMACEUTICALS, INC. Date: _____

By: _____ Verified: _____

SIGNATURE AUTHORIZED SIGNER

_____ Date: _____

TITLE

Compliance Status Yes

_____

DATE

CORPORATE RESOLUTIONS TO BORROW

Borrower: RIGEL PHARMACEUTICALS, INC.

I, the undersigned Secretary or Assistant Secretary of RIGEL PHARMACEUTICALS, INC. (the "Corporation"), HEREBY CERTIFY, on behalf of the Corporation, that the Corporation is organized and existing under and by virtue of the laws of the State of Delaware.

I FURTHER CERTIFY that attached hereto as Attachments 1 and 2 are true and complete copies of the Certificate of Incorporation, as amended, and the Restated Bylaws of the Corporation, each of which is in full force and effect on the date hereof.

I FURTHER CERTIFY that at a meeting of the Directors of the Corporation, duly called and held, at which a quorum was present and voting (or by other duly authorized corporate action in lieu of a meeting), the following resolutions were adopted.

BE IT RESOLVED, that any one (1) of the following named officers, employees, or agents of this Corporation, whose actual signatures are shown below:

NAMES	POSITION	ACTUAL SIGNATURES

acting for and on behalf of this Corporation and as its act and deed be, and they hereby are, authorized and empowered:

Borrow Money. To borrow from time to time from COMERICA BANK - CALIFORNIA ("Bank"), on such terms as may be agreed upon between the officers, employees, or agents of the Corporation and Bank, such sum or sums of money as in their judgment should be borrowed, without limitation.

Execute Loan Documents. To execute and deliver to Bank that certain Loan and Security Agreement dated as of July 12, 2002 (the "Loan Agreement") and any other agreement entered into between Corporation and Bank in connection with the Loan Agreement, including any amendments, all as amended or extended from time to time (collectively, with the Loan Agreement, the "Loan Documents"), and also to execute and deliver to Bank one or more renewals, extensions, modifications, refinancings, consolidations, or substitutions for the Loan Documents, or any portion thereof.

Grant Security. To grant a security interest to Bank in the Collateral described in the Loan Documents, which security interest shall secure all of the Corporation's Obligations, as described in the Loan Documents.

Negotiate Items. To draw, endorse, and discount with Bank all drafts, trade acceptances, promissory notes, or other evidences of indebtedness payable to or belonging to the Corporation or in which the Corporation may have an interest, and either to receive cash for the same or to cause such proceeds to be credited to the account of the Corporation with Bank, or to cause such other disposition of the proceeds derived therefrom as they may deem advisable.

Warrants. To issue Bank warrants to purchase the Corporation's capital stock.

Further Acts. In the case of lines of credit, to designate additional or alternate individuals as being authorized to request advances thereunder, and in all cases, to do and perform such other acts and things, to pay any and all fees and costs, and to execute and deliver such other documents and agreements as they may in their discretion deem reasonably necessary or proper in order to carry into effect the provisions of these Resolutions.

BE IT FURTHER RESOLVED, that any and all acts authorized pursuant to these resolutions and performed prior to the passage of these resolutions are hereby ratified and approved, that these Resolutions shall remain in full force and effect and Bank

may rely on these Resolutions until written notice of their revocation shall have been delivered to and received by Bank. Any such notice shall not affect any of the Corporation's agreements or commitments in effect at the time notice is given.

I FURTHER CERTIFY that the officers, employees, and agents named above are duly elected, appointed, or employed by or for the Corporation, as the case may be, and occupy the positions set forth opposite their respective names; that the foregoing Resolutions now stand of record on the books of the Corporation; and that the Resolutions are in full force and effect and have not been modified or revoked in any manner whatsoever.

IN WITNESS WHEREOF, I have hereunto set my hand on July 12, 2002 and attest that the signatures set opposite the names listed above are their genuine signatures.

CERTIFIED AND ATTESTED BY:

X /s/ James H. Welch
Secretary

COMERICA BANK - CALIFORNIA
Member FDIC

ITEMIZATION OF AMOUNT FINANCED
DISBURSEMENT INSTRUCTIONS
(Equipment Line)

Name(s): RIGEL PHARMACEUTICALS, INC. Date: July 12, 2002

$ credited to deposit account No. when Advances are requested by Borrower

Amounts paid to others on your behalf:
$56,250 to COMERICA BANK - CALIFORNIA for Loan Fee

$	to Bank counsel fees and expenses
$	to
$	to
$15,000,000	TOTAL (AMOUNT FINANCED)

Upon consummation of this transaction, this document will also serve as the authorization for COMERICA BANK - CALIFORNIA to disburse the loan proceeds as stated above.

Signature

Signature

AGREEMENT TO PROVIDE INSURANCE

TO: COMERICA BANK - CALIFORNIA
attn: Collateral Operations, M/C 4604
9920 South La Cienega Blvd, 14th Floor
Inglewood, CA 90301

Date: July 12, 2002

Borrower: RIGEL PHARMACEUTICALS, INC.

In consideration of a loan in the amount of $15,000,000, secured by all tangible personal property including inventory and equipment.

I/We agree to obtain adequate insurance coverage to remain in force during the term of the loan.

I/We also agree to advise the below named agent to add COMERICA BANK - CALIFORNIA as lender's loss payable on the new or existing insurance policy, and to furnish Bank at above address with a copy of said policy/endorsements and any subsequent renewal policies.

I/We understand that the policy must contain:

1. Fire and extended coverage in an amount in accordance with the terms of the Loan and Security Agreement by and between Borrower and Comerica Bank-California.

2. Lender's "Loss Payable" Endorsement Form 438 BFU in favor of COMERICA BANK - CALIFORNIA, or any other form acceptable to Bank.

INSURANCE INFORMATION

Insurance Co./Agent Telephone No.:

Agent's Address:

Signature of Obligor: _____

Signature of Obligor: _____

FOR BANK USE ONLY

INSURANCE VERIFICATION: Date: _____

Person Spoken to: _____

Policy Number: _____

Effective From: _____ To: _____

Verified by: _____

DEBTOR: **RIGEL PHARMACEUTICALS, INC.**

SECURED PARTY: **COMERICA BANK - CALIFORNIA**

EXHIBIT A

COLLATERAL DESCRIPTION ATTACHMENT
TO UCC-1 FINANCING STATEMENT

All personal property of Borrower (herein referred to as "Borrower" or "Debtor") whether presently existing or hereafter created or acquired, and wherever located, including, but not limited to:

(a) all accounts (including health-care-insurance receivables), chattel paper (including tangible and electronic chattel paper), deposit accounts, documents (including negotiable documents), equipment (including all accessions and additions thereto), general intangibles (including payment intangibles and software), goods (including fixtures), instruments (including promissory notes), inventory (including all goods held for sale or lease or to be furnished under a contract of service, and including returns and repossessions), investment property (including securities and securities entitlements), letter of credit rights, money, and all of Debtor's books and records with respect to any of the foregoing, and the computers and equipment containing said books and records; and

(b) any and all cash proceeds and/or noncash proceeds of any of the foregoing, including, without limitation, insurance proceeds, and all supporting obligations and the security therefor or for any right to payment. All terms above have the meanings given to them in the California Uniform Commercial Code, as amended or supplemented from time to time, including revised Division 9 of the Uniform Commercial Code-Secured Transactions, added by Stats. 1999, c.991 (S.B. 45), Section 35, operative July 1, 2001.

Notwithstanding the foregoing, the Collateral shall not include any copyrights, patents, trademarks, servicemarks, trade styles, trade names, logos, business names, applications for any of the foregoing, data, know-how, confidential or proprietary information, derivative works, inventions, blueprints, mask works, designs, design rights,

trade secrets, software, rights in software, goodwill, proprietary information on computer discs, computer tapes, literature, and catalogs, now owned or hereafter acquired, or any claims for damages by way of any past, present and future infringement of any of the foregoing (collectively, the "Intellectual Property"); provided, however, that the Collateral shall include (i) all equipment financed by Bank and (ii) all accounts and general intangibles that consist of rights to payment and proceeds from the sale, licensing or disposition of all or any part, or rights in, the foregoing (the "Rights to Payment"). Notwithstanding the foregoing, if a judicial authority (including a U.S. Bankruptcy Court) holds that a security interest in the underlying Intellectual Property is necessary to have a security interest in the Rights to Payment, then the Collateral shall automatically, and effective as of the Closing Date, include the Intellectual Property to the extent necessary to permit perfection of Bank's security interest in the Rights to Payment.

Notwithstanding the foregoing, the term "Collateral" shall not include any Equipment not financed by Bank, proceeds of such Equipment, or rights of Borrower as a licensee to the extent the granting of a security interest therein (i) would be contrary to applicable law or (ii) is prohibited by or would constitute a default under any agreement or document governing such property (but only to the extent such prohibition is enforceable under applicable law); provided that upon the termination or lapsing of any such prohibition, such property shall automatically be part of the Collateral; and provided further that the provisions of this paragraph shall in no case exclude from the definition of "Collateral" any Accounts, proceeds of the disposition of any property, or general intangibles consisting of rights to payment (other than proceeds of such excluded Equipment), all of which shall at all times constitute "Collateral"; and provided further that any Equipment financed by Bank will at all times constitute "Collateral".

SECURITIES ACCOUNT
CONTROL AGREEMENT

July 12, 2002

Attn: Jack Singer

Re: Comerica Bank – California /Security Interest in Securities Account of RIGEL PHARMACEUTICALS, INC.

Dear Sir or Madam:

This agreement ("Control Agreement") is entered by and among COMERICA BANK - CALIFORNIA ("Bank"), RIGEL PHARMACEUTICALS, INC. ("Pledgor") and Comerica Securities, Inc. ("Securities Intermediary").

1. This Control Agreement concerns any account (collectively, the "Securities Account") established by Pledgor with Securities Intermediary, whether now existing or hereafter arising. Pursuant to that certain Loan and Security Agreement dated as of the date hereof (as amended from time to time, the "Security Agreement"), Bank has a security interest in all of Pledgor's present and future right, title and interest in, to and under the Securities Account maintained with Securities Intermediary in connection with the securities, securities entitlements or other investment property, instruments and financial assets contained in the Securities Account, and all investment property, instruments and financial assets at any time held or maintained in the Securities Account, together with all investment property, instruments and financial assets substituted therefore or for any part thereof, all interest, dividends, increases, profits, new financial assets or other increments, distributions or rights of any kind received on account of any of the foregoing, and all other income received in connection therewith and all products or proceeds thereof (whether cash or non-cash proceeds)(collectively, the "Securities Entitlement"). Bank, Pledgor and Securities Intermediary are entering into this Control Agreement to perfect Bank's security interest in the Securities Account.

2. The Securities Entitlement is to be held in the Securities Account and is and will remain subject to a first priority security interest in favor of Bank. The Securities Account is not a margin account or subject to check writing privileges. All rights of Securities Intermediary in the Securities Account except for Permitted Liens as defined below shall be subordinated and postponed in favor of Bank's rights and interests therein under and pursuant to the Security Agreement.

3. Until Securities Intermediary is notified to the contrary by Bank in any entitlement order or other notice ("Notice"), Securities Intermediary is authorized to act upon the instruction of Pledgor, or its authorized representatives, and comply with Pledgor's (or its authorized representatives) instructions for the following purposes:

☒ make trades of any and all of the financial assets held in the Securities Account &/or

☒ receiving any distributions relating to the Securities Entitlement &/or

☒ making any withdrawals of any and all of the financial assets held in the Securities Account or the

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proceeds thereof.

Upon and following receipt of Notice until revocation or withdrawl of such Notice in writing by Bank, (i) Securities Intermediary shall immediately cease complying with instructions concerning the Securities Account and the Securities Entitlement originated by the Pledgor, or its representatives, and thereafter shall comply with the instructions of Bank without further consent by Pledgor; (ii) Securities Intermediary shall not be authorized to release any of the Securities Entitlement or any proceeds thereof or make any distribution from the Securities Account to any party other than Bank, until otherwise instructed by Bank in writing; (iii) Securities Intermediary is instructed to hold the Securities Account and Securities Entitlement for the benefit of Bank; and (iv) Bank shall be the only person authorized to make any withdrawals of and/or to authorize or receive any distribution of or relating to the Securities Entitlement.

4. By its execution hereof, Securities Intermediary acknowledges and agrees to the terms set forth herein, and that this Control Agreement constitutes written notice to Securities Intermediary and acknowledgment by Securities Intermediary of Bank's security interest in the Securities Account. Said security interest shall be noted by the Securities Intermediary on its books and records.

5. Securities Intermediary has established the Securities Account in Pledgor's name. A true and complete copy of the account agreement entered into between Pledgor and Securities Intermediary with respect to the Securities Account (the "Account Agreement")is attached as Exhibit A. Exhibit A contains a complete and accurate statement of the investment property, financial assets and credit balances credited to the Securities Account as of the date(s) set forth in the statement. Except for the claims and interest of Bank and Pledgor in the Securities Account and liens to secure fees owed to Securities Intermediary by Pledgor with respect to the operation of the Securities Account ("Permitted Liens"), Securities Intermediary does not know of any claim to or interest in the Securities Account.

6. Securities Intermediary shall send copies of all statements and confirmations regarding the Securities Account simultaneously to Pledgor and to Bank. Securities Intermediary shall promptly notify Bank and Pledgor if a person asserts a lien, encumbrance or adverse claim against the Securities Account without Bank's prior written consent, which will not be unreasonably withheld.

7. Securities Intermediary shall not agree with any third party that Securities Intermediary will comply with entitlement orders from the third party. Securities Intermediary shall not amend the Account Agreement, including its choice of law clause and the provision providing for treatment of property held in the securities account as a financial asset, without Bank's written consent. Securities Intermediary shall not permit Pledgor to terminate the Securities Account.

8. The rights and powers granted herein to Bank have been granted in order to perfect its security interest in the Securities Account, are powers coupled with an interest and will neither be affected by the death or bankruptcy of the Pledgor nor by the lapse of time. Securities Intermediary's obligations under this Control Agreement shall continue in effect until the security interest of Bank in the Securities Account has been terminated pursuant to the terms of the Security Agreement and Bank has notified you of such termination in writing. Upon receipt of such notice Securities Intermediary's obligations under this Control Agreement with respect to the operation and maintenance of the Securities Account after the receipt of such notice shall terminate, Bank shall have no further right to originate entitlement orders concerning the Securities Account and Securities Intermediary may take such steps as the Pledgor may request to vest full ownership and control of the Securities Account in the Pledgor, including, but not limited to, removing the name of Bank from the Securities Account or transferring all of the financial assets and credit balances in the Securities Account to another securities account in the name of the Pledgor or its designee.

9. This Control Agreement shall be binding upon and inure to the benefit of the successors and assigns of the parties hereto, and shall be governed by, and in accordance with, the laws of the State of California without regard to conflict of laws principles.

10. This Control Agreement may be executed in any number of counterparts, each of which shall be an original, but all of which taken together shall constitute one and the same instrument.

11. Pledgor acknowledges that this Control Agreement supplements Pledgor's existing agreements with Securities Intermediary. This Control Agreement does not create any obligation or duty of Securities Intermediary other than those expressly set forth herein. If this Control Agreement conflicts with any other agreement between Securities Intermediary and Pledgor, the terms of this Control Agreement shall prevail.

12. This Control Agreement is an integrated agreement and supplements all negotiations and agreement with respect to the subject matter hereof. Any amendments hereto shall be in writing and signed by all parties.

13. Unless otherwise provided in this Control Agreement, all notices or demands relating to this Control Agreement shall be in writing and (except for account statements and other informational documents which may be sent by first–class mail, postage prepaid) shall be personally delivered, sent by certified mail or by facsimile to Bank, Pledgor or Securities Intermediary, as the case may be, at the address set forth below:

If to Bank:	Comerica Bank-California 9920 S. La Cienega Blvd., Suite #628 Inglewood, CA 90301-4423 Telephone: (310) 417-5600 Facsimile: (310) 417-5414 Attention: Manager
With a copy to :	Comerica Bank-California Five Palo Alto Square - 8th Floor 3000 El Camino Real Palo Alto, CA 94306 Attn: Jonathan H. Norris FAX: (650) 213-1710
If to Pledgor:	RIGEL PHARMACEUTICALS, INC. 240 East Grand Avenue South San Francisco, CA 94080 Attn: Chief Financial Officer FAX: (650) 624-1101
If to Securities Intermediary:	Comerica Securities, Inc. 201 N. Figueroa St., 1st. Floor Los Angeles, CA 90012 Telephone: (213)484-3758 Facsimile: (213)484-3795 Attn: Jack Singer

14. WAIVER OF JURY TRIAL. THE PARTIES ACKNOWLEDGE THAT THE RIGHT TO TRIAL BY JURY IS A CONSTITUTIONAL ONE, BUT THAT IT MAY BE WAIVED. EACH PARTY, AFTER CONSULTING (OR HAVING HAD THE OPPORTUNITY TO CONSULT) WITH COUNSEL OF THEIR CHOICE, KNOWINGLY, VOLUNTARILY AND INTENTIONALLY, AND FOR THEIR MUTUAL BENEFIT, WAIVES ANY RIGHT TO TRIAL BY JURY IN THE EVENT OF LITIGATION REGARDING THE PERFORMANCE OR ENFORCEMENT OF, OR IN ANY WAY RELATED TO, THIS AGREEMENT.

Please sign where indicated below to reflect your acknowledgment of and agreement to the foregoing terms and conditions.

Very truly yours,

COMERICA BANK - CALIFORNIA

By: /s/ John Norris

Title: VP, Technology & Life Sciences Group

RIGEL PHARMACEUTICALS, INC.
Pledgor

By: /s/ James H. Welch

Title: Chief Financial Officer

COMERICA SECURITIES, INC.
Securities Intermediary

By: _____

Title: _____

Exhibit A
Account Agreement

SECURITIES ACCOUNT CONTROL AGREEMENT

July 12, 2002

Attn: Secretary

Re: Comerica Bank-California /Security Interest in Securities Account of RIGEL PHARMACEUTICALS, INC.

Dear Sir or Madam:

This agreement ("Control Agreement") is entered by and among Comerica Bank-California ("Bank"), a California banking corporation, RIGEL PHARMACEUTICALS, INC., a Delaware corporation ("Pledgor") and Monarch Funds, a Delaware business trust (the "Trust"), by Forum Shareholder Services, LLC, a Delaware limited liability company, as agent therefor.

1. This Control Agreement concerns any account (collectively, the "Securities Account") established by Pledgor with Trust, whether now existing or hereafter arising. Pursuant to that certain Loan and Security Agreement dated as of the date hereof (as amended from time to time, the "Security Agreement"), Bank has a security interest in all of Pledgor's present and future right, title and interest in, to and under the Securities Account maintained with Trust in connection with the securities, securities entitlements or other investment property, instruments and financial assets contained in the Securities Account, and all investment property, instruments and financial assets at any time held or maintained in the Securities Account, together with all investment property, instruments and financial assets substituted therefore or for any part thereof, all interest, dividends, increases, profits, new financial assets or other increments, distributions or rights of any kind received on account of any of the foregoing, and all other income received in connection therewith and all products or proceeds thereof (whether cash or non-cash proceeds)(collectively, the "Securities Entitlement"). Bank, Pledgor and Trust are entering into this Control Agreement to perfect Bank's security interest in the Securities Account.

2. The Securities Entitlement is to be held in the Securities Account and is and will remain subject to a first priority security interest in favor of Bank. The Securities Account is not a margin account or subject to check writing privileges. All rights of Trust in the Securities Account except for Permitted Liens as defined below shall be subordinated and postponed in favor of Bank's rights and interests therein under and pursuant to the Security Agreement.

3. Until Trust is notified to the contrary by Bank in any entitlement order or other notice ("Notice"), Trust is authorized to act upon the instruction of Pledgor, or its authorized representatives, and comply with Pledgor's (or its authorized representatives) instructions for the following purposes:

☒ make trades of any and all of the financial assets held in the Securities Account &/or

☒ receiving any distributions relating to the Securities Entitlement &/or

☒ making any withdrawals of any and all of the financial assets held in the Securities Account or the proceeds thereof.

Upon and following receipt of Notice, until revocation or withdrawl of such Notice in writing by Bank, (i) Trust shall immediately cease complying with instructions concerning the Securities Account and the Securities Entitlement originated by the Pledgor, or its representatives, and thereafter shall comply with the instructions of Bank without further consent by Pledgor; (ii) Trust shall not be authorized to release any of the Securities Entitlement or any proceeds thereof or make any distribution from the Securities Account to any party other than Bank, until otherwise instructed by Bank in writing; (iii) Trust is instructed to hold the Securities Account and Securities Entitlement for the benefit of Bank; and (iv) Bank shall be the only person authorized to make any withdrawals of and/or to authorize or receive any distribution of or relating to the Securities Entitlement.

4. By its execution hereof, Trust acknowledges and agrees to the terms set forth herein, and that this Control Agreement constitutes written notice to Trust and acknowledgment by Trust of Bank's security interest in the Securities Account. Said security interest shall be noted by the Trust on its books and records.

5. Trust has established the Securities Account in Pledgor's name. A true and complete copy of the account agreement entered into between Pledgor and Trust with respect to the Securities Account (the "Account Agreement") is attached as Exhibit A. Exhibit A is a complete and accurate statement of the investment property, financial assets and credit balances credited to the Securities Account as of the date(s) set forth in the statement. Except for the claims and interest of Bank and Pledgor in the Securities Account and liens to secure fees owed to Trust by Pledgor with respect to the operation of the Securities Account ("Permitted Liens"), Trust does not know of any claim to or interest in the Securities Account.

6. Trust shall send copies of all statements and confirmations regarding the Securities Account simultaneously to Pledgor and to Bank. Trust shall promptly notify Bank and Pledgor if a person asserts a lien, encumbrance or adverse claim against the Securities Account.

7. Trust shall not agree with any third party that Trust will comply with entitlement orders from the third party. Trust shall not amend the Account Agreement, including its choice of law clause and the provision providing for treatment of property held in the Securities Account as a financial asset, without Bank's written consent. Trust shall not permit Pledgor to terminate the Securities Account without Bank's written consent, which shall not be unreasonably withheld.

8. The rights and powers granted herein to Bank have been granted in order to perfect its security interest in the Securities Account, are powers coupled with

an interest and will neither be affected by the death or bankruptcy of the Pledgor nor by the lapse of time. Trust's obligations under this Control Agreement shall continue in effect until the security interest of Bank in the Securities Account has been terminated pursuant to the terms of the Security Agreement and Bank has notified you of such termination in writing. Upon receipt of such notice Trust's obligations under this Control Agreement with respect to the operation and maintenance of the Securities Account after the receipt of such notice shall terminate, Bank shall have no further right to originate entitlement orders concerning the Securities Account and Trust may take such steps as the Pledgor may request to vest full ownership and control of the Securities Account in the Pledgor, including, but not limited to, removing the name of Bank from the Securities Account or transferring all of the financial assets and credit balances in the Securities Account to another securities account in the name of the Pledgor or its designee.

9. This Control Agreement shall be binding upon and inure to the benefit of the successors and assigns of the parties hereto, and shall be governed by, and in accordance with, the laws of the State of California without regard to conflict of laws principles.

10. Each of the Pledgor and the Bank hereby agrees to indemnify the Trust for, defend the Trust against and hold the Trust harmless from all claims, demands, suits, expenses (including reasonable attorneys' fees), losses and damages resulting from or arising out of this Control Agreement and not due to the Trust's gross negligence or willful misconduct, including as a result of the Trust's actions in honoring instructions from any properly authorized person believed to be authorized prior to receipt of notification to the contrary or refusing to honor instructions from persons not demonstrated to the Trust's reasonable satisfaction to be so authorized. The Pledgor and the Bank agree that, in the event of any dispute between them or either of them and a third person in connection with which the Trust becomes subject to conflicting claims with respect the Securities Account, the Trust

may in its sole and absolute discretion initiate an interpleader action, in which the Pledgor and the Bank consent to being joined, to determine the relative rights of the claimants with respect to the Securities Account.

11. This Control Agreement may be executed in any number of counterparts, each of which shall be an original, but all of which taken together shall constitute one and the same instrument.

12. Pledgor acknowledges that this Control Agreement supplements Pledgor's existing agreements with Trust. This Control Agreement does not create any obligation or duty of Trust other than those expressly set forth herein. If this Control Agreement conflicts with any other agreement between Trust and Pledgor, the terms of this Control Agreement shall prevail.

13. This Control Agreement is an integrated agreement and supplements all negotiations and agreement with respect to the subject matter hereof. Any amendments hereto shall be in writing and signed by all parties.

14. Unless otherwise provided in this Control Agreement, all notices or demands relating to this Control Agreement shall be in writing and (except for account statements and other informational documents which may be sent by first–class mail, postage prepaid) shall be personally delivered, sent by certified mail or by facsimile to Bank, Pledgor or Trust, as the case may be, at the address set forth below:

If to Bank:	Comerica Bank-California 9920 S. La Cienega Blvd., Suite #628 Inglewood, CA 90301-4423 Telephone: (310) 417-5600 Facsimile: (310) 417-5414 Attention: Manager
With a copy to :	Comerica Bank-California Five Palo Alto Square - 8th Floor 3000 El Camino Real Palo Alto, CA 94306 Attn: Jonathan H. Norris FAX: (650) 213-1710
If to Pledgor:	RIGEL PHARMACEUTICALS, INC. 240 East Grand Avenue South San Francisco, CA 94080 Attn: Chief Financial Officer FAX: (650) 624-1101
If to Trust:	Monarch Funds P.O. Box 446 Portland, Maine 04101 Telephone: (207) 822-6680 Attn.: Secretary

15. WAIVER OF JURY TRIAL. THE PARTIES ACKNOWLEDGE THAT THE RIGHT TO TRIAL BY JURY IS A CONSTITUTIONAL ONE, BUT THAT IT MAY BE WAIVED. EACH PARTY, AFTER CONSULTING (OR HAVING HAD THE OPPORTUNITY TO CONSULT) WITH COUNSEL OF THEIR CHOICE, KNOWINGLY, VOLUNTARILY AND INTENTIONALLY, AND FOR THEIR MUTUAL BENEFIT, WAIVES ANY RIGHT TO TRIAL BY JURY IN THE EVENT OF LITIGATION REGARDING THE PERFORMANCE OR ENFORCEMENT OF, OR IN ANY WAY RELATED TO, THIS AGREEMENT.

Please sign where indicated below to reflect your acknowledgment of and agreement to the foregoing terms and conditions.

Very truly yours,

COMERICA BANK-CALIFORNIA,
a California banking corporation

By: /s/ Kathy Conte

Title: Senior Vice President

RIGEL PHARMACEUTICALS, INC.
Pledgor

By: /s/ James H. Welch

Title: Chief Financial Officer

By: _____

Title: _____

MONARCH FUNDS,
a Delaware business trust

By: Forum Shareholders Services, LLC,
a Delaware limited liability company, as agent

By: _____

Title: Director

Exhibit A
Account Agreement

[*] = 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 10.25

COLLABORATION AGREEMENT

THIS COLLABORATION AGREEMENT (the "Agreement") is entered into as of August 1st, 2002 (the "Effective Date") by and between **RIGEL PHARMACEUTICALS, INC**., a Delaware corporation ("Rigel") with its offices at 240 East Grand Avenue, South San Francisco, California 94080, and **DAIICHI PHARMACEUTICAL CO., LTD.**, a Japanese corporation ("Daiichi") with offices at 14-10 Nihonbashi 3-chome, Chuo-ku, Tokyo 103-8234, Japan. Rigel and Daiichi may be referred to herein individually as a "Party" or, collectively, as the "Parties."

RECITALS

WHEREAS, Rigel is a leader in the discovery and validation of target molecules involved in cancer;

WHEREAS, Daiichi is engaged in the research, development, marketing, manufacture and distribution of pharmaceutical products for the diagnosis, treatment or prevention of cancer;

WHEREAS, Rigel and Daiichi desire to enter into a collaborative relationship to identify small molecule inhibitors of a specific Target Molecule (hereinafter defined) useful for the development of such pharmaceutical products; and

WHEREAS, Rigel is prepared to grant Daiichi worldwide marketing rights with respect to any products arising from this collaboration, and Daiichi is prepared to grant to Rigel rights to co-develop and co-promote such products in North America, as specified below;

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

1. DEFINITIONS

Each of the capitalized terms used in this Agreement (other than the headings of the Articles and Sections), whether used in the singular or the plural, shall have the meaning as set forth below or, if not listed below, the meaning as designated in places throughout this Agreement.

1.1 "Affiliate" means any company or entity controlled by, controlling, or under common control with a Party hereto and shall include without limitation any company fifty percent (50%) or more of whose voting stock or participating profit interest is owned or controlled, directly or indirectly, by a Party, and any company which owns or controls, directly or indirectly, fifty percent (50%) or more of the voting stock of a Party.

1.2 "Assays" means **[*]**

1.3 "Assay Know-How" means all Information Controlled by Rigel during the Research Term that is necessary or reasonably useful to practice the Assay Patents or to make, perform or use the Assays.

1.4 "Assay Patents" means all Patents Controlled by Rigel during the Research Term that claim (a) the Assays or any component thereof, (b) a method of making the Assays or any component thereof or (c) a method of performing or using the Assays.

1.5 "Assay Technology" means the Assay Know-How and Assay Patents.

1.6 "[*]" means the **[*]** that are described in the Research Plan.

1.7 "[*]" means the **[*]** that are described in the Research Plan.

1.8 "Co-Developed Product" means a Product for which an IND has been filed in the North American Territory, and Rigel has not exercised any Non Co-Development Option and has not terminated, pursuant to Section 5.15(a), co-development in all countries of the North American Territory.

1.9 "Co-Developed Territory" means, with respect to a particular Co-Developed Product, the country or countries in the North American Territory for which (a) Rigel has not exercised its Non Co-Development Option, (b) Rigel has not terminated co-development pursuant to Section 5.15(a), and (c) Daiichi has not terminated co-development pursuant to Section 5.15(b).

1.10 "Confidential Information" means (a) all Information, and other information and materials, received by either Party from the other Party pursuant to this Agreement or pursuant to the Confidential Disclosure Agreement between the Parties dated November 1, 2000 and (b) all Rigel Restricted Information. For clarity, Rigel Restricted Information shall be considered Confidential Information of Rigel.

1.11 "Controlled" means, with respect to any gene, protein, compound, material, Information or intellectual property right, that the Party owns or has a license to such gene, protein, compound, material, Information or intellectual property right and has the ability to grant to the other Party access, a license or a sublicense (as applicable) to such gene, protein, compound, material, Information or intellectual property right as provided for herein without violating the terms of any agreement or other arrangements with any Third Party existing at the time such Party would be first required hereunder to grant the other Party such access, license or sublicense.

1.12 "Co-Promoted Product" means a Co-Developed Product for which Rigel has not exercised any Non Co-Promotion Option and has not terminated, pursuant to Section 6.3(a), co-promotion in all countries in which such Product was co-developed by the Parties.

1.13 "Co-Promoted Territory" means, with respect to a particular Co-Promoted Product, the country or countries in the Co-Developed Territory for such product for which (a) Rigel has not exercised its Non Co-Promotion Option, (b) Rigel has not terminated co-promotion

pursuant to Section 6.3(a), (c) Daiichi has not terminated co-promotion pursuant to Section 6.3(b), and (d) the **[*]** Co-Promotion Period has not expired.

1.14 "Co-Promotion Period" means, with respect to a particular Co-Promoted Product in a particular country in its Co-Promoted Territory, the period beginning on the receipt of approval of the Drug Approval Application for such Product in such country and ending **[*]** after the first commercial sale of such Product in such country.

1.15 "Daiichi Product Know-How" means all Information (other than Daiichi Product Patents) Controlled by Daiichi during the Term that is necessary or reasonably useful to (a) develop or offer for sale a Product or (b) practice the Daiichi Product Patents.

1.16 "Daiichi Product Patents" means all Patents Controlled by Daiichi during the Term that cover the manufacture, use or composition of matter of a Product.

1.17 "Daiichi Technology" means all Information and Patents Controlled by Daiichi during the Research Term that are necessary or reasonably useful for Rigel to carry out its responsibilities under the Research Program.

1.18 "Daiichi-Alone Territory" means all countries and territories of the world other than those countries and territories in the North American Territory.

1.19 "Development Budget" shall have the meaning assigned in Section 5.9.

1.20 "Development Costs" means the total costs incurred by the Parties in the course of planning, conducting, managing or reviewing the results of a Phase I Trial or a Phase II Trial for any Co-Developed Product in its Co-Developed Territory, including (without limitation): (a) costs of producing bulk drug, filling and finishing, shipping, storing and administering all doses of such Co-Developed Product that are administered to patients during such trials (where such costs are allocated on a per gram basis), (b) payments made to hospitals, medical personnel and clinical trial management organizations in consideration for work performed on such trials, (c) costs incurred as a result of the preparation, review and filing of regulatory submissions for such clinical trials, and (d) wages and benefits to the extent employees work on such clinical trials and related regulatory submissions (calculated on a full-time equivalent basis), provided that such costs were incurred in accordance with each Party's responsibilities under the Development Plan for such Co-Developed Product. Notwithstanding the foregoing, Development Costs shall exclude: **[*]**.

1.21 "Development Plan" shall have the meaning assigned in Section 5.9.

1.22 "Diligent Efforts" means the carrying out of obligations in a sustained manner consistent with the efforts a Party devotes to a product of similar market potential, profit potential or strategic value resulting from its own research efforts, based on conditions then prevailing. Diligent Efforts requires that: (a) each Party promptly assign responsibility for such obligations to specific employee(s) who are held accountable for progress and monitor such progress on an on-going basis, (b) each Party set and consistently seek to achieve specific and meaningful objectives for carrying out such obligations, and (c) each Party consistently make

and implement decisions and allocate resources designed to advance progress with respect to such objectives.

1.23 "Drug Approval Application" means an application for Regulatory Approval required before commercial sale or use of a Product as a drug in a regulatory jurisdiction.

1.24 "FTE" means the equivalent of one researcher working full time for or on behalf of Rigel for one 12-month period (including normal vacations, sick days and holidays).

1.25 "Hit Compound" means a Pre-Hit Compound that meets the criteria set forth in the Research Plan.

1.26 "IND" shall mean (a) with respect to the United States, an Investigational New Drug application, as defined in the U.S. Food, Drug and Cosmetics Act and the regulations promulgated thereunder, or (b) with respect to any other regulatory jurisdiction, any corresponding or equivalent application, registration or certification in such jurisdiction.

1.27 "Information" means biological materials, information, results and data of any type whatsoever, in any tangible or intangible form whatsoever, including without limitation, gene sequences, vectors, cell lines, reagents, samples, chemical compounds, databases, practices, methods, techniques, specifications, formulations, formulae, knowledge, know-how, skill, experience, test data including pharmacological, biological, chemical, biochemical, toxicological and clinical test data, analytical and quality control data, stability data, studies and procedures, and patent and other legal information or descriptions.

1.28 "Invention" means any and all inventions and improvements thereto, made, conceived or reduced to practice by a Party in the performance of its duties under the Research Program or in the course of its practice of a license granted to it pursuant to Section 4.2 or 4.3.

1.29 "Joint Development Committee" or "JDC" means the committee formed pursuant to Section 5.2.

1.30 "Joint Invention" means any Invention made, discovered or developed jointly by employee(s) or agent(s) of both Parties.

1.31 "Joint Research Committee" or "JRC" means the committee formed pursuant to Section 2.1.

1.32 "Lead Compound" means a Hit Compound or a derivative, analog or congener of a Hit Compound or Lead Compound, wherein such Hit Compound or derivative, analog or congener meets the criteria set forth in the Research Plan.

1.33 "NDA" means (a) a New Drug Application filed with the United States Food and Drug Administration in conformance with applicable laws and regulations, or (b) the foreign equivalent of any such application in any country other than the United States.

1.34 "Net Sales" means the gross amount invoiced for sales of a Product in a particular territory by Daiichi, its Affiliates or their permitted sublicensees to an

unrelated Third

Party, less (to the extent incurred for such Product in such territory): (i) discounts, including cash discounts (including quantity discounts), charge-back payments and rebates granted to managed health care organizations or to federal, state and local governments, their agencies, and purchasers and reimbursers or to trade customers, including but not limited to, wholesalers and chain and pharmacy buying groups (with any such discounts or reductions which are based on sales to the customer of multiple products being allocated to such Product on the basis of a methodology approved by the Parties), (ii) credits or allowances actually granted upon claims, damaged goods, rejections or returns of such Product, including recalls, (iii) freight, postage, shipping and insurance charges actually allowed or paid for delivery of such Product, to the extent billed, (iv) commissions paid to Third Parties, (v) taxes, tariffs, duties or other governmental charges levied on, absorbed or otherwise imposed on sale of such Products, including without limitation value-added taxes, or other governmental charges measured by the billing amount, when included in billing, as adjusted for rebates and refunds and (vi) bad debts (determined in accordance with the normal accounting procedures of, and applied consistently within and across the operating units of, Daiichi, its Affiliates or their permitted sublicensees). If Daiichi or its Affiliate or licensee sells any Product as a combination product containing one or more active ingredients in addition to the Product (which may be either combined in a single formulation or bundled with separate formulations), Net Sales for such combination product will be calculated by multiplying actual Net Sales of such combination product by the fraction A/(A+B) where A is the invoice price of the Product if sold separately, and B is the total invoice price of any other active ingredient or ingredients in the combination, if sold separately. If, on a country-by-country basis, the other active ingredient or ingredients in the combination are not sold separately in said country, Net Sales for the purpose of determining royalties of the combination product shall be calculated by multiplying actual Net Sales of such combination product by the fraction A/C where A is the invoice price of the Product if sold separately, and C is the invoice price of the combination product. If, on a country-by-country basis, neither the Product nor the other active ingredient or ingredients of the combination product is sold separately in said country or the mechanics provided above are otherwise inapplicable (as in the case of medical devices), Net Sales for the purposes of determining royalties of the combination product shall be determined by the Parties in good faith.

1.35 **"Non Co-Development Option"** shall have the meaning set forth in Section 5.1(b).

1.36 **"Non Co-Promotion Option"** shall have the meaning set forth in Section 6.1(b).

1.37 **"North American Territory"** means (a) the United States and its possessions and territories, (b) Canada and its provinces and territories, (c) Mexico and (d) any successor states to the foregoing.

1.38 **"Patent"** means (a) unexpired letters patent (including inventor's certificates) which have not been held invalid or unenforceable by a court of competent jurisdiction from which no appeal can be taken or has been taken within the required time period, including without limitation any substitution, extension, registration, confirmation, reissue, re-examination, renewal or any like filing thereof and (b) pending applications for letters patent, including without limitation any continuation, division or continuation-in-part thereof and any provisional applications.

1.39 **"Phase I Trial"** means a trial on sufficient numbers of normal volunteers and patients that is designed to establish that a pharmaceutical product is safe for its intended use, and to support its continued testing in Phase II Trials, or the equivalent of such trial (in the United States or abroad).

1.40 **"Phase II Trial"** means a trial on sufficient numbers of patients that is designed to establish the safety and biological activity of a pharmaceutical product for its intended use, and to define warnings, precautions and adverse reactions that are associated with the pharmaceutical product in the dosage range to be prescribed, or the equivalent of such trial (in the United States or abroad), but not a trial designed to establish efficacy with statistical significance.

1.41 **"Phase III Trial"** means a trial on sufficient numbers of patients that is designed to establish that a pharmaceutical product is safe and efficacious for its intended use, and to define warnings, precautions and adverse reactions that are associated with the pharmaceutical product in the dosage range to be prescribed, and to support Regulatory Approval of such pharmaceutical product or label expansion of such pharmaceutical product, or the equivalent of such trial (in the United States or abroad).

1.42 **"Pre-Hit Compound"** means a compound that is identified by Rigel during the Research Term, or by Daiichi during or after the Research Term ends, that meets the criteria set forth in the Research Plan.

1.43 **"Product"** means any product that contains, comprises or incorporates a Lead Compound and that was developed to diagnose, prevent or treat a human disease or condition.

1.44 **"Promotion Expenses"** means, with respect to a particular Co-Promoted Product, the costs incurred by Rigel (a) to operate and maintain the Sales Representatives for such Co-Promoted Product or (b) in connection with the promotion of such Co-Promoted Product in its Co-Promoted Territory by such Sales Representatives.

1.45 **"Regulatory Approval"** means any approvals (including supplements, amendments, pre- and post-approvals, pricing and reimbursement approvals), licenses, registrations or authorizations of any national, supra-national (e.g., the European Commission or the Council of the European Union), regional, state or local regulatory agency, department, bureau, commission, council or other governmental entity, necessary for the manufacture, distribution, use or sale of Products in a regulatory jurisdiction.

1.46 **"Research Plan"** means the plan that sets forth the research work to be performed by Rigel and Daiichi in the course of the Research Program and other matters referred to therein.

1.47 **"Research Program"** means the program of collaborative research described in Article 3.

1.48 **"Research Term"** means the period, the duration of which is set forth in Section 3.2, during which the Parties conduct the Research Program.

1.49 "Reverted Territory" means with respect to a particular Product, all countries in the North American Territory for which Rigel either (i) exercised its Non Co-Development Option or (ii) did not exercise such option but subsequently terminated co-development pursuant to Section 5.15(a).

1.50 "Rigel Compound Know-How" means all Information Controlled by Rigel, during the Research Term, that is necessary or reasonably useful to practice the Rigel Compound Patents.

1.51 "Rigel Compound Patents" means all Patents Controlled by Rigel, during the Research Term, that cover the manufacture, use or composition of matter of a Lead Compound.

1.52 "Rigel Product" means a Product on which Daiichi either (a) terminated co-development pursuant to Section 5.15(b) or (b) terminated co-promotion pursuant to Section 6.3(b).

1.53 "Rigel Restricted Information" means all Information of Rigel, other than Assay Know-How, Assay Patents, Rigel Compound Know-How, Rigel Compound Patents and Rigel Technology, that is learned by the employees of Daiichi who work at Rigel as permitted under Section 3.6 at any time they are at a Rigel facility.

1.54 "Rigel Technology" means all Information and Patents (other than Assay Know-How and Assay Patents) Controlled by Rigel during the Research Term that are necessary or reasonably useful for Daiichi to carry out its responsibilities under the Research Program.

1.55 "Rigel-Alone Option" shall have the meaning assigned in Section 7.4(a).

1.56 "Rigel-Alone Territory" means, with respect to a particular Rigel Product, the country or countries in which Daiichi terminated (a) co-development of such Product pursuant to Section 5.15(b) or (b) co-promotion of such Product pursuant to Section 6.3(b).

1.57 "Sales Representative" means an employee or agent of a Party or its Affiliate: (a) who is responsible for meeting with customers and others who can buy (or influence the buying process and decision regarding) the applicable Co-Promoted Product in its Co-Promoted Territory, and (b) whose success at such activities is a significant factor in the ongoing employment or engagement of such individual by such Party or Affiliate, provided that such individual is not solely engaged in telemarketing, professional education or other indirect activities in support of direct selling.

1.58 "Sales Representative Efforts" means the efforts, to be measured by means of a methodology to be established or approved by the Parties, of Sales Representatives to promote a particular Co-Promoted Product in its Co-Promoted Territory. In establishing the methodology for measurement of Sales Representative Efforts, the Parties shall take into consideration all factors that they determines to be relevant, including, by way of example, the following: frequency of calls, positioning of calls, appropriateness of calls, nature of contact and the role of the person contacted in influencing the buying process and decision.

1.59 "Sole Invention" means any Invention made, discovered or developed solely by a Party and its employees or agents.

1.60 "Target Molecule" shall mean **[*]**.

1.61 "Term" shall have the meaning assigned to it in Section 12.1.

1.62 "Third Party" means any person or entity other than a Party or an Affiliate of a Party.

2. RESEARCH PROGRAM GOVERNANCE

2.1 Joint Research Committee Formation; Joint Patent Committee.

(a) The Research Program established by this Agreement shall be overseen by a joint research committee composed of four (4) representatives from each Party (the "Joint Research Committee" or "JRC"). The Parties shall designate their representatives on the JRC within ten (10) days after the Effective Date. An alternate member designated by a Party may serve temporarily in the absence of a permanent member of the JRC for such Party. Each Party shall designate one of its representatives as a Co-Chair of the JRC. Each Co-Chair of the JRC will be responsible for the agenda of alternating JRC meetings. From time to time, the JRC may establish subcommittees or subordinate committees (which may or may not include members of the JRC itself) to oversee particular projects or activities, and such subcommittees or subordinate committees shall be constituted and shall operate as the JRC agrees.

(b) The Parties hereby establish a Joint Patent Committee to serve as a subordinate committee of the JRC. The Joint Patent Committee shall be composed of an equal number of representatives of each Party, appointed from time to time by the JRC, and shall include at least one patent attorney from each Party. The Joint Patent Committee shall be responsible for identifying Inventions made in the course of the Research Program and making recommendations to the JRC regarding the identity of the individual inventors and the nature of the patent protection to be sought for such Inventions.

2.2 JRC Actions. Actions by the JRC pursuant to this Agreement shall be taken only with unanimous approval of all of the JRC representatives. If the JRC fails to reach unanimity on a matter before it for decision, the matter shall be referred for resolution to senior officers of the Parties.

2.3 Meetings of the JRC. The JRC:

(a) shall hold meetings at such times and places as shall be determined by the JRC (it being expected that meetings will alternate between the offices of each Party) but in no event shall such meetings be held in person less frequently than once every three (3) months during the Research Term and during the first six (6) months after the end of the Research Term;

(b) may conduct meetings in person, by videoconference or by telephone conference, provided that meetings by videoconference or telephone conference shall not reduce the number of meetings in person specified in Section 2.3(a);

(c) may invite other senior personnel of the Parties to attend meetings of the JRC;

(d) may act without a meeting if, prior to such action, a written consent thereto is signed by all members of the JRC; and

(e) may, by unanimous written consent, amend or expand upon the foregoing procedures for its internal operation.

2.4 Minutes. At each meeting, the JRC shall elect a secretary who will prepare, within ten business (10) days after each meeting, minutes reporting in reasonable detail the actions taken by the JRC during such meeting, the status of the Research Program, issues requiring resolution, and resolutions of previously reported issues. Such minutes are to be reviewed and, if reasonably complete and accurate, signed by one JRC member from each Party. The secretary shall revise such minutes as necessary to obtain such signatures.

2.5 JRC Functions and Powers. The research activities of the Parties under this Agreement shall be managed by the JRC only to the extent set forth herein (unless otherwise mutually agreed in writing by the Parties). The JRC shall foster the collaborative relationship between the Parties, and shall in particular:

(a) encourage and facilitate ongoing cooperation and information exchange between the Parties;

(b) monitor the progress of the Research Program and the Parties' diligence in carrying out their responsibilities thereunder;

(c) set priorities, allocate tasks and coordinate activities required to perform the Research Program;

(d) define the pharmacokinetic, pharmacodynamic, stability and solubility criteria for a compound to qualify as a Lead Compound;

(e) identify those compounds which qualify as Hit Compounds or Lead Compounds on account of their fulfillment of the criteria set forth in the Research Plan for Hit Compounds and Lead Compounds, respectively;

(f) clear scientific publications relating to the Research Program, subject to the review and approval of both Parties pursuant to Section 10.6; and

(g) perform such other functions as appropriate to further the purposes of this Agreement as mutually determined by the Parties.

2.6 Limitations of Powers of the JRC. The JRC shall have no power to amend this Agreement and shall have only such powers as are specifically delegated to it hereunder.

2.7 Project Contact Persons. The day-to-day interactions and project management of the Research Program will be performed by a pair of project contact persons, one to be appointed by each Party.

2.8 Obligations of Parties. Each Party shall provide the JRC and its authorized representatives with reasonable access during regular business hours to all records and documents of such Party that are specific to the Research Program and that the JRC may reasonably require in order to perform its obligations hereunder, subject to any bona fide obligations of confidentiality to a Third Party.

2.9 Research Program Guidelines.

(a) General. In all matters related to the Research Program, the Parties shall be guided by standards of reasonableness in economic terms and fairness to each of the Parties, striving to balance as best they can the legitimate interests and concerns of the Parties, to further the Research Program and to realize the economic potential of the Products.

(b) Independence. Subject to the terms of this Agreement, the activities and resources of each Party shall be managed by such Party, acting independently and in its individual capacity. The relationship between Rigel and Daiichi is that of independent contractors and neither Party shall have the power to bind or obligate the other Party in any manner, other than as is expressly set forth in this Agreement.

3. CONDUCT OF RESEARCH PROGRAM.

3.1 Overview. The goal of the Research Program is to identify Lead Compounds. As described in greater detail in the Research Plan and this Article 3, it is anticipated that Rigel will **[*]** and each Party shall **[*].** Rigel shall also **[*].** The Parties shall use **[*]** and other **[*]** to perform research on promising Pre-Hit Compounds to determine whether they qualify as Hit Compounds. **[*].** Once a compound is designated or deemed to be a Lead Compound, no further work shall be performed upon it pursuant to the Research Program. The Parties' rights to develop and commercialize products that incorporate Lead Compounds are set forth in Articles 5, 6 and 7.

3.2 Research Term. The Research Term shall commence on the Effective Date and shall continue until the earlier of (a) the **[*]** anniversary of the Effective Date and (b) the effective date of any termination of this Agreement pursuant to Section 12.2. The FTE funding commitments of Daiichi set forth in Section 3.4 and the payment obligations of Daiichi set forth in Section 3.4 (b) shall remain in force until the end of the Research Term. The Research Term may be extended by **[*]** upon written agreement between the Parties at least **[*]** prior to the **[*].**

3.3 Research Plan. An initial Research Plan has been approved by the Parties concurrent with the execution of this Agreement. The Research Plan may be amended by the JRC, during the Research Term, based upon the results achieved in the Research Program, provided that the FTE commitments set forth in Section 3.4,

together with the definitions of Pre-Hit Compound, Hit Compound and Lead Compound, remain unchanged and such amendment does not violate or contradict any provision of this Agreement. Any change of the portions of the Research Plan specified in the previous sentence shall be made pursuant to the mechanism

set forth in Section 15.2. In the event of an inconsistency or disagreement between the Research Plan and this Agreement, the terms of this Agreement shall prevail.

3.4 Research Effort and Support.

(a) FTE Commitments. Rigel shall supply **[*]** FTEs during each contract year of the Research Term. In the event of an extension of the Research Term **[*],** the Parties shall agree at that time on the number of FTEs that Rigel shall supply in such **[*]** of the Research Term. Daiichi shall fund such FTEs as set forth in Section 3.4 (b). Daiichi understands and agrees that Rigel retains complete discretion to change the identity of the individuals who compose such FTEs and to alter the frequency and time which any individual devotes to the Research Program. All scientific work on or directly related to the Research Program performed by such individuals shall count towards the fulfillment of Rigel's FTE commitment pursuant to this Section 3.4. Such work may include, but is not limited to, experimental laboratory work, recording and writing up results, reviewing literature and references, holding scientific discussions, organizing and attending scientific meetings and conferences, managing and leading scientific staff, and carrying out Research Program management duties (including service on the JRC).

(b) Research Support. To support Rigel's efforts under the Research Program, during each contract year of the Research Term, Daiichi shall pay Rigel an amount equal to **[*]** for the **[*]** and **[*]** for the **[*]**, multiplied by the number of FTEs set forth in Section 3.4 for such year. Each such amount shall be paid to Rigel in four equal, quarterly advance payments. Daiichi shall make its first such payment within **[*]** of the Effective Date and each subsequent payment on the first business day of each contract quarter during the Research Term. Within thirty (30) days after the end of each contract year (i.e., each anniversary of the Effective Date), Rigel shall submit to Daiichi a report confirming its actual FTEs devoted to the conduct of the Research Program and the actual cost of such research efforts during the preceding contract year. If the total actual costs incurred by Rigel under the Research Program in each contract year are less than the amount that Daiichi has paid in each contract year, then **[*]** the **[*]** within **[*]** the **[*]** of **[*]**. If the total actual costs incurred by Rigel under the Research Program in each contract year are more than the amount that Daiichi has paid in each contract year, **[*]**.

3.5 Conduct of Research. The Parties shall use Diligent Efforts to conduct their respective tasks, as assigned under the Research Plan, throughout the Research Program, provided that Rigel shall not be obligated to devote any resources to the Research Program in excess of the FTEs funded by Daiichi pursuant to Section 3.4. In addition, the Parties shall conduct the Research Program in good scientific manner, and in compliance in all material respects with the requirements of applicable laws, rules and regulations and all applicable good laboratory practices to attempt to achieve their objectives efficiently and expeditiously.

3.6 Technology Transfer. Rigel will transfer to Daiichi, on an orderly basis and as the Assays are developed, the Assay Know-How and a copy of issued patents and patent applications that are Assay Patents. Such transfer shall be managed and coordinated by the JRC. To assist and direct the transfer to Daiichi of the Assay Know-How, Daiichi may provide, at its cost and expense, **[*]** to work at Rigel for up to **[*]** for technical training related to the **[*]** and **[*]** to work at Rigel for up to **[*]** for technical training related to the **[*]**, provided that access or

exposure to Rigel Restricted Information by Daiichi scientists shall be subject to the provisions of Article 10. All **[*]** that work at Rigel under the terms of this Section 3.6 shall be restricted from access to any Rigel facilities or locations other than those necessary for completing the technology transfer and training as provided above. Further, Rigel shall use reasonable efforts to limit and restrict such **[*]** from access or exposure to any confidential information of Rigel that is not Assay Know-How. All time spent by Rigel personnel in carrying out the technology transfer to Daiichi pursuant to the terms of this Section 3.6 shall count towards the fulfillment of Rigel's obligation, pursuant to Section 3.4, to provide a specified number of FTEs during each contract year of the Research Term.

3.7 Identification of Pre-Hit Compounds, Hit Compounds and Lead Compounds.

(a) During the **[*]** of the Research Term, Rigel shall **[*]** to determine **[*]**, and Daiichi shall **[*]**.

(b) Each Party shall use Diligent Efforts to **[*]** other compounds pursued under the Research Program. Each Party shall promptly report to the JRC the results of the further research performed by such Party on each Pre-Hit Compound **[*]**. The JRC shall review such results and shall determine whether such Pre-Hit Compound satisfies the technical criteria set forth in the Research Plan for a Hit Compound. Each Pre-Hit Compound that satisfies such criteria shall be deemed a Hit Compound, and each Party shall **[*]** each such Hit Compound.

(c) The JRC shall decide which Hit Compounds merit still further research, prioritize each such compound relative to other compounds pursued under the Research Program, and Daiichi shall have the primary responsibility for conducting such further research. Each Party shall use Diligent Efforts to perform the responsibilities allocated to it by the JRC according to the priorities set by the JRC. Each Pre-Hit Compound that did not satisfy the Hit Compound technical criteria specified in the Research Plan, but is nevertheless chosen by the JRC for further research as described in the Research Plan, shall be deemed a Hit Compound, and each Party shall promptly disclose to the JRC the identity and structure of each such Hit Compound. Each Party shall promptly report to the JRC the results of the further research performed by such Party on each Hit Compound and its derivatives, analogues and congeners. The JRC shall review such results and shall determine whether any such compound satisfies the technical criteria set forth in the Research Plan for a Lead Compound. Each such compound that satisfies such criteria shall be deemed a Lead Compound. If such a compound does not satisfy such criteria, but Daiichi designates such compound for any study listed in the Research Plan, then it shall also be deemed a Lead Compound.

(d) Once a compound is designated or deemed to be a Lead Compound, no further work shall be performed upon it pursuant to the Research Program, provided, however, that if Daiichi desires Rigel to perform further work on such Lead Compound, **[*]**.

3.8 Records. Each Party shall maintain complete and accurate records of all work conducted under the Research Program and all results, data and developments made pursuant to its efforts under the Research Program. Such records shall be complete and accurate and shall fully and properly reflect all work done and results achieved in the performance of the Research

Program in sufficient detail and in good scientific manner appropriate for patent and regulatory purposes. Each Party shall have the right to review and copy such records of the other Party at reasonable times to the extent necessary for such Party to conduct its research or other obligations under the Agreement.

3.9 Reports. During the Research Term, each Party shall report to the JRC no less than once per quarter, which report shall include a written progress report summarizing the work performed under the Research Program. The JRC shall define the format and the nature of the content of the quarterly report, which shall be adopted by both Parties.

3.10 Daiichi's Post-Research Term Activities. Daiichi shall use Diligent Efforts to further develop, and file INDs for, the Lead Compounds. Subject to the terms and conditions of this Agreement, Daiichi shall have the right to continue screening its libraries to identify Pre-Hit Compounds, Hit Compounds and Lead Compounds after the Research Term expires. All such Pre-Hit Compounds, Hit Compounds and Lead Compounds identified by Daiichi shall be subject to the terms and conditions of this Agreement.

4. LICENSE GRANTS; NONCOMPETITION

4.1 Collaborative Research Licenses.

(a) Grant by Rigel. Subject to the terms and conditions of this Agreement, Rigel hereby grants to Daiichi a non-exclusive, non-transferable (except via assignment in accordance with Section 15.9), worldwide, royalty-free license, under the Rigel Technology, solely for the purpose of carrying out, during the Research Term, Daiichi's responsibilities under the Research Program.

(b) Grant by Daiichi. Subject to the terms and conditions of this Agreement, Daiichi hereby grants to Rigel a non-exclusive, non-transferable (except via assignment in accordance with Section 15.9), worldwide, royalty-free license, under Daiichi Technology, solely for the purpose of carrying out, during the Research Term, Rigel's responsibilities under the Research Program.

4.2 Assay Licenses.

(a) Subject to the terms and conditions of this Agreement, Rigel hereby grants to Daiichi an exclusive (except as to Rigel), non-transferable (except via assignment in accordance with Section 15.9), worldwide, royalty-bearing (as provided in Article 8) license, under the Assay Technology, to use the Assays, during and after the end of the Research Term, to identify and perform research upon Pre-Hit Compounds, Hit Compounds and Lead Compounds. Rigel shall retain the right for itself and its Affiliates to use the Assays under the Assay Technology, but shall not license any Third Party to do so to identify and perform research upon Pre-Hit Compounds, Hit Compounds and Lead Compounds.

(b) Subject to the terms and conditions of this Agreement, Rigel hereby grants to Daiichi a non-exclusive, non-transferable (except via assignment in accordance with Section 15.9), worldwide, royalty-free license, under the Assay Technology, to use the Assays during

and after the end of the Research Term, to identify compounds that fail to qualify as Pre-Hit Compounds.

4.3 Development and Commercialization Licenses.

(a) Grant by Rigel. Subject to the terms and conditions of this Agreement, Rigel hereby grants to Daiichi and its Affiliates a worldwide, sublicensable, royalty-bearing (as provided in Article 8) license under the Rigel Compound Know-How, Rigel Compound Patents, Rigel's Sole Inventions and Rigel's interest in the Joint Inventions, to develop, use, make, have made, sell, offer for sale, import and export Products. The license set forth in this Section 4.3(a) shall be exclusive for all Products, provided, however, that Rigel shall retain the right, to the extent of Rigel's undertaking for co-development and co-promotion hereunder, under the Rigel Compound Know-How, Rigel Compound Patents, Rigel's Sole Inventions and Rigel's interest in the Joint Inventions in each country in the North American Territory, if Rigel has not exercised its Non Co-Development Option or Non Co-Promotion Option (if available) for such country.

(b) Grant by Daiichi. Subject to the terms and conditions of this Agreement, Daiichi hereby grants to Rigel and its Affiliates a non-exclusive, non-transferable (except via assignment in accordance with Section 15.9), royalty-free license, under Daiichi Product Know-How, Daiichi Product Patents, Daiichi's Sole Inventions and Daiichi's interest in the Joint Inventions, (i) to develop, in the applicable Co-Developed Territories, Co-Developed Products and (ii) to offer for sale, in the applicable Co-Promoted Territories, Co-Promoted Products.

(c) Restriction on Licensing. Rigel shall not grant any license under Rigel Compound Patents, Rigel's Sole Inventions, or Rigel's interest in Joint Inventions **[*]**.

4.4 Negative Covenant. Each Party covenants that it will not practice technology licensed to it under this Agreement outside the scope of the licenses granted herein. Except as specifically provided herein, no Party grants to the other Party any license, express or implied, to any technology, know-how, inventions, improvements, trade secrets or materials that it possesses.

4.5 Noncompetition.

(a) Exclusivity. During **[*]**, each Party will work exclusively with the other Party (and pursuant to this Agreement) with respect to (i) research directed toward the Target Molecule and inhibitors of the Target Molecule and (ii) development and commercialization of products containing inhibitors of the Target Molecule. The foregoing shall not be interpreted as limiting Daiichi's ability to sublicense (in accordance with Section 4.3(a)) the license granted to it therein.

(b) Pre-Hit Compounds. Each Party hereby covenants that it shall not (except pursuant to this Agreement) research, develop or commercialize any Pre-Hit Compound or any product containing, incorporation or comprising a Pre-Hit Compound, **[*]**. The foregoing shall not be interpreted as preventing either Party from

using Pre-Hit Compounds to **[*]**. Such **[*]** are not subject to the covenant set forth in this Section 4.5(b).

(c) Hit Compounds and Lead Compounds. Each Party hereby covenants that it shall not (except pursuant to this Agreement) research, develop or commercialize any Hit Compound or Lead Compound or any product containing, incorporating or comprising a Hit Compound or Lead Compound. For clarity, if any Hit Compound or Lead Compound is a member of a Party's screening library, then the covenant in this Section 4.5(c) does not obligate such Party to take the step of removing such Hit Compound or Lead Compound from its screening library.

5. CO-DEVELOPMENT

5.1 Co-Development Rights; Rigel Option to Terminate.

(a) Rigel Right to Co-Develop. Rigel shall have the right to co-develop in the North American Territory each Product for which Daiichi files an IND in a country of the North American Territory. If Rigel co-develops any Product hereunder, the Parties shall conduct such development in the North American Territory and share Development Costs for such Product as set forth in this Article 5. The period of co-development shall commence with **[*]** for such Co-Developed Product and shall terminate upon **[*]**. Generally, the **[*]** that the **[*]** for a **[*]** shall be made **[*]** in which the **[*]** are **[*]** for the **[*]**. Further, if Daiichi **[*]** for such Product anywhere in the Co-Developed Territory, the co-development period shall terminate in the North American Territory upon **[*]**.

(b) Option to Terminate Co-Development Rights. Daiichi hereby grants Rigel an option to terminate its Co-Development rights under this Agreement. Such option (the "Non Co-Development Option") may be exercised by Rigel at any time upon written notice to Daiichi. If Rigel exercises the Non Co-Development Option, then (i) it shall not have any right to Co-Develop or Co-Promote any future Products, and (ii) Daiichi shall be responsible for the additional milestone payments pursuant to Section 8.3(a).

(c) Exercise. Within **[*]** after **[*]**, Daiichi shall provide Rigel with **[*]** related to such Product which Daiichi owns and is reasonably useful for Rigel to exercise Non Co-Development Option. Within **[*]** of Rigel's receipt of such **[*]**, Rigel shall inform Daiichi in writing of whether Rigel wishes to exercise its Non Co-Development Option with respect to such Product and such country. If Rigel exercises such Non Co-Development Option within such **[*]** period, then such product shall remain a "Product" and Rigel shall have no further co-development rights under this Agreement. If Rigel does not exercise such Non Co-Development Option, then such Product shall be deemed to be a "Co-Developed Product" and such country shall be part of the Co-Developed Territory for such product.

5.2 Joint Development Committee Formation. Co-development of Co-Developed Products in their applicable Co-Developed Territories shall be overseen by a joint development committee composed of three (3) representatives from each Party (the "Joint Development Committee" or "JDC"). The Parties shall designate their representatives on the JDC within ten (10) days after Rigel first fails to exercise a Non Co-Development Option pursuant to Section 5.1 within the applicable **[*]** exercise period. An alternate member designated by a Party may serve temporarily in the absence of a permanent member of the JDC for such Party. Each Party shall designate one of its representatives as a Co-Chair of the JDC. Each Co-Chair of the JDC will be

responsible for the agenda of alternating JDC meetings. From time to time, the JDC may establish subcommittees or subordinate committees (which may or may not include members of the JDC itself) to oversee particular projects or activities, and such subcommittees or subordinate committees shall be constituted and shall operate as the JDC agrees.

5.3 JDC Actions. Actions by the JDC pursuant to this Agreement shall be taken only with unanimous approval of all of the JDC representatives. If the JDC fails to reach unanimity on a matter before it for decision, the matter shall be referred for resolution to the designated officers of the Parties identified in Section 14.1.

5.4 Meetings of the JDC. The JDC:

(a) shall hold meetings at such times and places as shall be determined by the JDC (it being expected that meetings will alternate between the offices of each Party) but in no event shall such meetings be held in person less frequently than once every four (4) months during any period in which there is at least one Co-Developed Product that the Parties are actively developing;

(b) may conduct meetings in person or by telephone conference, provided that meetings by telephone conference shall not reduce the number of meetings in person specified in Section 5.4(a);

(c) may invite other senior personnel of the Parties to attend meetings of the JDC;

(d) may act without a meeting if, prior to such action, a written consent thereto is signed by all members of the JDC; and

(e) may, by unanimous written consent, amend or expand upon the foregoing procedures for its internal operation.

5.5 Minutes. At each meeting, the JDC shall elect a secretary who will prepare, within ten business (10) days after each meeting, minutes reporting in reasonable detail the actions taken by the JDC during such meeting, the status of the Parties' efforts to co-develop Co-Developed Products in the applicable Co-Developed Territories, issues requiring resolution, and resolutions of previously reported issues. Such minutes are to be reviewed and, if reasonably complete and accurate, signed by one JDC member from each Party. The secretary shall revise such minutes as necessary to obtain such signatures.

5.6 JDC Functions and Powers. Co-development of all Co-Developed Products in the applicable Co-Developed Territories under this Agreement shall be managed by the JDC only to the extent set forth herein (unless otherwise mutually agreed in writing by the Parties). The JDC shall in particular:

(a) determine the overall strategy for clinical development of each Co-Developed Product in its Co-Developed Territory through the **[*]**, including (without limitation) determining the principal indications for which the Co-Developed Products shall be developed;

(b) coordinate the Parties' co-development activities hereunder;

(c) prepare, revise and approve the Development Plan and the Development Budget for each Co-Developed Product in accordance with Section 5.9;

(d) monitor the progress of co-development and the Parties' diligence in carrying out their responsibilities under the Development Plans; and

(e) perform such other functions as appropriate to further the purposes of this Agreement as mutually determined by the Parties.

5.7 Co-Development Guidelines. The JDC shall perform its functions in a manner consistent with the co-development guidelines set forth in this Section 5.7. The collaborative development of Co-Developed Products in the applicable Co-Development Territories shall be based on the principles of prompt and diligent development of the Co-Developed Products consistent with good pharmaceutical practices and the maximization of long-term profits derived from the sale of Co-Developed Products in the applicable Co-Development Territories. It is the intent of the Parties, in working together to clinically develop the Co-Developed Products **[*]**, to assign responsibilities for the various operational aspects of the collaboration to those portions of their respective organizations which have the appropriate resources, expertise and responsibility for such functions and, consistent with this Agreement, to treat the Co-Developed Products as if they were proprietary products solely of their own organization. The Parties intend that their respective organizations will work together to assure success of the collaboration.

5.8 Limitations of Powers of the JDC. The JDC shall have no power to amend this Agreement and shall have only such powers as are specifically delegated to it hereunder.

5.9 Development Plan and Development Budget. The co-development of each Co-Developed Product in its Co-Development Territory through the end of the time period specified in Section 5.1(a) shall be governed by a comprehensive development plan that describes the Parties' development goals for such Co-Developed Product, specifies that development-related activities to be performed in the furtherance of such goals, and allocates responsibility for such activities between the Parties ("Development Plan") and a detailed budget for performing such activities ("Development Budget"). The Development Budget shall be completed **[*]** of the year in which such Development Budget will operate, and such Development Budget shall be consistent with the Development Plan. Promptly after Rigel fails to exercise its Non Co-Development Option within the **[*]** period therefor with respect to a particular Co-Developed Product, the Parties shall complete a detailed Development Plan covering such Co-Developed Product and a Development Budget for the first year of such development. Periodically thereafter (but not less than once every 12 months), the JDC shall review and, if appropriate, revise such Development Plan. The Parties shall prepare a new Development Budget for each year.

5.10 Regulatory Matters. The Parties shall share equally all responsibility for communicating and negotiating with regulatory authorities in each country in the applicable Co-Developed Territory regarding each Co-Developed Product. Daiichi shall have the sole responsibility for filing all regulatory documents. Notwithstanding the foregoing, after the filing

of the IND and prior to the time period specified in Section 5.1(a) for such Co-Developed Product in such country, the Parties shall agree on the strategy for such communications and Rigel will have the right to **[*]** all regulatory filings in such country and to **[*]** regulatory authorities in such country. Daiichi shall provide Rigel with copies of all written regulatory reports for Co-Developed Products in the applicable Co-Developed Territories, including but not limited to Drug Approval Applications and periodic NDA, annual IND and safety updates, **[*]** Daiichi's submission of such reports to regulatory authorities.

5.11 Development Costs.

(a) Subject to Sections 5.11(c) and 5.12, Development Costs shall be borne **[*]**.

(b) In accordance with procedures to be established by the JDC, each Party shall calculate and maintain records of Development Costs incurred by it. Within sixty (60) days after the end of each six-month period (ending June 30 and December 31) during which the Parties are co-developing at least one Co-Developed Product, each Party shall send the other Party a report which specifies the Development Costs incurred by such Party during such six-month period with respect to each Co-Developed Product in the Co-Developed Territory. The Parties shall seek to resolve any questions related to such accounting statements within ninety (90) days following receipt.

(c) If the reports for a particular six-month period show that one Party's Development Costs for such six-month period were greater than **[*]**, then the other Party (the "Reimbursing Party") shall pay the first Party, within ninety (90) days after the end of such six-month period, an amount equal to **[*]**, provided that the total Development Costs for each Co-Developed Product for such six-month period did not exceed **[*]** for such product for such six-month period.

(i) If the total Development Costs exceed such **[*]** by more than **[*]** for such six-month period and the Reimbursing Party's Development Costs for such six-month period for such product were less than **[*]**, then the Reimbursing Party shall first pay the other Party an amount equal to the difference between (A) the Development Costs incurred by the Reimbursing Party for such product in such six-month period and (B) **[*]**.

(ii) The Reimbursing Party's obligation to reimburse the other Party for **[*]** of all such Development Costs in excess of **[*]** shall be limited to (A) those additional Development Costs approved by the JDC (either before or after they are incurred) and (B) those additional Development Costs that are the result of work carried out in response to a governmental requirement (imposed or directed following preparation of such Development Budget) to do such work. If, after any payment by the Reimbursing Party pursuant to Section 5.11(c)(i), the Reimbursing Party's total Development Cost expenditures, including such payment, (collectively "Z") are less than **[*]** where X is **[*]** and Y is 100% of such reimbursable additional Development Costs, then the Reimbursing Party shall pay the other Party an amount equal to **[*]**. Failure of a Party to reimburse the other Party for any Development Costs that are subject to a good faith dispute hereunder shall not be deemed to be a material breach of this Agreement.

5.12 Worldwide Dossier; Use of Data across Territories. The Parties recognize that development of the Products within the Co-Developed Territory is likely to be part of a worldwide development program, and that it will be efficient to use Product data generated in one territory for purposes of development of and seeking Regulatory Approvals for such Product worldwide. Nonetheless, in order to assure that costs are allocated properly as between the Co-Developed Territory and the Daiichi-Alone Territory, **[*]** or Phase II Trial for a Co-Developed Product in its Co-Developed Territory **[*]** in or to support any regulatory filing in any country outside such Co-Developed Territory **[*]**, and with a **[*]** of the **[*]** of the **[*]** that **[*]** to **[*]**, and **[*]** with respect to a Co-Development Product in the course of a **[*]** in the **[*]** in or to support any regulatory filing in any country in the Co-Developed Territory **[*]**, including a **[*]** of the **[*]** of the **[*]** that **[*]** and **[*]**.

5.13 Obligations of Parties. Each Party shall use Diligent Efforts to perform the tasks assigned to it under the Development Plan for each Co-Developed Product. Each Party shall provide the JDC and its authorized representatives with reasonable access during regular business hours to all records and documents of such Party that are specific to the co-development of any Co-Developed Product in its Co-Development Territory and that the JDC may reasonably require in order to perform its obligations hereunder, subject to any bona fide obligations of confidentiality to a Third Party.

5.14 Daiichi Obligations. Daiichi shall be solely responsible for and pay all costs associated with (a) development of each Product in all countries of the North American Territory through **[*]** for such Product in such country, (b) **[*]** and **[*]** and **[*]** of Co-Developed Products, (c) **[*]** each **[*]** the **[*]** of **[*]** and (d) **[*]** including without limitation the **[*]**. Daiichi shall use Diligent Efforts to (i) develop Products in the North American Territory **[*]** and (ii) obtain Regulatory Approval in the Co-Developed Territory for each Co-Developed Product.

5.15 Termination.

(a) By Rigel. Rigel may terminate its co-development of any Co-Developed Product in any country in the applicable Co-Developed Territory, by giving Daiichi **[*]** prior written notice of such termination. Rigel shall remain responsible for its share of Development Costs for such Co-Developed Product in such country until the effective date of such termination. If, at the time of such notice, there are no **[*]** for such Product in such country, then such termination effective date shall be **[*]** after Daiichi's receipt of such notice. If, at the time of such notice, there is **[*]** for such Product in such country, then such termination effective date shall be **[*]**, provided that, commencing **[*]** after Daiichi's receipt of such notice, Rigel shall only be responsible for its share of those Development Costs that are incurred in the course of **[*]**. Rigel shall make its personnel and other resources available to Daiichi as necessary to effect an orderly transition of development responsibilities by the termination effective date. Thereafter, such country shall no longer be part of the Co-Developed Territory for such product and, if no countries remain in such Co-Developed Territory, then such product shall cease to be a Co-Developed Product. If Rigel elects to terminate its co-development of a Co-Developed Product in a particular country in the applicable Co-Developed Territory, then it may not recommence co-development of such Product in such country **[*]**. In addition, Rigel shall not receive any refund of its net (after Daiichi pays any amounts due pursuant to Section 5.11(c)) co-development expenditures for such Co-Developed Product in such country. Furthermore, Rigel

shall not retain the right provided for in Section 4.3(a) in the territory in which termination occurred with respect to such former Co-Developed Product.

(b) By Daiichi. Daiichi may terminate its co-development of any Co-Developed Product in any country in the applicable Co-Developed Territory, by giving Rigel **[*]** prior written notice of such termination. Daiichi shall remain responsible for its share of Development Costs for such Co-Developed Product in such country until the effective date of such termination. If, at the time of such notice, there are no **[*]** for such Product in such country, then such termination effective date shall be **[*]** after Rigel's receipt of such notice. If, at the time of such notice, there is **[*]** for such Product in such country, then such termination effective date shall be the date **[*]**, provided that, commencing **[*]** after Rigel's receipt of such notice, Daiichi shall only be responsible for its share of those Development Costs that are incurred in the course of **[*]**. Daiichi shall make its personnel and other resources available to Rigel as necessary to effect an orderly transition of development responsibilities by the termination effective date. Thereafter, such country shall no longer be part of the Co-Developed Territory for such product but shall be part of the Rigel-Alone Territory. If Daiichi elects to terminate its co-development of a Co-Developed Product in a particular country in the applicable Co-Developed Territory, then it may not recommence co-development of such Product in such country **[*]**. In addition, Daiichi shall not receive any refund of its net (after Rigel pays any amounts due pursuant to Section 5.11(c)) co-development expenditures for such Co-Developed Product in such country.

6. CO-PROMOTION

6.1 Option.

(a) Rigel Right to Co-Promote. Rigel shall have the right to co-promote with Daiichi, under a single trademark, in each country of the Co-Developed Territory each Co-Developed Product for which Daiichi obtains Regulatory Approval in such country. If Rigel co-promotes with Daiichi under this Agreement, the Parties shall conduct such co-promotion in accordance with this Article 6.

(b) Option to Terminate Co-Promotion Rights. Daiichi hereby grants Rigel an option to terminate its co-promotion rights for each Co-Developed Product (the "Non Co-Promotion Option").

(c) Exercise. Within **[*]** after **[*]**, Daiichi shall provide Rigel with **[*]**. If Rigel wishes to exercise its Non Co-Promotion Option with respect to such Product and such country, then Rigel shall inform Daiichi in writing within **[*]** of Rigel's receipt of such **[*]**. If Rigel exercises such Non Co-Promotion Option within such **[*]** then such Co-Developed Product shall remain a "Co-Developed Product," and Rigel shall have no further obligation with respect to such Co-Developed Product in such country. Each Co-Developed Product for which Rigel does not exercise its Non Co-Promotion Option shall immediately be deemed to be a "Co-Promoted Product" (1). Rigel may elect to exercise its Non Co-Promotion Option for a particular country or countries of the Co-Promotion Territory, in which case the Co-Promoted Territory for

such Product shall **[*]** those countries in which Rigel did not exercise its Non Co-Promotion Option.

(1) It shall also remain a Product and a Co-Developed Product.

(d) Co-promotion agreement. If Rigel does not exercise its Non Co-Promotion Option with respect to a Co-Developed Product in accordance with the Section 6.1(c), then **[*]** the **[*]** and **[*]** for the **[*]**.

6.2 Co-Promotion Principles. During the Co-Promotion Period for a particular Co-Promoted Product in a particular country in its Co-Promoted Territory, the Parties anticipate that Rigel's co-promotion activities shall equal **[*]** Sales Representative Efforts for such Product in such country. **[*]** between their respective operating entities in order to maximize sales of each Co-Promoted Product in the Co-Promoted Territory. Rigel's Promotion Expenses during the Co-Promotion Period will be **[*]**.

6.3 Termination.

(a) By Rigel. During the applicable Co-Promotion Period, Rigel may terminate its co-promotion of any Co-Promoted Product in any country in the applicable Co-Promoted Territory, by giving Daiichi **[*]** prior written notice of such termination. Rigel shall remain responsible for the Sales Representative Efforts for such Co-Promoted Product in such country until the effective date of such termination, which shall be **[*]** after Daiichi's receipt of such notice. Thereafter, such country shall no longer be part of the Co-Promoted Territory for such product and, if no countries remain in such Co-Promoted Territory, then such product shall cease to be a Co-Promoted Product. If Rigel elects to terminate its co-promotion of a Co-Promoted Product in a particular country in the applicable Co-Promoted Territory, then it may not recommence co-promotion of such Product in such country **[*]**.

(b) By Daiichi. During the applicable Co-Promotion Period, Daiichi may terminate its sale of any Co-Promoted Product in any country in the applicable Co-Promoted Territory, by giving Rigel **[*]** prior written notice of such termination. Daiichi shall remain responsible for its share of the Sales Representative Efforts for such Co-Promoted Product in such country until the effective date of such termination, which shall be **[*]** after Rigel's receipt of such notice. Thereafter, such country shall no longer be part of the Co-Promoted Territory for such product but shall be part of the Rigel-Alone Territory.

7. DEVELOPMENT AND COMMERCIALIZATION OF DAIICHI PRODUCTS AND RIGEL PRODUCTS.

7.1 Development of Daiichi Developed Products

(a) Daiichi shall have the sole right to develop (a) each Product in the Daiichi-Alone Territory and (b) each Product in its Reverted Territory (collectively, "Daiichi Developed Products"). Daiichi shall use Diligent Efforts to obtain Regulatory Approval for Daiichi Developed Products, and Daiichi shall bear all expenses of development of Daiichi Developed Products. Daiichi agrees to facilitate communication and cooperation with Rigel to coordinate development of Daiichi Developed Products with Co-Developed Products consistent with the principles of this collaboration.

(b) In addition to the general undertaking provided in Section 7.1(a), Daiichi agrees that, it shall diligently research, develop and commercialize any Hit Compound, Lead Compound or Product **[*]**. If Rigel is concerned that Daiichi is not devoting sufficient effort **[*]** refer the matter to dispute resolution pursuant to Article 14, and if the arbitrator determines that the standard set forth in the first sentence of this Section 7.1(b) has not been satisfied, the remedy shall be that **[*]** to the **[*]** and such **[*]** to **[*]** and **[*]**, and **[*]** the **[*]** and **[*]** that **[*]** to **[*]** that **[*]** the **[*]** of **[*]** the **[*]** of **[*]** of **[*]**.

7.2 Commercialization of Daiichi Promoted Products. Daiichi shall have the sole right to commercialize (a) each Product in the Daiichi-Alone Territory, (b) each Product in its Reverted Territory, and (c) each Co-Developed Product in all countries in its Co-Developed Territory that are not part of its Co-Promoted Territory (if any) (collectively, "Daiichi Promoted Products"). Daiichi shall use Diligent Efforts to commercialize Daiichi Promoted Products, and Daiichi shall bear all expenses of such commercialization. Daiichi agrees to facilitate communication and cooperation with Rigel to coordinate commercialization (including promotion) of Daiichi Promoted Products with Co-Promoted Products consistent with the principles of this collaboration.

7.3 Reporting. Within **[*]** during the Term, Daiichi shall provide Rigel with a written report that summarizes the efforts, product status and accomplishments of Daiichi and its Affiliates and sublicensees with respect to development of Daiichi Developed Products and commercialization of Daiichi Promoted Products during such **[*]**.

7.4 Option for Rigel-Alone Development and Commercialization.

(a) Grant. Daiichi hereby grants to Rigel the option, for each Co-Developed Product for which Daiichi (i) terminated co-development pursuant to Section 5.15(b) or (ii) terminated co-promotion pursuant to Section 6.3(b), to independently develop and commercialize such Product in such country in which termination occurred (the "Rigel-Alone Option").

(b) Exercise. If Rigel wishes to exercise its Rigel-Alone Option with respect to such Product in its Rigel-Alone Territory, it shall inform Daiichi in writing within **[*]** of Rigel's receipt of Daiichi's termination notice pursuant to Section 5.15(b) or 6.3(b). If Rigel exercises its Rigel-Alone Option within such **[*]** period, then **[*]**, and **[*]** and **[*]** to **[*]**. Additionally, if Rigel exercises its Rigel-Alone Option within such **[*]** period, Daiichi, at **[*]** reasonable expense, shall: **[*]** in the **[*]**, or, in the alternative, **[*]** such Rigel Product in such Rigel-Alone Territory, and **[*]** assist Rigel in any other activity necessary or useful for Rigel to develop or market such Rigel Product in the Rigel-Alone Territory. In return for the **[*]** and based on the **[*]** in the development or commercialization **[*]** Daiichi terminated co-development or co-promotion of such Rigel Product.

8. ECONOMICS.

8.1 Up-Front Payments. Within **[*]** days of the Effective Date, Daiichi shall pay Rigel an up-front payment of **[*]**.

8.2 Milestone Payments. Daiichi shall pay Rigel the following amounts within **[*]** of the achievement of the applicable event:

(a) [*]

8.3 Additional Payments. Daiichi shall pay Rigel the following amounts within **[*]** of the achievement of the applicable event:

(a) **[*]**

8.4 Royalty Payments. Daiichi shall pay Rigel royalties on Net Sales of each Product at the applicable royalty rate stated below:

(a) **[*]** of the Net Sales of such Product in the Daiichi-Alone Territory;

(b) **[*]** of the Net Sales of such Product in its Reverted Territory; and

(c) **[*]** of the Net Sales of such Product in its Co-Developed Territory.

8.5 Quarterly Payments. All royalties due under Section 8.5 shall be paid quarterly, on a country-by-country basis, within **[*]** of the end of the relevant calendar quarter for which royalties are due.

8.6 Term of Royalties. Rigel's right to receive royalties under Section 8.5 for each Product shall expire on a country-by-country basis upon the later of (a) **[*]** years from the first commercial sale of such Product in such country, or (b) expiration of the last to expire issued Patent in such country Controlled by a Party that claims **[*]**.

8.7 Royalty Payment Reports. Each royalty payment shall be accompanied by a statement stating the number, description, and aggregate Net Sales, by country, of each Product sold during the relevant quarter.

8.8 Payment Method. All payments due under this Agreement to Rigel shall be made by bank wire transfer in immediately available funds to an account designated by Rigel. All payments hereunder shall be made in the legal currency of the United States of America, and all references to "$" or "dollars" shall mean the legal currency of the United States of America.

8.9 No Credits or Refunds. All payments to Rigel hereunder shall be noncreditable and nonrefundable, except in the event that an audit confirms that Daiichi had overpaid royalties to Rigel, in which case such overpayment will be credited against future royalties due to Rigel, or refunded to Daiichi after the end of the royalty term.

8.10 Taxes. With respect to all taxes including taxes that laws or regulations require that taxes be withheld ("Withholding Taxes"), Rigel shall pay any and all such taxes that are levied on account of all payments Rigel receives under this Agreement. Daiichi shall (i) deduct the Withholding Taxes from the remittable payment, (ii) pay all applicable Withholding Taxes to the proper taxing authority, and (iii) send evidence of the obligation together with proof of tax payment to Rigel within sixty (60) days following that tax payment.

8.11 Blocked Currency. In each country where the local currency is blocked and cannot be removed from the country, royalties accrued in that country shall be paid to Rigel in the country in local currency by deposit in a local bank designated by Rigel, unless the Parties otherwise agree.

8.12 Sublicenses. In the event Daiichi grants licenses or sublicenses to others to sell Products which are subject to royalties under Section 8.5, such licenses or sublicenses shall include an obligation for the licensee or sublicensee to account for and report its sales of Products on the same basis as if such sales were Net Sales by Daiichi, and Daiichi shall pay to Rigel, with respect to such sales, royalties as if such sales of the licensee or sublicensee were Net Sales of Daiichi.

8.13 Foreign Exchange. Conversion of sales recorded in local currencies to U.S. dollars will be performed in a manner consistent with **[*]**.

8.14 Records; Inspection. Each Party shall keep or cause to be kept such records as are required to determine, in a manner consistent with generally accepted accounting principles in the United States, the sums or credits due under this Agreement, including, but not limited to, Development Costs, Net Sales and Promotion Expenses. At the request (and expense) of either Party, the other Party and its sublicensees shall permit an independent certified public accountant appointed by such Party and reasonably acceptable to the other Party, at reasonable times not more than once a year and upon reasonable notice, to examine only those records as may be necessary to determine, with respect to any calendar year ending not more than three years prior to such Party's request, the correctness or completeness of any report or payment made under this Agreement. Results of any such examination shall be (i) limited to information relating to the Products, (ii) made available to both Parties and (iii) subject to Article 10. The Party requesting the audit shall bear the full cost of the performance of any such audit, unless such audit discloses a variance of more than five percent (5%) from the amount of the original report, royalty or payment calculation. In such case, the Party being audited shall bear the full cost of the performance of such audit.

8.15 Interest. If Daiichi fails to make any payment due to Rigel under this Agreement, then interest shall accrue on a daily basis at a rate equal to **[*]** above the then-applicable prime commercial lending rate of CitiBank, N.A. San Francisco, California, or at the maximum rate permitted by applicable law, whichever is the lower.

9. INTELLECTUAL PROPERTY.

9.1 Ownership. Inventorship of all Inventions will be determined under the patent laws of the United States. Each Party shall own the entire right, title and interest in and to any and all of its Sole Inventions, and Patents covering such Sole Inventions. Each Party shall each own an undivided one-half interest in and to any and all Joint Inventions and Patents and other intellectual property rights claiming or covering or appurtenant to such Joint Inventions. Rigel and Daiichi as joint owners shall each have the right to exploit without an accounting and to grant licenses under such Joint Inventions, unless otherwise specified in this Agreement.

9.2 Patent Prosecution and Maintenance; Abandonment.

(a) Except as provided in Section 9.2(b), each Party shall direct the filing, prosecution (including any interferences, reissue proceedings and reexaminations) and maintenance of all Patents covering its Sole Inventions. **[*]** shall direct the filing, prosecution (including any interferences, reissue proceedings and reexaminations) and maintenance of all **[*]** Patents and (except as provided in Section 9.2(b)) all Patents contained within the **[*]** Technology. **[*]** shall direct the filing,

prosecution (including any interferences, reissue proceedings and reexaminations) and maintenance of all **[*]** Patents and Patents contained within the **[*]** Technology.

(b) **[*]** shall direct the filing, prosecution (including any interferences, reissue proceedings and reexaminations) and maintenance of all **[*]** Patents and all **[*]** Sole Inventions licensed to **[*]** under Section 4.3**[*]**. In carrying out the prosecution of patents and patent applications pursuant to this Section 9.2(b), **[*]** shall seek to obtain effective patent protection for Inventions and their uses **[*]**. All Patent prosecution and maintenance described in this Section 9.2(b) shall be carried out by a primary outside law firm selected by mutual consent of the Parties, which shall prepare the initial application for such Inventions (which in most cases will be filed in the United States). **[*]** shall be responsible for the selection of counsel in countries outside the United States to file and prosecute foreign counterparts of the primary filing. The Parties shall have equal access to outside law firms doing work pursuant to this Section 9.2(b) for purposes of giving and receiving communications regarding the preparation and prosecution of such Patent applications, and **[*]** shall give fair consideration to the comments of **[*]** regarding such matters. **[*]** Patent prosecution pursuant to this Section 9.2(b) shall be made by **[*]**.

(c) The Party that, pursuant to Section 9.2(a) or 9.2(b), directs the filing, prosecution and maintenance of a particular Patent shall bear all expenses associated with such activities, except that in the case of **[*]** shall **[*]** of **[*]** out-of-pocket costs (including the fees and expenses of outside counsel) of such filing, prosecution and maintenance.

(d) The Parties shall establish the patent strategy for all Joint Inventions, and shall determine, on a Joint Invention-by-Joint Invention basis, which Party (the "Prosecuting Party") shall be responsible for, the filing, prosecution (including any interferences, reissue proceedings and reexaminations) and maintenance of all Patents covering such Joint Invention consistent with such strategy. The Prosecuting Party shall provide the other Party with (i) drafts of any new patent application that covers a Joint Invention prior to filing that application, allowing adequate time for review and comment by the other Party if possible; provided, however, the Prosecuting Party shall not be obligated to delay the filing of any patent application; and (ii) copies of all correspondence from any and all patent offices concerning patent applications covering Joint Inventions and an opportunity to comment on any proposed responses, voluntary amendments and submissions of any kind to be made to any and all such patent offices. **[*]** expenses associated with the filing, prosecution (including any interferences, reissue proceedings and reexaminations) and maintenance of all Patents covering Joint Inventions that are exclusively or co-exclusively licensed to Daiichi under Section 4.3(a). The Parties shall mutually agree on the percentage of such expenses that each Party shall bear with respect to other Patents covering Joint Inventions (which in the absence of any other agreement between the Parties shall be divided evenly).

9.3 **Enforcement of Patent Rights**.

(a) **Enforcement of Daiichi Patents.** In the event that management or in-house counsel for Rigel becomes aware of a suspected infringement of any Daiichi Product Patent or any Patent covering a Sole Invention of Daiichi, Rigel shall notify Daiichi promptly, and following such notification, the Parties shall confer. Daiichi shall have the sole right, but shall not be obligated, to bring an infringement action or to defend such proceedings at its own expense, in its own name and entirely under its own direction and control.

(b) **Enforcement of Rigel Patents.** In the event that management or in-house counsel for Daiichi becomes aware of a suspected infringement of any Assay Patent, Rigel Compound Patent or any Patent covering a Sole Invention of Rigel, Daiichi shall notify Rigel promptly, and following such notification, the Parties shall confer. Except as provided in the following sentence, Rigel shall have the sole right, but shall not be obligated, to bring an infringement action or to defend such proceedings at its own expense, in its own name and entirely under its own direction and control. In the event of an apparent infringement by a Third Party of a Rigel Compound Patent or a Patent covering a Sole Invention by Rigel that covers the manufacture, use or sale of a Product, which infringement is based on the manufacture, use or sale of a product directly competitive with a Product, Rigel shall, upon the written request of Daiichi, either file a law suit against such infringer or (if permitted by law) authorize Daiichi to file such law suit. If Rigel files such law suit in its own name, it shall diligently prosecute such law suit provided that (i) Daiichi immediately reimburses Rigel, upon receipt of invoices, for all out-of-pocket expenses associated with such law suit (including the fees and expenses of outside counsel and experts) in addition to the costs reasonably attributable to the time spent by its employees on such case, (ii) Daiichi indemnifies Rigel for all costs, claims, losses and causes of action arising from the commencement or prosecution of such law suit, and (iii) Rigel shall give fair consideration to the comments of Daiichi regarding such matters. Rigel shall not settle such law suit on terms which license the continued manufacture, use or sale of the product that competes with a Product without the prior written consent of Daiichi.

(c) **Enforcement of Joint Patents.** In the event that management or in-house counsel for either Party becomes aware of a suspected infringement of any Patent claiming a Joint Invention, such Party shall notify the other Party promptly. Following such notification, the Parties shall confer and determine the rights and obligations of the Parties to bring an infringement action with respect to such Patent or to defend validity proceedings regarding such Patent.

(d) **Recoveries.** In the event either Party exercises the rights conferred in this Section 9.3 and recovers any damages or other sums in such action, suit or proceeding or in settlement thereof, such damages or other sums recovered shall first be applied to all out-of-pocket costs and expenses incurred by such Party in connection therewith, including attorneys fees. If after such reimbursement any funds shall remain from such damages or other sums recovered, and such funds shall be retained by such Party that controlled the litigation. In the case of a law suit filed by Rigel under Section 9.3(b) but funded by Daiichi, such recovery, after the reimbursement of expenses, shall be **[*]**.

9.4 **Defense of Third Party Claims**. If a claim is brought by a Third Party that any activity related to work performed by a Party under the Research Program infringes the intellectual property rights of such Third Party, each Party will give prompt written notice to the other Party of such claim. Promptly upon receipt of such notice, the Parties shall meet and discuss in good faith if such activity infringes such Third Party's intellectual property rights, and shall take necessary steps on this matter. In the event of any Third Party claim against a Party with respect to the Research Program or Products, each Party shall be entitled to defend itself in such matter.

9.5 **Copyright Registrations**. Copyrights and copyright registrations on copyrightable subject matter shall be filed, prosecuted, defended, and maintained in accordance with local laws and regulations applicable, and the Parties shall have the right to pursue infringers of any copyrights owned or Controlled by it, in substantially the same manner as the Parties have allocated such responsibilities, and the expenses therefor, for patent rights under this Article 9.

9.6 **Trademarks**. The trademarks on the Product shall be the trademark(s) owned or controlled by **[*]**.

9.7 **Acquisition of Third Party Technology.**

(a) If a Party determines that a license to Third Party technology is useful for the Research Program and such technology does not relate to a **[*]** Compound, then such Party shall notify the other Party in writing of such potential licensing opportunity. Promptly upon receipt of such notice, the Parties shall meet and discuss, in good faith, the necessity of acquiring a license to such Third Party technology. If the Parties agree in writing to attempt to acquire such Third Party license, then Rigel shall use commercially reasonable efforts to acquire such Third Party license within a reasonable time. If Rigel is unable to obtain such Third Party license within such reasonable time, then **[*]**. If Rigel obtains such Third Party license, then **[*]** all costs associated with obtaining and maintaining such Third Party license, unless the Parties agree otherwise in writing.

(b) If any Party determines that Third Party technology relates to a **[*]** Compound, then such Party shall notify the other Party in writing of such potential licensing opportunity. Promptly upon receipt of such notice, the Parties shall meet and discuss, in good faith, the utility of acquiring such a Third Party license. If the Parties agree in writing to acquire such Third Party license, then Daiichi shall attempt to acquire such Third Party license within a commercially reasonable time. If Daiichi is unable to obtain such Third Party license, then **[*]**. If Daiichi obtains such Third Party license, then **[*]** costs associated with obtaining and maintaining such Third Party license, unless the Parties agree otherwise in writing.

10. CONFIDENTIALITY.

10.1 Treatment of Confidential Information. The Parties agree that during the Term, and for a period of **[*]** after the end of the Term, a Party receiving Confidential Information of the other Party will (a) maintain in confidence such Confidential Information to the same extent such Party maintains its own proprietary industrial information of similar kind

and value (but at a minimum each Party shall use commercially reasonable efforts), (b) not disclose such Confidential Information to any Third Party without prior written consent of the other Party, and (c) not use such Confidential Information for any purpose except those permitted by this Agreement.

10.2 Exceptions. A Party shall not have the obligations set forth in Section 10.1 with respect to any portion of such Confidential Information which it can show by adequate documentation:

(a) is publicly disclosed by the disclosing Party, either before or after it becomes known to the receiving Party;

(b) was known to the receiving Party, without obligation to keep it confidential, prior to when it was received from the disclosing Party;

(c) is subsequently disclosed to the receiving Party by a Third Party lawfully in possession thereof without obligation to keep it confidential;

(d) has been published by a Third Party; or

(e) has been independently developed by the receiving Party without the aid, application or use of Confidential Information.

10.3 Authorized Disclosure. Notwithstanding Section 10.2, a Party may disclose Confidential Information belonging to the other Party to the extent such disclosure is reasonably necessary in the following instances:

(a) filing or prosecuting Patents relating to Joint Inventions or Products;

(b) regulatory filings;

(c) prosecuting or defending litigation;

(d) complying with applicable governmental regulations; and

(e) disclosure, in connection with the performance of this Agreement, to Affiliates, licensees, sublicensees, employees, consultants, or agents, each of whom prior to disclosure must be bound by similar obligations of confidentiality and non-use at least equivalent in scope to those set forth in this Article 10.

The Parties acknowledge that the terms of this Agreement shall be treated as Confidential Information of both Parties. Such terms may be disclosed by a Party to individuals or entities covered by 10.3(e) above, each of whom prior to disclosure must be bound by similar obligations of confidentiality and non-use at least equivalent in scope to those set forth in this Article 10. Disclosure of the terms of this Agreement (but not other Confidential Information received from the other Party) may also be made, under binders of confidentiality and non-use at least equivalent in scope to those set forth in this Article 10, to actual or potential bankers, lenders and

investors of the disclosing Party. In addition, a copy of this Agreement may be filed by either Party with the Securities and Exchange Commission in connection with any public offering of such Party's securities. In connection with any such filing, such Party shall endeavor to obtain confidential treatment of economic and trade secret information. In any event, the Parties agree to take all reasonable action to avoid disclosure of Confidential Information except as permitted hereunder.

10.4 Termination of Prior Agreements. This Agreement supersedes the Mutual Confidential Disclosure Agreement dated November 30, 2000 between Daiichi and Rigel. All Information exchanged between the Parties under such earlier Agreement shall be deemed Confidential Information and shall be subject to the terms of this Article 10.

10.5 Publicity. The public announcement of the execution of this Agreement shall be mutually agreed upon between the Parties. Any other publication, news release or other public announcement relating to this Agreement or to the performance hereunder, shall first be reviewed and approved by both Parties, which approval shall not be unreasonably withheld; provided, however, that any disclosure which is required by law as advised by the disclosing Party's counsel may be made without the prior

consent of the other Party, although the other Party shall be given prompt notice of any such legally required disclosure and to the extent practicable shall provide the other Party an opportunity to comment on the proposed disclosure.

10.6 Publications. Neither Party shall publish or present the results of studies carried out under this Agreement without the opportunity for prior review by the other Party. Subject to Section 10.5, each Party agrees to provide the other Party the opportunity to review any proposed abstracts, manuscripts or presentations (including verbal presentations) which relate to any Product at least **[*]** prior to their intended submission for publication and agrees, upon request, not to submit any such abstract or manuscript for publication until the other Party is given a reasonable period of time to secure patent protection for any material in such publication which it believes to be patentable. Both Parties understand that a reasonable commercial strategy may require delay of publication of information or filing of patent applications. The Parties agree to review and decide whether to delay of publication and filing of patent applications under certain circumstances. Neither Party shall have the right to publish or present Confidential Information of the other Party which is subject to Section 10.1. Nothing contained in this Section 10.6 shall prohibit the inclusion of information necessary for a patent application, provided the nonfiling Party is given a reasonable opportunity to review the information to be included prior to submission of such patent application and to request deletion of its Confidential Information (subject to Section 10.3(a)).

11. REPRESENTATIONS AND WARRANTIES.

11.1 General Representations and Warranties. Each Party represents and warrants to the other that:

(a) it is duly organized and validly existing under the laws of its state or country of incorporation, and has full corporate power and authority to enter into this Agreement and to carry out the provisions hereof.

(b) it is duly authorized to execute and deliver this Agreement and to perform its obligations hereunder, and the person or persons executing this Agreement on its behalf has been duly authorized to do so by all requisite corporate action.

(c) this Agreement is legally binding upon it and enforceable in accordance with its terms. The execution, delivery and performance of this Agreement by it does not conflict with any agreement, instrument or understanding, oral or written, to which it is a party or by which it may be bound, nor violate any material law or regulation of any court, governmental body or administrative or other agency having jurisdiction over it.

(d) it has not granted, and will not grant during the Term of the Agreement, any right to any Third Party which would conflict with the rights granted to the other Party hereunder. It has (or will have at the time performance is due) maintained and will maintain and keep in full force and effect all agreements necessary to perform its obligations hereunder.

(e) it is aware of no action, suit or inquiry or investigation instituted by any governmental agency which questions or threatens the validity of this Agreement.

11.2 Disclaimer Concerning Technology. THE PATENTS AND KNOW-HOW PROVIDED BY EACH PARTY HEREUNDER ARE PROVIDED "AS IS" AND EACH PARTY EXPRESSLY DISCLAIMS ANY AND ALL WARRANTIES OF ANY KIND, EXPRESS OR IMPLIED, INCLUDING WITHOUT LIMITATION THE WARRANTIES OF DESIGN, MERCHANTABILITY, FITNESS FOR A PARTICULAR PURPOSE, NONINFRINGEMENT OF THE INTELLECTUAL PROPERTY RIGHTS OF THIRD PARTIES OR ARISING FROM A COURSE OF DEALING, USAGE OR TRADE PRACTICES, IN ALL CASES WITH RESPECT THERETO. Without limiting the generality of the foregoing, each Party expressly does not warrant (i) the success of the Research Program or (ii) the safety or usefulness for any purpose of the Patents or know-how it provides hereunder.

12. TERM AND TERMINATION.

12.1 Term.

(a) This Agreement shall become effective on the Effective Date and shall continue until the earlier of (i) expiration of the last royalty obligation with respect to any Product, as provided in Section 8.6, and (ii) the effective date of termination pursuant to Section 12.2 (the "Term").

(b) Notwithstanding the provision 12.1(a) above, if any Product **[*]** in any country in the world **[*]** shall have the right to terminate this Agreement upon written notice **[*]**. In the event of termination pursuant to this Section 12.1(b), **[*]** or **[*]** prior to such **[*]**. **[*]** after **[*]** the terms and conditions of such an extended collaboration.

(c) The Parties may terminate this Agreement by mutual written consent, at any time.

12.2 Termination for Breach.

(a) If either Party believes that the other is in material breach of this Agreement, then the non-breaching Party may deliver written notice of such breach to the other Party. The allegedly breaching Party shall have **[*]** from receipt of such notice to either cure such breach or, if cure cannot be reasonably effected within such **[*]** period, to deliver to the other Party a plan for curing such breach which is reasonably sufficient to effect a cure. Such a plan shall set forth a program for achieving cure as rapidly as practicable. Following delivery of such plan, the breaching Party shall use Diligent Efforts to carry out the plan and cure the breach.

(b) If the Party receiving notice of breach fails to cure such breach within the **[*]** period and the Party providing the notice reasonably determines that the proposed corrective plan (if any) or the actions being taken to carry it out is not commercially practicable, the Party originally delivering the notice may terminate this Agreement **[*]**.

(c) If a Party gives notice of termination under this Section 12.2 and the other Party disputes whether such notice was proper, then the issue of

whether this Agreement has been terminated shall be resolved in accordance with Article 14. If as a result of such dispute resolution process it is determined that the notice of termination was proper, then such termination shall be deemed to have been effective **[*]** following the date of the notice of termination. If as a result of such dispute resolution process it is determined that the notice of termination was improper, then no termination shall have occurred and this Agreement shall remain in effect.

12.3 Effect of Termination; Survival.

(a) The following provisions shall survive any expiration or termination of this Agreement: Articles 1, 10, 13, 14, and 15, and Sections 8.14; 8.15; 9.1; 9.2 (as relates to **[*]** patent costs incurred during the term of this Agreement); 9.3, 9.4 and 9.5 (to the extent that each relates to claims of infringement by activities occurring during the term of this Agreement); and 12.3.

(b) Termination of this Agreement shall not relieve the Parties of any liability which accrued hereunder prior to the effective date of such termination nor preclude either Party from pursuing all rights and remedies it may have hereunder or at law or in equity with respect to any breach of this Agreement nor prejudice either Party's right to obtain performance of any obligation. The remedies provided in Section 12.3(b) are not exclusive of other remedies available to a Party in law or equity.

13. INDEMNIFICATION.

13.1 Mutual Indemnification. Subject to Section 13.3, each Party hereby agrees to indemnify, defend and hold the other Party, its Affiliates, its licensees, and its and their officers, directors, employees, consultants, contractors, sublicensees and agents (collectively, the "Indemnitees") harmless from and against any and all damages or other amounts payable to a Third Party claimant, as well as any reasonable attorneys' fees and costs of litigation incurred by such Indemnitee as to any such Claim (as defined in this Section 13.1) until the indemnifying Party has acknowledged that it will provide indemnification hereunder with respect to such Claim as provided below, (collectively, "Damages") resulting from claims, suits, proceedings or

causes of action ("Claims") brought by such Third Party against such Indemnitee based on: (a) breach of warranty by the indemnifying Party contained in this Agreement; (b) breach of this Agreement or applicable law by such indemnifying Party; (c) negligence or willful misconduct of a Party, its Affiliates or (sub)licensees, or their respective employees, contractors or agents in the performance of this Agreement; and/or (d) breach of a contractual or fiduciary obligation owed by it to a Third Party (including without limitation misappropriation of trade secrets).

13.2 Indemnification by Daiichi. Subject to Section 13.3, Daiichi hereby agrees to indemnify, defend and hold Rigel and its Affiliates, its licensees, and its and their officers, directors, employees, consultants, contractors, sublicensees and agents (collectively, the "Rigel Indemnitees") harmless from and against any Damages resulting from Claims brought by Third Party against such Rigel Indemnitee resulting directly or indirectly from (a) development, manufacture, use, handling, storage, sale, offer for sale, importation or other disposition of Products by Daiichi, its Affiliates, agents or sublicensees, or (b) Daiichi's practice, after the end of the Research Term, of the license granted to it pursuant to Section 4.2, except to the extent such Damages result from the negligence or wrongdoing of any Rigel Indemnitee.

13.3 Conditions to Indemnification. As used herein, "Indemnitee" shall mean a party entitled to indemnification under the terms of Section 13.1 or 13.2. As a condition precedent to an Indemnitee's right to seek indemnification under such Section 13.1 or 13.2, such Indemnitee:

(a) shall inform the indemnifying Party of a Claim as soon as reasonably practicable after it receives notice of the Claim;

(b) shall, if the indemnifying Party acknowledges that such Claim falls within the scope of its indemnification obligations hereunder, permit the indemnifying Party to assume direction and control of the defense, litigation, settlement, appeal or other disposition of the Claim (including the right to settle the claim solely for monetary consideration); provided, that the indemnifying Party shall seek the prior written consent (not to be unreasonably withheld or delayed) of any such Indemnitee as to any settlement which would materially diminish or materially adversely affect the scope, exclusivity or duration of any Patents licensed under this Agreement, would require any payment by such Indemnitee, would require an admission of legal wrongdoing in any way on the part of an Indemnitee, or would effect an amendment of this Agreement; and

(c) shall fully cooperate (including providing access to and copies of pertinent records and making available for testimony relevant individuals subject to its control) as reasonably requested by, and at the expense of, the indemnifying Party in the defense of the Claim.

Provided that an Indemnitee has complied with the foregoing, the indemnifying Party shall provide attorneys reasonably acceptable to the Indemnitee to defend against any such Claim. Subject to the foregoing, an Indemnitee may participate in any proceedings involving such Claim using attorneys of its/his/her choice and at its/his/her expense. In no event may an Indemnitee settle or compromise any Claim for which it/he/she intends to seek indemnification from the indemnifying Party hereunder without the prior written consent of the indemnifying Party, or the

indemnification provided under such Section 13.1 or 13.2 as to such Claim shall be null and void.

13.4 Exclusion of Damages. IN NO EVENT SHALL EITHER PARTY OR ITS AFFILIATES BE LIABLE TO THE OTHER PARTY FOR ANY INDIRECT, INCIDENTAL, SPECIAL, PUNITIVE, EXEMPLARY OR CONSEQUENTIAL DAMAGES, WHETHER BASED UPON A CLAIM OR ACTION OF CONTRACT, WARRANTY, NEGLIGENCE, STRICT LIABILITY OR OTHER TORT, OR OTHERWISE, ARISING OUT OF THIS AGREEMENT, UNLESS SUCH DAMAGES ARE DUE TO THE GROSS NEGLIGENCE OR WILLFUL MISCONDUCT OF THE LIABLE PARTY. For clarification, the foregoing sentence shall not be interpreted to limit or to expand the express rights specifically granted in the sections of this Agreement.

14. DISPUTE RESOLUTION

14.1 Disputes. The Parties recognize that disputes as to certain matters may from time to time arise during the Term which relate to either Party's rights and/or obligations hereunder. It is the objective of the Parties to establish procedures to facilitate the resolution of disputes arising under this Agreement in an expedient manner by mutual cooperation and without resort to litigation. To accomplish this objective, the Parties agree to follow the procedures set forth in this Article 14 if and when a dispute

arises under this Agreement. In the event of any disputes, controversies or differences which may arise between the Parties, out of or in relation to or in connection with this Agreement, or for the breach thereof, upon the request of either Party, the Parties agree to meet and discuss in good faith a possible resolution thereof. If the matter is not resolved within **[*]** following the request for discussions, either Party may then invoke the provisions of Section 14.2 below.

14.2 Alternative Dispute Resolution. Any dispute, controversy or claim arising out of or relating to the validity, construction, enforceability or performance of this Agreement shall be settled by binding Alternative Dispute Resolution ("ADR") in the manner described below:

(a) If a Party intends to begin an ADR to resolve a dispute, such Party shall provide written notice (the "ADR Request") by certified or registered mail to the other Party informing such other Party of such intention and the issues to be resolved. The complaining Party's notice shall include a detailed description of the alleged dispute. The notice shall explain the nature of the complaint and refer to the relevant sections of the Agreement upon which the complaint is based. The complaining Party shall also set forth a proposed solution to the problem, including a suggested time frame within which the Parties must act.

(b) The non-complaining Party must respond in writing within 60 days of receiving the notice with an explanation, including references to the relevant provisions of the Agreement and a response to the proposed solution and suggested time frame for action.

(c) Within 15 days of receipt of the response from the non-complaining Party, the Parties shall meet and discuss options (e.g., mediation) for resolving the dispute. The complaining Party must initiate the scheduling of this resolution meeting. Each Party shall make

available all appropriate personnel to meet and confer with the other Party within the 15 day period following the complaining Party's receipt of the response by the non-complaining Party.

Any and all disputes that cannot be resolved pursuant to this Section 14.2 shall be submitted to final and binding arbitration in accordance with the terms of this Agreement. The arbitration will be conducted **[*]** except to the extent of any conflict with this Article 14, and the Parties consent to the exclusive jurisdiction of such dispute resolution mechanism. Any situation not expressly covered by this Agreement shall be decided in accordance with **[*]**.

14.3 Arbitrator. The arbitrator shall be one neutral, independent and impartial arbitrator selected pursuant to the rules **[*]**.

14.4 Governing Law. Resolution of all disputes arising out of or related to this Agreement or the performance, enforcement, breach or termination of this Agreement and any remedies relating thereto, shall be governed by and construed under the substantive laws of **[*]** without regard to conflicts of law rules that would provide for application of the law of a jurisdiction outside **[*]**.

14.5 Rules of Procedure. The Parties shall be entitled to discovery as provided in the **[*]**. To the extent such rules of discovery are within the discretion of the neutral arbitrator, it is the intent of the Parties that they be permitted to conduct meaningful discovery in order to minimize the potential for surprise at the proceeding and encourage settlement prior to such proceeding.

14.6 Decision. The power of the arbitrator to fashion procedures and remedies within the scope of this Agreement is recognized by the Parties as essential to the success of the arbitration process. The arbitrator shall not have the authority to fashion remedies which would not be available to a judge hearing the same dispute. The arbitrator is encouraged to operate on this premise in an effort to reach a fair and just decision but shall fashion such rules and procedures to best approximate judicial rules and procedures except with respect to procedural time limits and delays (which shall be set by the arbitrator pursuant to Section 14.5). Reasons for the arbitrator's decisions should be complete and explicit. A full transcript and record of the proceedings as well as written decisions including all determinations of law and fact shall be provided to the Parties. The written reasons should also include the basis for any damages awarded and a statement of how the damages were calculated. Such a written decision shall be rendered by the arbitrator following a full comprehensive hearing, no later than eighteen (18) months following the selection of the arbitrator as provided for in Section 14.3 hereof.

14.7 Award.

(a) Any monetary award shall be paid in U.S. dollars free of any tax, deduction or offset; and any costs or fees incident to enforcing the award shall, to the maximum extent permitted by law, be charged against the Party resisting enforcement.

(b) If as to any issue the arbitrator should determine under the applicable law that the position taken by a Party is frivolous or otherwise irresponsible or that any wrongdoing they find is in callous disregard of law and equity or the rights of the other Party, the arbitrator shall also award an appropriate allocation of the adversary's reasonable attorney fees, costs and

expenses to be paid by the offending Party, the precise sums to be determined after a bill of attorney fees, expenses and costs consistent with such award has been presented following the award on the merits.

(c) Each Party agrees to abide by the award rendered in any arbitration conducted pursuant to this Article 14, and agrees that such judgment may be entered in a court of competent jurisdiction, if necessary to its enforcement.

(d) The award shall include interest from the date of any damages incurred for breach of the Agreement, and from the date of the award until paid in full, at a rate fixed by the arbitrator.

(e) With respect to money damages, nothing contained herein shall be construed to permit the arbitrator(s) or any court or any other forum to award punitive, exemplary or consequential damages (except that consequential damages may be recovered solely for a breach of Article 10). By entering into this agreement to arbitrate, the Parties expressly waive any claim for punitive, exemplary or consequential damages (except for consequential damages in the event of a breach of Article 10). The only damages recoverable under this Agreement are direct compensatory damages, together with equitable (non-monetary) remedies as ordered by the Arbitrator.

14.8 Costs. Except as set forth in Section 14.7(b) above, each Party shall bear its own legal fees. The arbitrator shall assess his or her costs, fees and expenses against the Party losing the ADR unless he or she believes that neither Party is the clear loser, in which case the arbitrator shall divide his or her fees, costs and expenses according to his or her sole discretion.

14.9 Injunctive Relief. Provided a Party has made a sufficient showing, the arbitrator shall have the freedom to invoke, and the Parties agree to abide by, injunctive measures after either Party submits in writing for arbitration claims requiring immediate relief.

14.10 Confidentiality. The ADR proceeding shall be confidential and the arbitrator shall issue appropriate protective orders to safeguard each Party's Confidential Information. Except as required by law, no Party shall make (or instruct the arbitrator to make) any public announcement with respect to the proceedings or decision of the arbitrator without prior written consent of each other Party. The existence of any dispute submitted to ADR, and the award, shall be kept in confidence by the Parties and the arbitrator, except as required in connection with the enforcement of such award or as otherwise required by applicable law.

14.11 Survivability. Any duty to arbitrate under this Agreement shall remain in effect and be enforceable after termination of the contract for any reason.

15. MISCELLANEOUS.

15.1 Export Control. This Agreement is made subject to any restrictions concerning the export of products or technical information from the United States of America or other countries which may be imposed upon or related to Rigel or Daiichi from time to time. Each Party agrees that it will not export, directly or indirectly, any technical information acquired from the other Party under this Agreement or any products using such technical information to a

location or in a manner that at the time of export requires an export license or other governmental approval, without first obtaining the written consent to do so from the appropriate agency or other governmental entity.

15.2 Entire Agreement; Amendment. This Agreement sets forth the complete, final and exclusive agreement and all the covenants, promises, agreements, warranties, representations, conditions and understandings between the Parties hereto and supersedes and terminates all prior agreements and understandings between the Parties. There are no covenants, promises, agreements, warranties, representations, conditions or understandings, either oral or written, between the Parties other than as are set forth herein and therein. No subsequent alteration, amendment, change or addition to this Agreement shall be binding upon the Parties unless reduced to writing and signed by an authorized officer of each Party.

15.3 Bankruptcy.

(a) All rights and licenses granted under or pursuant to this Agreement, including amendments hereto, by each Party to the other Party are, for all purposes of Section 365(n) of Title 11 of the U.S. Code ("Title 11"), licenses of rights to intellectual property as defined in Title 11. Each Party agrees during the term of this Agreement to create and maintain current copies or, if not amenable to copying, detailed descriptions or other appropriate embodiments, to the extent feasible, of all such intellectual property. If a case is commenced by or against either Party (the "Bankrupt Party") under Title 11, then, unless and until this Agreement is rejected as provided in Title 11, the Bankrupt Party (in any capacity, including debtor-in-possession) and its successors and assigns (including, without limitation, a Title 11 Trustee) shall, at the election of the Bankrupt Party made within 60 days after the commencement of the case (or, if no such election is made, immediately upon the request of the non-Bankrupt Party) either (i) perform all of the obligations provided in this Agreement to be performed by the Bankrupt Party including, where applicable and without limitation, providing to the non-Bankrupt Party portions of such intellectual property (including embodiments thereof) held by the Bankrupt Party and such successors and assigns or otherwise available to them or (ii) provide to the non-Bankrupt Party all such intellectual property (including all embodiments thereof) held by the Bankrupt Party and such successors and assigns or otherwise available to them.

(b) If a Title 11 case is commenced by or against the Bankrupt Party and this Agreement is rejected as provided in Title 11 and the non-Bankrupt Party elects to retain its rights hereunder as provided in Title 11, then the Bankrupt Party (in any capacity, including debtor-in-possession) and its successors and assigns (including, without limitations, a Title 11 Trustee) shall provide to the non-Bankrupt Party all such intellectual property (including all embodiments thereof) held by the Bankrupt Party and such successors and assigns or otherwise available to them immediately upon the non-Bankrupt Party's written request therefor. Whenever the Bankrupt Party or any of its successors or assigns provides to the non-Bankrupt Party any of the intellectual property licensed hereunder (or any embodiment thereof) pursuant to this Section 15.3, the non-Bankrupt Party shall have the right to perform the obligations of the Bankrupt Party hereunder with respect to such intellectual property, but neither such provision nor such performance by the non-Bankrupt Party shall release the Bankrupt Party from any such obligation or liability for failing to perform it.

(c) All rights, powers and remedies of the non-Bankrupt Party provided herein are in addition to and not in substitution for any and all other rights, powers and remedies now or hereafter existing at law or in equity (including, without limitation, Title 11) in the event of the commencement of a Title 11 case by or against the Bankrupt Party. The non-Bankrupt Party, in addition to the rights, power and remedies expressly provided herein, shall be entitled to exercise all other such rights and powers and resort to all other such remedies as may now or hereafter exist at law or in equity (including, without limitation, under Title 11) in such event. The Parties agree that they intend the foregoing non-Bankrupt Party rights to extend to the maximum extent permitted by law and any provisions of applicable contracts with Third Parties, including without limitation for purposes of Title 11, (i) the right of access to any intellectual property (including all embodiments thereof) of the Bankrupt Party or any Third Party with whom the Bankrupt Party contracts to perform an obligation of the Bankrupt Party under this Agreement, and, in the case of the Third Party, which is necessary for the development, registration and manufacture of licensed products and (ii) the right to contract directly with any Third Party described in (i) in this sentence to complete the contracted work. Any intellectual property provided pursuant to the provisions of this Section 15.3 shall be subject to the licenses set forth elsewhere in this Agreement and the payment obligations of this Agreement, which shall be deemed to be royalties for purposes of Title 11.

15.4 Force Majeure. Both Parties shall be excused from the performance of their obligations under this Agreement to the extent that such performance is prevented by force majeure and the nonperforming Party promptly provides notice of the prevention to the other Party. Such excuse shall be continued so long as the condition constituting force majeure continues and the nonperforming Party takes reasonable efforts to remove the condition. For purposes of this Agreement, force majeure shall include conditions beyond the control of the Parties, including without limitation, an act of God, voluntary or involuntary compliance with any regulation, law or order of any government, war, terrorism, civil commotion, labor strike or lock-out, epidemic, failure or default of public utilities or common carriers, destruction of production facilities or materials by fire, earthquake, storm or like catastrophe; provided, however, the payment of invoices due and owing hereunder shall not be delayed by the payor

because of a force majeure affecting the payor.

15.5 Notices. Any notice required or permitted to be given under this Agreement shall be in writing, shall specifically refer to this Agreement and shall be deemed to have been sufficiently given for all purposes if mailed by first class certified or registered mail, postage prepaid, express delivery service or personally delivered. Unless otherwise specified in writing, the mailing addresses of the Parties shall be as described below.

For Rigel:
Rigel Pharmaceuticals, Inc.
240 East Grand Avenue
South San Francisco, CA 94080
Attn: President

With a copy to:
Cooley Godward LLP
Five Palo Alto Square
Palo Alto, CA 94306-2155
Attention: Robert L. Jones, Esq.

For Daiichi:
Daiichi Pharmaceutical Co., Ltd.
16-13, Kita-Kasai 1 Chome
Edogawa-ku, Tokyo 134-8630
Japan
Attention: General Manager of Research Planning Department

15.6 Consents Not Unreasonably Withheld or Delayed. Whenever provision is made in this Agreement for either Party to secure the consent or approval of the other, that consent or approval shall not unreasonably be withheld or delayed, and whenever in this Agreement provisions are made for one Party to object to or disapprove a matter, such objection or disapproval shall not unreasonably be exercised.

15.7 Maintenance of Records. Each Party shall keep and maintain all records required by law or regulation with respect to Products and shall make copies of such records available to the other Party upon request.

15.8 No Strict Construction. This Agreement has been prepared jointly and shall not be strictly construed against either Party.

15.9 Assignment. Neither Party may assign or transfer this Agreement without the prior written consent of the other, except a Party may make such an assignment without the other Party's consent to an Affiliate of such Party or to a successor to substantially all of the related business of such Party, whether in a merger, sale of stock, sale of assets or other transaction. Any permitted successor or assignee of rights and/or obligations hereunder shall, in a writing to the other Party, expressly assume performance of such rights and/or obligations. Any permitted assignment shall be binding on the successors of the assigning Party. Any assignment or attempted assignment by either Party in violation of the terms of this Section 15.9 shall be null and void.

15.10 Performance by Affiliates. Each of Rigel and Daiichi acknowledge that obligations under this Agreement may be performed by Affiliates of Rigel and Daiichi, and each of Rigel and Daiichi guarantee performance of this Agreement by its Affiliates. In the event of any dispute arising from the performance of this Agreement by an Affiliate, or the alleged failure of an Affiliate to comply with the conditions and obligations of this Agreement, the Party seeking to resolve such dispute may do so directly with the other Party, without any obligation to first pursue an action against, or recovery from, the Affiliate which is alleged to have caused a breach of this Agreement.

15.11 Counterparts. This Agreement 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.

15.12 Further Actions. Each Party agrees to execute, acknowledge and deliver such further instruments, and to do all such other acts, as may be necessary or appropriate in order to carry out the purposes and intent of this Agreement.

15.13 Severability. If any provision of this Agreement is held to be invalid or unenforceable in the alternative dispute resolution proceedings specified in Article 14 from

which no court appeal can be or is taken , the provision shall be considered severed from this Agreement and shall not serve to invalidate any remaining provisions hereof. The Parties shall make a good faith effort to replace any invalid or unenforceable provision with a valid and enforceable one such that the objectives contemplated by the Parties when entering this Agreement may be realized.

15.14 Ambiguities. Ambiguities, if any, in this Agreement shall not be construed against any Party, irrespective of which Party may be deemed to have authored the ambiguous provision.

15.15 Headings. The headings for each article and section in this Agreement have been inserted for 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.

15.16 Translations. This Agreement is in the English language only, which language shall be controlling in all respects, and all versions hereof in any other language shall be for accommodation only and shall not be binding upon the Parties. All communications and notices to be made or given pursuant to this Agreement, and any dispute proceeding related to or arising hereunder, shall be in the English language. If there is a discrepancy between any Japanese translation of this Agreement and this Agreement, this Agreement shall prevail.

15.17 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.

IN WITNESS WHEREOF, the Parties have executed this Agreement in duplicate originals by their proper officers as of the date and year first above written.

DAIICHI PHARMACEUTICAL CO., LTD..		**RIGEL PHARMACEUTICALS, INC.**	
By:	/s/ Kiyoshi Morita	By:	/s/ James M. Gower
Name:	Mr. Kiyoshi Morita	Name:	Mr. James M. Gower
Title:	President	Title:	Chief Executive Officer
Date:	8/1/2002	Date:	7/25/2002

[*] = 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 ACT OF 1934, AS AMENDED.

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AMENDED.

EXHIBIT 15.1

November 11, 2002

The Board of Directors and Stockholders of Rigel Pharmaceuticals, Inc.

We are aware of the incorporation by reference in the Registration Statements (Forms S-8 No. 333-51184 and No. 333-72492) pertaining to the Rigel Pharmaceuticals, Inc. 1999 Stock Plan, the 2001 Non-Officer Equity Incentive Plan, 2000 Equity Incentive Plan, 2000 Employee Stock Purchase Plan, and the 2000 Non-Employee Directors' Stock Option Plan, and the Registration Statements (Forms S-3 No. 333-87276 and No. 333-74906) related to the sale of common shares, and in the related prospectuses, as applicable, contained in such Registration Statements of our report dated October 15, 2002, relating to the unaudited condensed interim financial statements of Rigel Pharmaceuticals, Inc. that are included in its Form 10-Q for the quarter ended September 30, 2002.

Pursuant to Rule 436(c) of the Securities Act of 1933 our report is not a part of the registration statement prepared or certified by accountants within the meaning of section 7 or 11 of the Securities Act of 1933.

Very truly yours,

/s/ERNST & YOUNG LLP

Exhibit 99.1

CERTIFICATION

Pursuant to Section 906 of the Sarbanes-Oxley Act of 2002 (18 U.S.C. § 1350, as adopted) , James M. Gower, the Chief Executive Officer of Rigel Pharmaceuticals, Inc. (the "Company"), and James H. Welch, the Chief Financial Officer of the Company, each hereby certifies that, to his knowledge:

1. The Company's Quarterly Report on Form 10-Q for the period ended September 30, 2002, to which this Certification is attached as Exhibit 99.1 (the "Periodic Report"), fully complies with the requirements of Section 13(a) or Section 15(d) of the Securities Exchange Act of 1934, as amended; and

2. The information contained in the Periodic Report fairly presents, in all material respects, the financial condition of the Company at the end of the periods covered by the Periodic Report and the results of operations of the Company for the periods covered by the Periodic Report.

This certification accompanies the Periodic Report pursuant to §906 of the Sarbanes-Oxley Act of 2002 and shall not be deemed "filed" by the Company for purposes of Section 18 of the Securities Exchange Act of 1934, as amended.

Dated: November 14, 2002

/s/ JAMES M. GOWER
James M. Gower
Chief Executive Officer

/s/ JAMES H. WELCH
James H. Welch
Chief Financial Officer