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

FORM 10-Q

(Mark One)

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

FOR THE QUARTERLY PERIOD ENDED JUNE 30, 2016

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

(State or other jurisdiction of incorporation or organization)

94-3248524

(I.R.S. Employer Identification No.)

1180 Veterans Blvd.

South San Francisco, CA

(Address of principal executive offices)

94080

(Zip Code)

(650) 624-1100

(Registrant's telephone number, including area code)

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

Indicate by check mark whether the registrant has submitted electronically and posted on its corporate Web site, if any, every Interactive Data File required to be submitted and posted pursuant to Rule 405 of Regulation S-T (§232.405 of this chapter) during the preceding 12 months (or for such shorter period that the registrant was required to submit and post such files). Yes No

Indicate by check mark whether the registrant is a large accelerated filer, an accelerated filer, a non-accelerated filer, or a smaller reporting company. See the definitions of "large accelerated filer," "accelerated filer" and "smaller reporting company" in Rule 12b-2 of the Exchange Act.

Large accelerated filer

Accelerated filer

Non-accelerated filer

Smaller reporting company

(Do not check if a smaller reporting company)

Indicate by check mark whether the registrant is a shell company (as defined in Rule 12b-2 of the Exchange Act). Yes No

As of July 27, 2016, there were 94,589,643 shares of the registrant's Common Stock outstanding.

**RIGEL PHARMACEUTICALS, IN C.
QUARTERLY REPORT ON FORM 10-Q
FOR THE QUARTERLY PERIOD ENDED JUNE 30, 2016**

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PART I. FINANCIAL INFORMATION**Item 1. Financial Statements****RIGEL PHARMACEUTICALS, INC.
CONDENSED BALANCE SHEETS
(In thousands)**

	June 30, 2016	December 31, 2015(1)
	(unaudited)	
Assets		
Current assets:		
Cash and cash equivalents	\$ 24,946	\$ 43,456
Short-term investments	69,994	82,820
Accounts receivable	95	203
Prepaid and other current assets	1,862	2,545
Total current assets	96,897	129,024
Property and equipment, net	1,581	1,613
Other assets	842	1,110
	<u>\$ 99,320</u>	<u>\$ 131,747</u>
Liabilities and stockholders' equity		
Current liabilities:		
Accounts payable	\$ 1,506	\$ 2,763
Accrued compensation	3,119	6,251
Accrued research and development	6,702	4,953
Other accrued liabilities	1,269	1,133
Deferred revenue	3,760	13,427
Deferred liability – sublease, current portion	3,112	3,005
Deferred rent, current portion	2,533	2,264
Total current liabilities	22,001	33,796
Long-term portion of deferred liability – sublease	1,877	3,460
Long-term portion of deferred rent	1,707	3,083
Other long-term liabilities	15	27
Commitments		
Stockholders' equity:		
Preferred stock	—	—
Common stock	95	91
Additional paid-in capital	1,096,215	1,082,980
Accumulated other comprehensive gain (loss)	53	(44)
Accumulated deficit	(1,022,643)	(991,646)
Total stockholders' equity	73,720	91,381
	<u>\$ 99,320</u>	<u>\$ 131,747</u>

(1) The balance sheet at December 31, 2015 has been derived from the audited financial statements included in Rigel's Annual Report on Form 10-K for the year ended December 31, 2015.

See Accompanying Notes.

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

	<u>Three Months Ended June 30,</u>		<u>Six Months Ended June 30,</u>	
	<u>2016</u>	<u>2015</u>	<u>2016</u>	<u>2015</u>
Contract revenues from collaborations	\$ 8,594	\$ 5,184	\$ 13,623	\$ 7,362
Costs and expenses:				
Research and development	17,468	15,059	35,641	30,761
General and administrative	4,774	4,099	9,197	8,816
Total costs and expenses	<u>22,242</u>	<u>19,158</u>	<u>44,838</u>	<u>39,577</u>
Loss from operations	(13,648)	(13,974)	(31,215)	(32,215)
Interest income	115	62	218	110
Net loss	<u>\$ (13,533)</u>	<u>\$ (13,912)</u>	<u>\$ (30,997)</u>	<u>\$ (32,105)</u>
Net loss per share, basic and diluted	<u>\$ (0.15)</u>	<u>\$ (0.16)</u>	<u>\$ (0.34)</u>	<u>\$ (0.36)</u>
Weighted average shares used in computing net loss per share, basic and diluted	<u>92,495</u>	<u>88,137</u>	<u>91,525</u>	<u>88,090</u>

See Accompanying Notes.

RIGEL PHARMACEUTICALS, INC.
CONDENSED STATEMENTS OF COMPREHENSIVE LOSS
(In thousands)
(unaudited)

	<u>Three Months Ended June 30,</u>		<u>Six Months Ended June 30,</u>	
	<u>2016</u>	<u>2015</u>	<u>2016</u>	<u>2015</u>
Net loss	\$ (13,533)	\$ (13,912)	\$ (30,997)	\$ (32,105)
Other comprehensive income (loss):				
Net unrealized gain (loss) on short-term investments	4	(6)	97	18
Comprehensive loss	<u>\$ (13,529)</u>	<u>\$ (13,918)</u>	<u>\$ (30,900)</u>	<u>\$ (32,087)</u>

See Accompanying Notes.

RIGEL PHARMACEUTICALS, INC.
CONDENSED STATEMENTS OF CASH FLOW S
(In thousands)
(unaudited)

	<u>Six Months Ended June 30,</u>	
	<u>2016</u>	<u>2015</u>
Operating activities		
Net loss	\$ (30,997)	\$ (32,105)
Adjustments to reconcile net loss to net cash used in operating activities:		
Depreciation and amortization	584	814
Stock-based compensation expense	3,452	3,963
Changes in assets and liabilities:		
Accounts receivable	108	5,400
Prepaid and other current assets	683	398
Other assets	88	68
Accounts payable	(1,263)	(517)
Accrued compensation	(3,132)	1,168
Accrued research and development	1,749	300
Other accrued liabilities	136	1
Deferred revenue	(9,667)	23,095
Deferred rent and other long term liabilities	(2,595)	(2,744)
Net cash used in operating activities	<u>(40,854)</u>	<u>(159)</u>
Investing activities		
Purchases of short-term investments	(67,895)	(82,798)
Maturities of short-term investments	80,818	84,120
Capital expenditures	(546)	(105)
Net cash provided by investing activities	<u>12,377</u>	<u>1,217</u>
Financing activities		
Net proceeds from issuances of common stock upon exercise of options and participation in employee stock purchase plan	618	1,029
Proceeds from sale and issuance of common stock, net of offering costs	9,349	—
Net cash provided by financing activities	<u>9,967</u>	<u>1,029</u>
Net increase (decrease) in cash and cash equivalents	(18,510)	2,087
Cash and cash equivalents at beginning of period	43,456	15,203
Cash and cash equivalents at end of period	<u>\$ 24,946</u>	<u>\$ 17,290</u>

See Accompanying Notes.

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

In this report, “Rigel,” “we,” “us” and “our” refer to Rigel Pharmaceuticals, Inc.

1. Nature of Operations

We were incorporated in the state of Delaware on June 14, 1996. We are engaged in the discovery and development of novel, targeted drug candidates in the therapeutic areas of immunology, oncology and immuno-oncology.

2. Basis of Presentation

Our accompanying unaudited condensed financial statements have been prepared in accordance with U.S. generally accepted accounting principles (U.S. GAAP), for interim financial information and pursuant to the instructions to Form 10-Q and Article 10 of Regulation S-X of the Securities Act of 1933, as amended (Securities Act). Accordingly, they do not include all of the information and notes required by U.S. GAAP for complete financial statements. These unaudited condensed financial statements include only normal and recurring adjustments that we believe are necessary to fairly state our financial position and the results of our operations and cash flows. Interim-period results are not necessarily indicative of results of operations or cash flows for a full-year or any subsequent interim period. The balance sheet at December 31, 2015 has been derived from audited financial statements at that date, but does not include all disclosures required by U.S. GAAP for complete financial statements. Because all of the disclosures required by U.S. GAAP for complete financial statements are not included herein, these interim unaudited condensed financial statements and the notes accompanying them should be read in conjunction with our audited financial statements and the notes thereto included in our Annual Report on Form 10-K for the year ended December 31, 2015.

The preparation of financial statements in conformity with U.S. GAAP requires management to make estimates and assumptions that affect the amounts reported in the financial statements and accompanying notes. We base our estimates on historical experience and on various other assumptions that we believe to be reasonable under the circumstances. Actual results could differ from these estimates.

3. Recent Accounting Pronouncements

In August 2014, the Financial Accounting Standards Board (FASB) issued Accounting Standard Update (ASU) No. 2014-15—*Disclosure of Uncertainties about an Entity’s Ability to Continue as a Going Concern*, under Accounting Standards Codification (ASC) Subtopic 205-40, *Presentation of Financial Statements—Going Concern*. ASU No. 2014-15 provides guidance about management’s responsibility to evaluate whether there is substantial doubt about an entity’s ability to continue as a going concern and to provide related footnote disclosures. Management’s evaluation should be based on relevant conditions and events that are known and reasonably knowable at the date that the financial statements are issued (or at the date that the financial statements are available to be issued when applicable). Substantial doubt about an entity’s ability to continue as a going concern exists when relevant conditions and events, considered in the aggregate, indicate that it is probable that the entity will be unable to meet its obligations as they become due within one year after the date that the financial statements are issued (or available to be issued). ASU No. 2014-15 is effective for the annual period ending after December 15, 2016 and early adoption is permitted. We plan to adopt this new standard in our annual financial statements for the year ending December 31, 2016. We will continue to evaluate the guidance under ASU No. 2014-15 and present the required disclosures within our financial statements at the time of adoption. The actual impact will be dependent upon our liquidity and the nature or significance of future events or conditions that exist upon the adoption of this new standard.

In May 2014, the FASB issued ASU No. 2014-09—*Revenue from Contracts with Customers*, which supersedes the revenue recognition requirements under ASC Topic 605, *Revenue Recognition*, and most industry-specific guidance under the ASC. The core principle of ASU No. 2014-09 is that an entity should recognize revenue when it transfers promised goods or services to customers in an amount that reflects the consideration to which the entity expects to be entitled in exchange for those goods or services. ASU No. 2014-09 defines a five step process to achieve this core principle and, in doing so, it is possible more judgment and estimates may be required within the revenue recognition process than required under existing U.S. GAAP including identifying performance obligations in the contract, estimating the amount of variable consideration to include in the transaction price and allocating the transaction price to each separate performance obligation. ASU No. 2014-09 also requires additional disclosures to enable users of financial statements to understand the nature, amount, timing and uncertainty of revenue and cash flows arising from customer contracts. ASU No. 2014-09 allows for either full retrospective or modified retrospective adoption, and we have not yet determined which approach we will apply. In July 2015, the FASB deferred by one year the effective date of ASU No. 2014-09 with the new effective date beginning after December 15, 2017, and the interim periods within that year and will allow early adoption for all entities as of the original effective date for public business entities, which was annual reporting periods beginning after December 15, 2016. We plan to adopt this new standard on January 1, 2018. We are currently evaluating the potential impact of the adoption of ASU No. 2014-09 on our financial statements and cannot estimate the impact of adoption at this time.

In February 2016, the FASB issued ASU No. 2016-02—*Leases*, which is aimed at making leasing activities more transparent, and requires substantially all leases be recognized by lessees on their balance sheet as a right-of-use asset and corresponding lease liability, including leases currently accounted for as operating leases. The guidance is effective for all interim and annual reporting periods beginning after December 15, 2018. Early adoption is permitted. We plan to adopt this new standard on January 1, 2019. We are currently evaluating the potential impact of the adoption of ASU No. 2016-02 on our financial statements and cannot estimate the impact of adoption at this time.

In March 2016, the FASB issued ASU No. 2016-09—*Stock Compensation*, which is intended to simplify several aspects of the accounting for share-based payment award transactions, including the income tax consequences, an option to recognize gross stock compensation expense with actual forfeitures recognized as they occur, as well as certain classifications on the statement of cash flows. The guidance will be effective for the fiscal year beginning after December 15, 2016, including interim periods within that year. We plan to adopt this new standard on January 1, 2017. We are currently evaluating the potential impact of the adoption of ASU No. 2016-09 on our financial statements and cannot estimate the impact of adoption at this time.

4. Stock Award Plans

We have three stock option plans, our 2011 Equity Incentive Plan (2011 Plan), 2000 Equity Incentive Plan (2000 Plan) and 2000 Non-Employee Directors' Stock Option Plan (Directors' Plan), that provide for granting to our officers, directors and all other employees and consultants options to purchase shares of our common stock. We also have our Employee Stock Purchase Plan (Purchase Plan), wherein eligible employees can purchase shares of our common stock at a price per share equal to the lesser of 85% of the fair market value on the first day of the offering period or 85% of the fair market value on the purchase date. The fair value of each option award is estimated on the date of grant using the Black-Scholes option pricing model which considered our stock price, as well as assumptions regarding a number of complex and subjective variables. These variables include, but are not limited to, volatility, expected term, risk-free interest rate and dividends. We estimate volatility over the expected term of the option using historical share price performance. For expected term, we take into consideration our historical data of options exercised, cancelled and expired. The risk-free rate is based on the U.S. Treasury constant maturity rate. We have not paid and do not expect to pay dividends in the foreseeable future. In order to calculate stock-based compensation expense, we also estimate the forfeiture rate using our historical experience with options that cancel before they vest. We review our forfeiture rates each quarter and make any necessary changes to our estimates. We use the straight-line attribution method over the requisite employee service period for the entire award in recognizing stock-based compensation expense.

We granted performance-based stock options to purchase shares of our common stock which will vest upon the achievement of certain corporate performance-based milestones. We determined the fair values of these performance-based stock options using the Black-Scholes option pricing model at the date of grant. For the portion of the performance-based stock options of which the performance condition is considered probable of achievement, we recognized stock-based compensation expense on the related estimated fair value of such options on a straight-line basis from the date of grant up to the date when we expect the performance condition will be achieved. For the performance conditions that are not considered probable of achievement at the grant date or upon quarterly re-evaluation, prior to the event actually occurring, we will recognize the related stock-based compensation expense when the event occurs or when we can determine that the performance condition is probable of achievement. In those cases, we will recognize the change in estimate at the time we determine the condition is probable of achievement (by recognizing stock-based compensation expense as cumulative catch-up adjustment as if we had estimated at the grant date that the performance condition would have been achieved) and recognize the remaining compensation cost up to the date when we expect the performance condition will be achieved, if any.

5. Net Loss Per Share

Basic net loss per share is computed by dividing net loss by the weighted-average number of shares of common stock outstanding during the period. Diluted net loss per share is computed by dividing net loss by the weighted-average number of shares of common stock outstanding during the period and the number of additional shares of common stock that would have been outstanding if potentially dilutive securities had been issued. Potentially dilutive securities include a warrant to purchase our common shares and stock options and shares issuable under our stock award plans. The dilutive effect of these potentially dilutive securities is reflected in diluted earnings per share by application of the treasury stock method. Under the treasury stock method, an increase in the fair market value of our common stock can result in a greater dilutive effect from potentially dilutive securities.

We had securities which could potentially dilute basic loss per share, but were excluded from the computation of diluted net loss per share, as their effect would have been antidilutive. These securities consist of the following (in thousands):

	Three Months Ended		Six Months Ended	
	June 30,		June 30,	
	2016	2015	2016	2015
Outstanding stock options	22,232	20,138	22,232	20,138
Warrant to purchase common stock	200	200	200	200
Purchase Plan	247	223	156	144
	<u>22,679</u>	<u>20,561</u>	<u>22,588</u>	<u>20,482</u>

6. Stock-based Compensation

Total stock-based compensation expense related to all of our share-based payments that we recognized for the three and six months ended June 30, 2016 and 2015 were as follows (in thousands):

	Three Months Ended		Six Months Ended	
	June 30,		June 30,	
	2016	2015	2016	2015
Research and development	\$ 1,410	\$ 1,056	\$ 2,103	\$ 2,216
General and administrative	604	853	1,349	1,747
Total stock-based compensation expense	<u>\$ 2,014</u>	<u>\$ 1,909</u>	<u>\$ 3,452</u>	<u>\$ 3,963</u>

During the quarter ended June 30, 2016, we entered into severance agreements with certain employees. As part of the severance arrangements, we extended the date through which such former employees had the right to exercise their vested options. In addition, we also accelerated the vesting of certain unvested stock options granted to a former employee. As a result of these modifications, we recorded incremental stock-based compensation expense of \$641,000 during the three and six months ended June 30, 2016. The incremental compensation expense was computed based on

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the fair values of the modified awards on the respective modification dates. This amount is included as part of “Research and development expense” in the accompanying Condensed Statements of Operations.

The fair value of each option award is estimated on the date of grant using the Black-Scholes option pricing model. We have segregated option awards into the following three homogenous groups for the purposes of determining fair values of options: officers and directors, all other employees, and consultants.

We determined weighted-average valuation assumptions separately for each of these groups as follows:

- Volatility—We estimated volatility using our historical share price performance over the expected life of the option. We also considered other factors, such as implied volatility, our current clinical trials and other company activities that may affect the volatility of our stock in the future. We determined that at this time historical volatility is more indicative of our expected future stock performance than implied volatility.
- Expected term—For options granted to consultants, we use the contractual term of the option, which is generally ten years, for the initial valuation of the option and the remaining contractual term of the option for the succeeding periods. We analyzed various historical data to determine the applicable expected term for each of the other option groups. This data included: (1) for exercised options, the term of the options from option grant date to exercise date; (2) for cancelled options, the term of the options from option grant date to cancellation date, excluding non-vested option forfeitures; and (3) for options that remained outstanding at the balance sheet date, the term of the options from option grant date to the end of the reporting period and the estimated remaining term of the options. The consideration and calculation of the above data gave us reasonable estimates of the expected term for each employee group. We also considered the vesting schedules of the options granted and factors surrounding exercise behavior of the option groups, our current market price and company activity that may affect our market price. In addition, we considered the optionee type (i.e., officers and directors or all other employees) and other factors that may affect the expected term of the option.
- Risk-free interest rate—The risk-free interest rate is based on U.S. Treasury constant maturity rates with similar terms to the expected term of the options for each option group.
- Dividend yield—The expected dividend yield is 0% as we have not paid and do not expect to pay dividends in the future.

Pursuant to FASB ASC 718, we are required to estimate the amount of expected forfeitures when calculating compensation costs. We estimated the forfeiture rate using our historical experience with non-vested options. We adjust our stock-based compensation expense as actual forfeitures occur, review our estimated forfeiture rates each quarter and make changes to our estimate as appropriate.

The following table summarizes the weighted-average assumptions relating to options granted pursuant to our equity incentive plans, including the performance-based stock option awards which will vest upon the achievement of a corporate performance-based milestone, for the three and six months ended June 30, 2016 and 2015:

	Three Months Ended		Six Months Ended	
	June 30,		June 30,	
	2016	2015	2016	2015
Risk-free interest rate	1.5 %	1.9 %	1.7 %	1.8 %
Expected term (in years)	7.0	7.0	6.4	6.5
Dividend yield	0.0 %	0.0 %	0.0 %	0.0 %
Expected volatility	76.9 %	66.9 %	63.3 %	65.1 %

The exercise price of stock options is at the market price of our common stock on the date immediately preceding the date of grant. Options become exercisable at varying dates and generally expire 10 years from the date of grant.

We granted options to purchase 3,833,435 shares of common stock during the six months ended June 30, 2016, with a grant-date weighted-average fair value of \$1.59 per share. Of the 3,833,435 common stock options granted, 1,015,000 shares were related to performance-based stock option awards. 865,000 shares of these performance-based stock option awards remained outstanding after the cancellation of the 150,000 shares granted to a former executive, effective July 1, 2016. The outstanding performance-based stock option awards options has a grant date fair value of \$1.4 million and will vest upon the achievement of a corporate performance-based milestone. We did not consider the achievement of the corporate-based milestone as probable as of June 30, 2016. Accordingly, no stock-based compensation cost was recognized during the three and six months ended June 30, 2016 for these performance-based stock option awards.

We granted options to purchase 3,793,420 shares of common stock during the six months ended June 30, 2015, with a grant-date weighted-average fair value of \$1.40 per share. Of the 3,793,420 common stock options granted, 1,175,000 shares were related to performance-based stock option awards which vested upon the achievement of a corporate performance-based milestone in the first quarter of 2016.

As of June 30, 2016, there was approximately \$7.0 million of total unrecognized stock-based compensation cost, net of estimated forfeitures, related to all unvested options granted under our equity incentive plans. Of this amount, approximately \$2.1 million of unrecognized stock compensation expense relate to the performance-based stock option awards, of which the underlying corporate performance-based milestone was not probable of achievement as of June 30, 2016.

At June 30, 2016, there were 2,108,340 shares of common stock available for future grant under our equity incentive plans and 11,977 options to purchase shares were exercised during the six months ended June 30, 2016.

Employee Stock Purchase Plan

Our Employee Stock Purchase Plan (Purchase Plan) permits eligible employees to purchase common stock at a discount through payroll deductions during defined offering periods. The price at which the stock is purchased is equal to the lesser of 85% of the fair market value of the common stock on the first day of the offering or 85% of the fair market value of our common stock on the purchase date. The initial offering period commenced on the effective date of our initial public offering.

The fair value of awards granted under our Purchase Plan is estimated on the date of grant using the Black-Scholes option pricing model, which uses weighted-average assumptions. Our Purchase Plan provides for a twenty-four month offering period comprised of four six-month purchase periods with a look-back option. A look-back option is a provision in our Purchase Plan under which eligible employees can purchase shares of our common stock at a price per share equal to the lesser of 85% of the fair market value on the first day of the offering period or 85% of the fair market value on the purchase date. Our Purchase Plan also includes a feature that provides for a new offering period to begin when the fair market value of our common stock on any purchase date during an offering period falls below the fair market value of our common stock on the first day of such offering period. This feature is called a "reset." Participants are automatically enrolled in the new offering period. We had a "reset" on July 1, 2016 because the fair market value of our stock on June 30, 2016 was lower than the fair market value of our stock on January 5, 2015, the first day of the offering period. We applied modification accounting in accordance with ASC Topic No. 718, *Stock Compensation*, to determine the incremental fair value associated with this Purchase Plan "reset" and will recognize the related stock-based compensation expense according to FASB ASC Subtopic No. 718-50, *Employee Share Purchase Plans*. The total incremental fair value for this Purchase Plan "reset" was approximately \$1.0 million and will be recognized from July 1, 2016 to June 30, 2018.

As of June 30, 2016, there were approximately 2,689,635 shares reserved for future issuance under the Purchase Plan. The following table summarizes the weighted-average assumptions related to our Purchase Plan for the six months

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ended June 30, 2016 and 2015. Expected volatilities for our Purchase Plan are based on the historical volatility of our stock. Expected term represents the weighted-average of the purchase periods within the offering period. The risk-free interest rate for periods within the expected term is based on U.S. Treasury constant maturity rates.

	Six Months Ended	
	June 30,	
	2016	2015
Risk-free interest rate	0.7 %	0.6 %
Expected term (in years)	1.8	1.5
Dividend yield	0.0 %	0.0 %
Expected volatility	61.5 %	61.2 %

7. Research and Development Accruals

We have various contracts with third parties related to our research and development activities. Costs that are incurred but not billed to us as of the end of the period are accrued. We make estimates of the amounts incurred in each period based on the information available to us and our knowledge of the nature of the contractual activities generating such costs. Clinical trial contract expenses are accrued based on units of activity. Expenses related to other research and development contracts, such as research contracts, toxicology study contracts and manufacturing contracts are estimated to be incurred generally on a straight-line basis over the duration of the contracts. Raw materials and study materials purchased for us by third parties are expensed at the time of purchase.

8. Sponsored Research and License Agreements

We conduct research and development programs independently and in connection with our corporate collaborators. We are party to a collaboration agreement with Bristol-Myers Squibb Company (BMS) for the discovery, development and commercialization of cancer immunotherapies based on our small molecule TGF beta receptor kinase inhibitors, as discussed below. Our participation in the collaboration is limited to the Joint Research Committee and the performance of research activities based on billable full-time equivalent fees as specified in the collaboration agreement. We do not have ongoing participation obligations under our agreements with Aclaris Therapeutics International Limited (Aclaris) for the development and commercialization of certain janus kinase (JAK) inhibitors for the treatment of alopecia areata and other dermatological conditions, AstraZeneca (AZ) for the development and commercialization of R256, an inhaled JAK inhibitor, BerGenBio AS (BerGenBio) for the development and commercialization of an oncology program, and Daiichi Sankyo (Daiichi) to pursue research related to a specific target from a novel class of drug targets called ligases. Under these agreements, which we entered into in the ordinary course of business, we received or may be entitled to receive upfront cash payments, progress dependent contingent payments on events achieved by such partners and royalties on any net sales of products sold by such partners under the agreements. Total future contingent payments to us under all of these current agreements could exceed \$531.9 million if all potential product candidates achieved all of the payment triggering events under all of our current agreements (based on a single product candidate under each agreement). Of this amount, up to \$148.8 million relates to the achievement of development events, up to \$345.6 million relates to the achievement of regulatory events and up to \$37.5 million relates to the achievement of certain commercial or launch events. This estimated future contingent amount does not include any estimated royalties that could be due to us if the partners successfully commercialize any of the licensed products. Future events that may trigger payments to us under the agreements are based solely on our partners' future efforts and achievements of specified development, regulatory and/or commercial events.

In October 2015, we entered into a non-exclusive license agreement with a third party, pursuant to which we received a payment in the single-digit millions in exchange for granting a non-exclusive license to certain limited intellectual property rights. We concluded that the granting of the license, which was fully delivered to such third party in the fourth quarter of 2015, represents the sole deliverable under this agreement. Accordingly, we recognized the payment as revenue during the fourth quarter of 2015.

In August 2015, we entered into a license agreement with Aclaris, pursuant to which Aclaris will have exclusive rights and will assume responsibility for the continued development of certain JAK inhibitor compounds for the

treatment of alopecia areata and other dermatological conditions. Under the license agreement, we received a noncreditable and non-refundable upfront payment of \$8.0 million in September 2015. We are also entitled to receive development and regulatory contingent fees that could exceed \$80.0 million for a successful compound approved in certain indications. In addition, we are also eligible to receive tiered royalties on the net sales of any products under the agreement. We concluded that the granting of the license, which has been fully delivered to Aclaris in the third quarter of 2015, represents the sole deliverable under this agreement. Accordingly, we recognized the \$8.0 million payment as revenue during the third quarter of 2015.

In February 2015, we entered into a collaboration agreement with BMS for the discovery, development and commercialization of cancer immunotherapies based on our extensive portfolio of small molecule TGF beta receptor kinase inhibitors. Under the collaboration agreement, BMS will have exclusive rights and will be solely responsible for the clinical development and commercialization of any products. Pursuant to the collaboration agreement with BMS, we received a noncreditable and non-refundable upfront payment of \$30.0 million in March 2015. We are also entitled to receive development and regulatory contingent fees that could exceed \$309.0 million for a successful compound approved in certain indications. In addition, we are also eligible to receive tiered royalties on the net sales of any products from the collaboration. BMS shall also reimburse us for agreed upon costs based on a contractual cost per full-time equivalent employee in connection with the performance of research activities during the research term. Under the collaboration agreement, we were obligated to provide the following deliverables: (i) granting of license rights to our program, (ii) participation in the Joint Research Committee, and (iii) performance of research activities. We concluded that these deliverables are a single unit of accounting as the license does not have stand-alone value apart from the other deliverables. Accordingly, the \$30.0 million upfront payment is being recognized ratably as revenue from the effective date of the agreement through September 2016, the end of the estimated research term. We believe that straight-line recognition of this revenue is appropriate as the research is expected to be performed ratably over the research period. As of June 30, 2016, we were not notified by BMS of its intention to extend the estimated research term under which we will perform research activities. However, BMS does continue to evaluate compounds from the extensive portfolio under the agreement on its own, for designation of a compound as an early candidate nomination. During the three and six months ended June 30, 2016, we recognized revenue of \$4.8 million and \$9.7 million, respectively, relating to the upfront payment and \$95,000 and \$290,000, respectively, relating to the research activities we performed. During the three and six months ended June 30, 2015, we recognized revenue of \$4.8 million and \$6.9 million, respectively, relating to the upfront payment and \$350,000 and \$456,000, respectively, relating to the research activities we performed. As of June 30, 2016, deferred revenue related to the \$30.0 million upfront payment was \$3.8 million, which will be fully recognized as revenue in the third quarter of 2016.

In June 2011, we entered into an exclusive license agreement with BerGenBio for the development and commercialization of an oncology program. BerGenBio is responsible for all activities it wishes to perform under the license we granted to it. In June 2016, we received contingent payments of \$1.7 million relating to a time-based non-refundable fee and \$2.0 million relating to BerGenBio's exercise of certain option rights before the prescription period to exercise the rights expired. All deliverables under the agreement had been previously delivered, as such, the above payments of \$3.7 million triggered by the above time-based and contingent events were recognized as revenue in the second quarter of 2016.

9. Cash, Cash Equivalents and Short-Term Investments

Cash, cash equivalents and short-term investments consisted of the following (in thousands):

	June 30, 2016	December 31, 2015
Cash	\$ 2,380	\$ 2,118
Money market funds	15,417	26,291
U. S. treasury bills	8,314	9,048
Government-sponsored enterprise securities	20,684	48,613
Corporate bonds and commercial paper	48,145	40,206
	<u>\$ 94,940</u>	<u>\$ 126,276</u>
Reported as:		
Cash and cash equivalents	\$ 24,946	\$ 43,456
Short-term investments	69,994	82,820
	<u>\$ 94,940</u>	<u>\$ 126,276</u>

Cash equivalents and short-term investments include the following securities with gross unrealized gains and losses (in thousands):

	Amortized Cost	Gross Unrealized		Fair Value
		Gains	Losses	
June 30, 2016				
U. S. treasury bills	\$ 8,303	\$ 11	\$ —	\$ 8,314
Government-sponsored enterprise securities	20,671	13	—	20,684
Corporate bonds and commercial paper	48,116	31	(2)	48,145
Total	<u>\$ 77,090</u>	<u>\$ 55</u>	<u>\$ (2)</u>	<u>\$ 77,143</u>

	Amortized Cost	Gross Unrealized		Fair Value
		Gains	Losses	
December 31, 2015				
U. S. treasury bills	\$ 9,061	\$ —	\$ (13)	\$ 9,048
Government-sponsored enterprise securities	48,643	1	(31)	48,613
Corporate bonds and commercial paper	40,207	11	(12)	40,206
Total	<u>\$ 97,911</u>	<u>\$ 12</u>	<u>\$ (56)</u>	<u>\$ 97,867</u>

As of June 30, 2016, our cash equivalents and short-term investments which have contractual maturities within one year, had a weighted-average time to maturity of approximately 118 days. We view our short-term investments portfolio as available for use in current operations. Accordingly, we have classified our investments as short-term investments. We have the ability to hold all investments as of June 30, 2016 through their respective maturity dates. At June 30, 2016, we had no investments that had been in a continuous unrealized loss position for more than 12 months. As of June 30, 2016, a total of 8 individual securities had been in an unrealized loss position for 12 months or less, and the losses were determined to be temporary. The gross unrealized losses above were caused by interest rate increases. No significant facts or circumstances have arisen to indicate that there has been any deterioration in the creditworthiness of the issuers of the securities held by us. Based on our review of these securities, including the assessment of the duration and severity of the unrealized losses and our ability and intent to hold the investments until maturity, there were no other-than-temporary impairments for these securities at June 30, 2016.

The following table shows the fair value and gross unrealized losses of our investments in individual securities that are in an unrealized loss position, aggregated by investment category (in thousands):

	Fair Value	Unrealized Losses
June 30, 2016		
Corporate bonds and commercial paper	<u>\$ 4,250</u>	<u>\$ (2)</u>

10. Fair Value

Under FASB ASC 820, *Fair Value Measurements and Disclosures*, fair value is defined as the price at which an asset could be exchanged or a liability transferred in a transaction between knowledgeable, willing parties in the principal or most advantageous market for the asset or liability. Where available, fair value is based on observable market prices or parameters or derived from such prices or parameters. Where observable prices or parameters are not available, valuation models are applied.

Assets and liabilities recorded at fair value in our financial statements are categorized based upon the level of judgment associated with the inputs used to measure their fair value. Hierarchical levels directly related to the amount of subjectivity associated with the inputs to fair valuation of these assets and liabilities, are as follows:

Level 1—Inputs are unadjusted, quoted prices in active markets for identical assets at the reporting date. Active markets are those in which transactions for the asset or liability occur in sufficient frequency and volume to provide pricing information on an ongoing basis.

The fair valued assets we hold that are generally included under this Level 1 are money market securities where fair value is based on publicly quoted prices.

Level 2—Inputs, other than quoted prices included in Level 1, that are either directly or indirectly observable for the asset or liability through correlation with market data at the reporting date and for the duration of the instrument's anticipated life.

The fair valued assets we hold that are generally assessed under Level 2 included government-sponsored enterprise securities, U.S. treasury bills and corporate bonds and commercial paper. We utilize third party pricing services in developing fair value measurements where fair value is based on valuation methodologies such as models using observable market inputs, including benchmark yields, reported trades, broker/dealer quotes, bids, offers and other reference data. We use quotes from external pricing service providers and other on-line quotation systems to verify the fair value of investments provided by our third party pricing service providers. We review independent auditor's reports from our third party pricing service providers particularly regarding the controls over pricing and valuation of financial instruments and ensure that our internal controls address certain control deficiencies, if any, and complementary user entity controls are in place.

Level 3—Unobservable inputs that are supported by little or no market activity and that are significant to the fair value of the assets or liabilities and which reflect management's best estimate of what market participants would use in pricing the asset or liability at the reporting date. Consideration is given to the risk inherent in the valuation technique and the risk inherent in the inputs to the model.

We do not have fair valued assets classified under Level 3.

Fair Value on a Recurring Basis

Financial assets measured at fair value on a recurring basis are categorized in the tables below based upon the lowest level of significant input to the valuations (in thousands):

	Assets at Fair Value as of June 30, 2016			
	Level 1	Level 2	Level 3	Total
Money market funds	\$ 15,417	\$ —	\$ —	\$ 15,417
U. S. treasury bills	—	8,314	—	8,314
Government-sponsored enterprise securities	—	20,684	—	20,684
Corporate bonds and commercial paper	—	48,145	—	48,145
Total	\$ 15,417	\$ 77,143	\$ —	\$ 92,560

	Assets at Fair Value as of December 31, 2015			
	Level 1	Level 2	Level 3	Total
Money market funds	\$ 26,291	\$ —	\$ —	\$ 26,291
U. S. treasury bills	—	9,048	—	9,048
Government-sponsored enterprise securities	—	48,613	—	48,613
Corporate bonds and commercial paper	—	40,206	—	40,206
Total	\$ 26,291	\$ 97,867	\$ —	\$ 124,158

11. Sublease Agreement

In December 2014, we entered into a sublease agreement with an unrelated third party to occupy a portion of our research and office space. We expect to receive approximately \$4.4 million in future sublease income (excluding our subtenant's share of facilities operating expenses) over the remaining term of the sublease. In connection with this sublease, we recognized a loss on sublease of \$9.3 million during the fourth quarter of 2014. We record rent expense on a straight-line basis for our lease, net of sublease income, wherein such arrangements contain scheduled rent increases over the term of the lease and sublease, respectively. For our sublease arrangement which we classified as an operating lease, our loss on the sublease was comprised of the present value of our future payments to our landlord less the present value of our future rent payments expected from our subtenant over the term of the sublease. The liability arising from this sublease agreement was determined using a credit-adjusted risk-free rate to discount the estimated future net cash flows. The changes in the liability related to the sublease agreement for the six months ended June 30, 2016 were as follows (in thousands):

Balance at January 1, 2016	\$ 6,465
Accretion of deferred liability	205
Amortization of deferred liability	(1,681)
Balance at June 30, 2016	\$ 4,989

12. Controlled Equity Offering

In August 2015, we entered into a Controlled Equity OfferingSM Sales Agreement (Sales Agreement) with Cantor Fitzgerald & Co. (Cantor), as sales agent, pursuant to which we may sell, through Cantor, up to an aggregate of \$30.0 million in shares of our common stock. All sales of our common stock will be made pursuant to a shelf registration statement that was declared effective by the Securities and Exchange Commission (SEC) on July 13, 2015. Cantor is acting as our sole sales agent for any sales made under the Sales Agreement for a low single-digit commission on gross proceeds. The common stock is sold at prevailing market prices at the time of the sale. Unless otherwise terminated earlier, the Sales Agreement continues until all shares available under the agreement have been sold. During the six months ended June 30, 2016, 3,711,096 shares of common stock were sold under the Sales Agreement, with an aggregate net proceeds of \$9.3 million. As of June 30, 2016, 5,433,408 shares of our common stock had been issued under the Sales Agreement with aggregate net proceeds of \$14.9 million. As of June 30, 2016, we had approximately \$14.7 million of remaining common stock registered for sale under the Sales Agreement.

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 the accompanying notes included in this report and the audited financial statements and accompanying notes included in our Annual Report on Form 10-K for the year ended December 31, 2015. Operating results for the three and six months ended June 30, 2016 are not necessarily indicative of results that may occur in future interim periods or for the full fiscal year.

This Quarterly Report on Form 10-Q contains statements indicating expectations about future performance and other forward-looking statements within the meaning of Section 27A of the Securities Act and Section 21E of the Exchange Act, that involve risks and uncertainties. We usually use words such as "may," "will," "should," "could," "expect," "plan," "anticipate," "believe," "estimate," "predict," "intend," or the negative of these terms or similar expressions to identify these forward-looking statements. These statements appear throughout this Quarterly Report on Form 10-Q and are statements regarding our current expectation, belief or intent, primarily with respect to our operations and related industry developments. Examples of these statements include, but are not limited to, statements regarding the following: our business and scientific strategies; the progress of our and our collaborators' product development programs, including clinical testing, and the timing of results thereof; our corporate collaborations and revenues that may be received from our collaborations and the timing of those potential payments; our expectations with respect to regulatory submissions and approvals; our drug discovery technologies; our research and development expenses; protection of our intellectual property; sufficiency of our cash and capital resources and the need for additional capital; and our operations and legal risks. You should not place undue reliance on these forward-looking statements. Our actual results could differ materially from those anticipated in these forward-looking statements for many reasons, including as a result of the risks and uncertainties discussed under the heading "Risk Factors" in Item 1A of Part II of this Quarterly Report on Form 10-Q. Any forward-looking statement speaks only as of the date on which it is made, and we undertake no obligation to update any forward-looking statement to reflect events or circumstances after the date on which the statement is made or to reflect the occurrence of unanticipated events. New factors emerge from time to time, and it is not possible for us to predict which factors will arise. In addition, we cannot assess the impact of each factor on our business or the extent to which any factor, or combination of factors, may cause actual results to differ materially from those contained in any forward-looking statements.

Overview

We are a clinical-stage biotechnology company dedicated to the discovery and development of novel, targeted drugs in the therapeutic areas of immunology, oncology and immuno-oncology. Our pioneering research focuses on signaling pathways that are critical to disease mechanisms. Our current clinical programs include fostamatinib, an oral spleen tyrosine kinase (SYK) inhibitor, which is in Phase 3 clinical trials for immune thrombocytopenic purpura (ITP); a Phase 2 clinical trial for autoimmune hemolytic anemia (AIHA); and a Phase 2 clinical trial for IgA nephropathy (IgAN). In addition, we have two oncology product candidates in Phase 1 development with partners BerGenBio AS and Daiichi Sankyo.

Product Development Programs

Our product development portfolio features multiple novel, targeted drug candidates in the therapeutic areas of immunology, oncology and immuno-oncology.

Recent Developments

Change in Executive Team. On March 7, 2016, Elliott Grossbard, M.D., resigned from his position as our Chief Medical Officer (CMO), and on June 30, 2016, Dr. Grossbard retired as an employee of the Company after 14 years. Dr. Grossbard will remain with the Company as a consultant, advising on the new drug application (NDA) filing and regulatory strategy for fostamatinib in ITP. Anne-Marie Duliege, M.D., M.S. assumed the role of CMO of the Company on March 7, 2016.

Clinical Stage Programs

Fostamatinib—Immune Thrombocytopenic Purpura

Disease background. Chronic ITP affects an estimated 60,000 to 125,000 people in the U.S. In patients with ITP, the immune system attacks and destroys the body's own blood platelets, which play an active role in blood clotting and healing. ITP patients can suffer extraordinary bruising, bleeding and fatigue as a result of low platelet counts. Current therapies for ITP include steroids, blood platelet production boosters that imitate thrombopoietin (TPOs) and splenectomy.

Orally-available SYK inhibitor program. Taken in tablet form, fostamatinib blocks the activation of SYK inside immune cells. ITP causes the body to produce antibodies that attach to healthy platelets in the blood stream. Immune cells recognize these antibodies and affix to them, which activates the SYK enzyme inside the immune cell, and triggers the destruction of the antibody and the attached platelet. When SYK is inhibited by fostamatinib, it interrupts this immune cell function and allows the platelets to escape destruction. The results of our Phase 2 clinical trial, in which fostamatinib was orally administered to sixteen adults with chronic ITP, published in *Blood*, showed that fostamatinib significantly increased the platelet counts of certain ITP patients, including those who had failed other currently available agents.

In October 2013, we met with the U.S. Food and Drug Administration (FDA) for an end-of-Phase 2 meeting for fostamatinib in ITP. Based on that meeting, we designed a Phase 3 clinical program, called fostamatinib in thrombocytopenia (FIT), in which a total of 150 ITP patients were randomized into two identical multi-center, double-blind, placebo-controlled clinical trials. The patients will have been diagnosed with persistent or chronic ITP, and have blood platelet counts consistently below 30,000 per microliter of blood. Two-thirds of the subjects will receive fostamatinib orally at 100 mg bid (twice daily) and the other third will receive placebo on the same schedule. Subjects are expected to remain on treatment for 24 weeks. At week four of treatment, subjects who meet certain platelet count and tolerability thresholds will have their dosage of fostamatinib (or corresponding placebo) increased to 150 mg bid. The primary efficacy endpoint of this program is a stable platelet response by week 24 with platelet counts at or above 50,000 per microliter of blood for at least four of the final six qualifying blood draws. In August 2015, the FDA granted our request for Orphan Drug designation to fostamatinib, our oral SYK inhibitor, for the treatment of ITP. On April 1, 2016, we announced that we have completed enrollment for both studies in the FIT Phase 3 clinical program of fostamatinib in ITP. The results from the first study are expected by the end of August 2016, with the results for the second study expected a few months later. We plan to submit a New Drug Application to the FDA in the first quarter of 2017, subject to the positive results of the program.

Fostamatinib—IgAN

Disease background. IgAN is an autoimmune disease that severely affects the functioning of the kidneys. An estimated 12,000 Americans are diagnosed with this type of glomerulonephritis each year, with 25% of its victims eventually requiring dialysis and/or kidney transplantation over time. IgAN is characterized by the deposition of IgA immune complexes in the glomeruli of the kidneys leading to an inflammatory response and subsequent tissue damage that ultimately disrupts the normal filtering function of the kidneys. By inhibiting SYK in kidney cells, fostamatinib may block the signaling of IgA immune complex receptors and arrest or slow destruction of the glomeruli.

Orally-available SYK inhibitor program. Our Phase 2 clinical trial in patients with IgAN, called SIGN (SYK Inhibition for Glomerulonephritis) completed enrollment for the first cohort and is currently enrolling patients for the second cohort. We expect to report top line results for the first cohort by the end of 2016.

Fostamatinib—AIHA

Disease background. AIHA is a rare, serious blood disorder where the immune system produces antibodies that result in the destruction of the body's own red blood cells. Symptoms can include fatigue, shortness of breath, rapid heartbeat, jaundice or enlarged spleen. While no medical treatments are currently approved for AIHA, physicians generally treat acute and chronic cases of the disorder with corticosteroids, other immuno-suppressants, or splenectomy.

Research has shown that inhibiting SYK with fostamatinib may reduce the destruction of red blood cells. This disorder affects an estimated 40,000 Americans, for whom no approved treatment options currently exist.

Orally available SYK inhibitor program We initiated a Phase 2 clinical trial in patients with AIHA in February 2016. The trial is an open-label, multi-center, two-stage study that will evaluate the efficacy and safety of fostamatinib in patients with warm antibody AIHA who have previously received treatment for the disorder, but have relapsed. Stage 1 will enroll 17 patients who will receive 150 mg of fostamatinib orally twice a day for a period of 12 weeks. The patients will return to the clinic every two weeks for blood draws and medical assessment. The primary efficacy endpoint of this study is to achieve increased hemoglobin levels by week 12 of greater than 10 g/dL, and greater than or equal to 2 g/dL higher than baseline. Stage 2 will include an additional 20 patients who will receive the same treatment protocol as Stage 1. We expect to have results of the Stage 1 segment of the trial in early 2017. With this data, we will evaluate the best way forward and potentially an expedited path for pursuing AIHA.

R348—Dry Eye in Patients with Ocular Graft-Versus-Host Disease (GvHD)

Disease background. According to an article published by the American Academy of Ophthalmology, a significant number (22% to 80%) of patients with acute or chronic GvHD develop a secondary incidence of dry eye (keratoconjunctivitis sicca). In general, these patients are severely ill and have a great medical need for a topical therapy that may better manage their symptoms.

Topical Ophthalmic JAK/SYK inhibitor program. We recently completed our Phase 2 study of patients with ocular GvHD to determine if R348, an ophthalmic JAK/SYK inhibitor, reduces inflammation and limits the damage to the eye tissue caused by the disease. The study was comprised of 30 patients that were randomized to receive either R348 at 0.2%, 0.5% or a placebo eye drops for 12 weeks. The primary endpoint was a mean change from baseline at 12 weeks in total fluorescein staining score (CFS) of all corneal regions, a measure of corneal epithelial damage. In the “per protocol” population which is the pre-specified efficacy analysis population, the mean change from baseline at 12 weeks in CFS scores was -2.11 for the placebo group, -4.14 in the R348 0.2% group ($p=0.186$ versus placebo group), and -6.00 in the R348 0.5% group ($p=0.053$ versus placebo, using nonparametric testing). As such, the primary endpoint was not met based on the results of the study. R348 was well tolerated by patients at both doses.

Research/Preclinical Programs

We are conducting proprietary research in the broad disease areas of inflammation/immunology, immuno-oncology, cancers and muscle wasting/muscle endurance. Within each disease area, our researchers are investigating mechanisms of action as well as screening compounds against potential novel targets and optimizing those leads that appear to have the greatest potential.

We are conducting preclinical studies to identify a lead molecule for our IRAK program. This program may provide opportunities in both the oncology and immunology areas. We expect to file an Investigational New Drug (IND) with our molecule in the first half of 2017.

Leveraging our extensive immunology expertise, we are continuing to explore novel immuno-oncology approaches to treating various oncology indications. The first of these resulted in a collaboration with BMS for TGF beta receptor kinase inhibitors. Several other projects are currently underway.

Sponsored Research and License Agreements

We conduct research and development programs independently and in connection with our corporate collaborators. We are a party to a collaboration agreement with BMS for the discovery, development and commercialization of cancer immunotherapies based on our small molecule TGF beta receptor kinase inhibitors, as discussed below. Our participation in the collaboration is limited to the Joint Research Committee and the performance of research activities based on billable full-time equivalent fees as specified in the collaboration agreement. We do not have ongoing participation obligations under our agreements with Aclaris for the development and commercialization of certain JAK inhibitors for the treatment of alopecia areata and other dermatological conditions, AZ for the development

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and commercialization of R256, an inhaled JAK inhibitor, BerGenBio for the development and commercialization of an oncology program, and Daiichi to pursue research related to a specific target from a novel class of drug targets called ligases. Under these agreements, which we entered into in the ordinary course of business, we received or may be entitled to receive upfront cash payments, progress dependent contingent payments on events achieved by such partners and royalties on any net sales of products sold by such partners under the agreements. Total future contingent payments to us under all of these current agreements could exceed \$531.9 million if all potential product candidates achieved all of the payment triggering events under all of our current agreements (based on a single product candidate under each agreement). Of this amount, up to \$148.8 million relates to the achievement of development events, up to \$345.6 million relates to the achievement of regulatory events and up to \$37.5 million relates to the achievement of certain commercial or launch events. This estimated future contingent amount does not include any estimated royalties that could be due to us if the partners successfully commercialize any of the licensed products. Future events that may trigger payments to us under the agreements are based solely on our partners' future efforts and achievements of specified development, regulatory and/or commercial events. Because we do not control the research, development or commercialization of the product candidates generated under these agreements, we are not able to reasonably estimate when, if at all, any contingent payments would become payable to us. As such, the contingent payments we could receive thereunder involve a substantial degree of risk to achieve and may never be received in the next 12 months or thereafter. Accordingly, we do not expect, and investors should not assume, that we will receive all of the potential contingent payments provided for under these agreements and it is possible that we may never receive any additional significant contingent payments or royalties under these agreements.

In October 2015, we entered into a non-exclusive license agreement with a third party, pursuant to which we received a payment in the single-digit millions in exchange for granting a non-exclusive license to certain limited intellectual property rights. We concluded that the granting of the license, which was fully delivered to such third party in the fourth quarter of 2015, represents the sole deliverable under this agreement. Accordingly, we recognized the payment as revenue during the fourth quarter of 2015.

In August 2015, we entered into a license agreement with Aclaris, pursuant to which Aclaris will have exclusive rights and will assume responsibility for the continued development of certain JAK inhibitor compounds for the treatment of alopecia areata and other dermatological conditions. Under the license agreement, we received a non-creditable and non-refundable upfront payment of \$8.0 million in September 2015. We are also entitled to receive development and regulatory contingent fees that could exceed \$80.0 million for a successful compound approved in certain indications. In addition, we are also eligible to receive tiered royalties on the net sales of any products under the agreement. We concluded that the granting of the license, which has been fully delivered to Aclaris in the third quarter of 2015, represents the sole deliverable under this agreement. Accordingly, we recognized the \$8.0 million payment as revenue during the third quarter of 2015.

In February 2015, we entered into a collaboration agreement with BMS for the discovery, development and commercialization of cancer immunotherapies based on our extensive portfolio of small molecule TGF beta receptor kinase inhibitors. Under the collaboration agreement, BMS will have exclusive rights and will be solely responsible for the clinical development and commercialization of any products. Pursuant to the collaboration agreement with BMS, we received a non-creditable and non-refundable upfront payment of \$30.0 million in March 2015. We are also entitled to receive development and regulatory contingent fees that could exceed \$309.0 million for a successful compound approved in certain indications. In addition, we are also eligible to receive tiered royalties on the net sales of any products from the collaboration. BMS shall also reimburse us for agreed upon costs based on a contractual cost per full-time equivalent employee in connection with the performance of research activities during the research term. Under the collaboration agreement, we were obligated to provide the following deliverables: (i) granting of license rights to our program, (ii) participation in the Joint Research Committee, and (iii) performance of research activities. We concluded that these deliverables are a single unit of accounting as the license does not have stand-alone value apart from the other deliverables. Accordingly, the \$30.0 million upfront payment is being recognized ratably as revenue from the effective date of the agreement through September 2016, the end of the estimated research term. We believe that straight-line recognition of this revenue is appropriate as the research is expected to be performed ratably over the research period. As of June 30, 2016, we were not notified by BMS of its intention to extend the estimated research term under which we will perform research activities. However, BMS does continue to evaluate compounds from the extensive portfolio under the agreement on its own, for designation of a compound as an early candidate nomination. During the three and six

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months ended June 30, 2016, we recognized revenue of \$4.8 million and \$9.7 million, respectively, relating to the upfront payment and \$95,000 and \$290,000, respectively, relating to the research activities we performed. During the three and six months ended June 30, 2015, we recognized revenue of \$4.8 million and \$6.9 million, respectively, relating to the upfront payment and \$350,000 and \$456,000, respectively, relating to the research activities we performed. As of June 30, 2016, deferred revenue related to the \$30.0 million upfront payment was \$3.8 million, which will be fully recognized as revenue in the third quarter of 2016.

In June 2011, we entered into an exclusive license agreement with BerGenBio for the development and commercialization of an oncology program. BerGenBio is responsible for all activities it wishes to perform under the license we granted to it. In June 2016, we received contingent payments of \$1.7 million relating to a time-based non-refundable fee and \$2.0 million relating to BerGenBio's exercise of certain option rights before the prescription period to exercise the rights expired. All deliverables under the agreement had been previously delivered, as such, the above payments of \$3.7 million triggered by the above time-based and contingent events were recognized as revenue in the second quarter of 2016.

Research and Development Expenses

Our research and development expenditures include costs related to preclinical and clinical trials, scientific personnel, supplies, equipment, consultants, sponsored research, stock based compensation, and allocated facility costs.

We do not track fully burdened research and development costs separately for each of our drug candidates. We review our research and development expenses by focusing on three categories: research, development, and other. Our research team is focused on creating a portfolio of product candidates that can be developed into small molecule therapeutics in our own proprietary programs or with potential collaborative partners and utilizes our robust discovery engine to rapidly discover and validate new product candidates in our focused range of therapeutic indications. "Research" expenses relate primarily to personnel expenses, lab supplies, fees to third party research consultants and compounds. Our development group leads the implementation of our clinical and regulatory strategies and prioritizes disease indications in which our compounds may be studied in clinical trials. "Development" expenses relate primarily to clinical trials, personnel expenses, lab supplies and fees to third party research consultants. "Other" expenses primarily consist of allocated facilities costs and allocated stock based compensation expense relating to personnel in research and development groups.

In addition to reviewing the three categories of research and development expenses described in the preceding paragraph, we principally consider qualitative factors in making decisions regarding our research and development programs, which include enrollment in clinical trials and the results thereof, the clinical and commercial potential for our drug candidates and competitive dynamics. We also make our research and development decisions in the context of our overall business strategy, which includes the evaluation of potential collaborations for the development of our drug candidates.

The following table presents our total research and development expense by category (in thousands).

	Three Months Ended		Six Months Ended		From January 1, 2007* to June 30, 2016
	June 30,		June 30,		
	2016	2015	2016	2015	
Categories:					
Research	\$ 5,814	\$ 5,265	\$ 12,414	\$ 10,803	\$ 208,912
Development	7,642	5,946	16,070	12,157	299,353
Other	4,012	3,848	7,157	7,801	216,522
	<u>\$ 17,468</u>	<u>\$ 15,059</u>	<u>\$ 35,641</u>	<u>\$ 30,761</u>	<u>\$ 724,787</u>

* We started tracking research and development expense by category on January 1, 2007.

"Other" expenses mainly represent allocated facilities costs of approximately \$2.6 million and \$2.8 million for the three months ended June 30, 2016 and 2015, respectively, and allocated stock-based compensation expenses of

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approximately \$1.4 million and \$1.1 million for the three months ended June 30, 2016 and 2015, respectively. For the six months ended June 30, 2016 and 2015, allocated facilities costs were approximately \$5.1 million and \$5.6 million, respectively, and allocated stock-based compensation expenses were approximately \$2.1 million and \$2.2 million, respectively.

For the three and six months ended June 30, 2016, a major portion of our total research and development expense was associated with salaries of our research and development personnel, our ITP, AIHA and IgAN programs, and allocated facilities costs. For the three and six months ended June 30, 2015, a major portion of our total research and development expense was associated with our ITP and IgAN programs, salaries of our research and development personnel, and allocated facilities costs.

We do not have reliable estimates regarding the timing of our clinical trials. Preclinical testing and clinical development are long, expensive and uncertain processes. 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 1, 2 and 3 clinical trials in humans. Significant delays in clinical testing could materially impact our product development costs and timing of completion of the clinical trials. We do not know whether planned clinical trials will begin on time, will need to be halted or revamped or will be completed on schedule, or at all. Clinical trials can be delayed for a variety of reasons, including delays in obtaining regulatory approval to commence a trial, delays from scale up, delays in reaching agreement on acceptable clinical trial agreement terms with prospective clinical sites, delays in obtaining institutional review board approval to conduct a clinical trial at a prospective clinical site or delays in recruiting subjects to participate in a clinical trial.

We currently do not have reliable estimates of total costs for a particular drug candidate to reach the market. Our potential products are subject to a lengthy and uncertain regulatory process that may involve unanticipated additional clinical trials and may not result in receipt of the necessary regulatory approvals. Failure to receive the necessary regulatory approvals would prevent us from commercializing the product candidates affected. In addition, clinical trials of our potential products may fail to demonstrate safety and efficacy, which could prevent or significantly delay regulatory approval.

For further discussion on research and development activities, see “Research and Development Expense” under “Results of Operations” below.

Results of Operations

Three and Six Months Ended June 30, 2016 and 2015

Revenues

	Three Months Ended			Six Months Ended		
	June 30,		Aggregate Change	June 30,		Aggregate Change
	2016	2015 (in thousands)		2016	2015 (in thousands)	
<i>Contract revenues from collaborations</i>	\$ 8,594	\$ 5,184	\$ 3,410	\$ 13,623	\$ 7,362	\$ 6,261

Contract revenues from collaborations of \$8.6 million during the three months ended June 30, 2016 were comprised of the amortization of the \$30.0 million upfront payment and FTE fees we earned from BMS of \$4.8 million and \$95,000, respectively, as well as the contingent payments amounting to \$3.7 million we received pursuant to our license agreement with BerGenBio. Contract revenues from collaborations of \$13.6 million during the six months ended June 30, 2016 were comprised of the amortization of the upfront payment and FTE fees we earned from BMS of \$9.7 million and \$290,000, respectively, as well as the contingent payments amounting to \$3.7 million we received from BerGenBio. Contract revenues from collaborations of \$5.2 million and \$7.4 million during the three and six months ended June 30, 2015, respectively, were comprised of the amortization of the \$30.0 million upfront payment and FTE fees we earned from BMS.

As of June 30, 2016, deferred revenue related to the \$30.0 million upfront payment was \$3.8 million. We expect the remaining unamortized portion of the upfront payment to be fully recognized as revenue in the third quarter of 2016.

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Our potential future revenues may include payments from our current partners and from new partners with whom we enter into agreements in the future, if any, the timing and amount of which is unknown at this time.

Research and Development Expense

	Three Months Ended			Six Months Ended		
	June 30,		Aggregate Change	June 30,		Aggregate Change
	2016	2015		2016	2015	
	(in thousands)			(in thousands)		
Research and development expense	\$ 17,468	\$ 15,059	\$ 2,409	\$ 35,641	\$ 30,761	\$ 4,880
Stock-based compensation expense included in research and development expense	\$ 1,410	\$ 1,056	\$ 354	\$ 2,103	\$ 2,216	\$ (113)

The increase in research and development expense for the three months ended June 30, 2016, compared to the same period in 2015, was primarily due to the increase in research and development costs related to our fostamatinib in ITP, AIHA and IgAN programs, as well as the increase in stock-based compensation as discussed below. The increase in research and development expense for the six months ended June 30, 2016, compared to the same period in 2015, was primarily due to the increase in research and development costs related to our fostamatinib in ITP, AIHA and IgAN programs. We expect that our research and development expense will remain relatively consistent with the previous quarter as we continue to ramp up our efforts related to NDA submission and, at the same time, wind down our Phase 3 clinical trials in ITP.

During the quarter ended June 30, 2016, we entered into severance agreements with certain employees. As part of the severance arrangements, we extended the date through which such former employees had the right to exercise their vested options. In addition, we also accelerated the vesting of certain unvested stock options granted to a former employee. As a result of these modifications, we recorded incremental stock-based compensation expense in the second quarter of 2016 of \$641,000.

General and Administrative Expense

	Three Months Ended			Six Months Ended		
	June 30,		Aggregate Change	June 30,		Aggregate Change
	2016	2015		2016	2015	
	(in thousands)			(in thousands)		
General and administrative expense	\$ 4,774	\$ 4,099	\$ 675	\$ 9,197	\$ 8,816	\$ 381
Stock-based compensation expense included in general and administrative expense	\$ 604	\$ 853	\$ (249)	\$ 1,349	\$ 1,747	\$ (398)

The increase in general and administrative expense for the three and six months ended June 30, 2016, compared to the same periods in 2015, was primarily due to the increase in recruitment costs for certain personnel, as well as increase in consulting fees and facility costs. This was partially offset by the decrease in stock-based compensation expense due mainly to the full recognition of stock-based compensation expense related to certain performance-based stock options granted in the prior years.

Interest Income

	Three Months Ended			Six Months Ended		
	June 30,		Aggregate Change	June 30,		Aggregate Change
	2016	2015		2016	2015	
	(in thousands)			(in thousands)		
Interest income	\$ 115	\$ 62	\$ 53	\$ 218	\$ 110	\$ 108

Interest income results from our interest-bearing cash and investment balances. The increase in interest income for the three months and six months ended June 30, 2016, as compared to the same periods in 2015 was primarily due to the higher yield on our investments.

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 U.S. generally accepted accounting principles (U.S. GAAP). The preparation of these financial statements requires us to make estimates and assumptions that affect the amounts reported in the financial statements and accompanying notes. We evaluate our estimates, including those related to our stock based compensation, impairment issues, the estimated useful life of assets, estimated research term on our collaboration agreement with BMS, and estimated accruals, particularly research and development accruals, on an ongoing basis. 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 that there have been no significant changes in our critical accounting policies and estimates disclosed in our Annual Report on Form 10-K for the year ended December 31, 2015, as filed with the SEC.

Recent Accounting Pronouncements

In August 2014, the FASB issued ASU No. 2014-15—*Disclosure of Uncertainties about an Entity's Ability to Continue as a Going Concern under ASC Subtopic 205-40, Presentation of Financial Statements—Going Concern*. ASU No. 2014-15 provides guidance about management's responsibility to evaluate whether there is substantial doubt about an entity's ability to continue as a going concern and to provide related footnote disclosures. Management's evaluation should be based on relevant conditions and events that are known and reasonably knowable at the date that the financial statements are issued (or at the date that the financial statements are available to be issued when applicable). Substantial doubt about an entity's ability to continue as a going concern exists when relevant conditions and events, considered in the aggregate, indicate that it is probable that the entity will be unable to meet its obligations as they become due within one year after the date that the financial statements are issued (or available to be issued). ASU No. 2014-15 is effective for the annual period ending after December 15, 2016 and early adoption is permitted. We plan to adopt this new standard in our annual financial statements for the year ending December 31, 2016. We will continue to evaluate the guidance under ASU No. 2014-15 and present the required disclosures within our financial statements at the time of adoption. The actual impact will be dependent upon our liquidity and the nature or significance of future events or conditions that exist upon the adoption of this new standard.

In May 2014, the FASB issued ASU No. 2014-09—*Revenue from Contracts with Customers*, which supersedes the revenue recognition requirements under ASC Topic 605, *Revenue Recognition*, and most industry-specific guidance under the ASC. The core principle of ASU No. 2014-09 is that an entity should recognize revenue when it transfers promised goods or services to customers in an amount that reflects the consideration to which the entity expects to be entitled in exchange for those goods or services. ASU No. 2014-09 defines a five step process to achieve this core principle and, in doing so, it is possible more judgment and estimates may be required within the revenue recognition process than required under existing U.S. GAAP including identifying performance obligations in the contract, estimating the amount of variable consideration to include in the transaction price and allocating the transaction price to each separate performance obligation. ASU No. 2014-09 also requires additional disclosures to enable users of financial statements to understand the nature, amount, timing and uncertainty of revenue and cash flows arising from customer contracts. ASU No. 2014-09 allows for either full retrospective or modified retrospective adoption, and we have not yet determined which approach we will apply. In July 2015, the FASB deferred by one year the effective date of ASU No. 2014-09 with the new effective date beginning after December 15, 2017, and the interim periods within that year and will allow early adoption for all entities as of the original effective date for public business entities, which was annual reporting periods beginning after December 15, 2016. We plan to adopt this new standard on January 1, 2018. We are currently evaluating the potential impact of the adoption of ASU No. 2014-09 on our financial statements and cannot estimate the impact of adoption at this time.

In February 2016, the FASB issued ASU No. 2016-02—*Leases*, which is aimed at making leasing activities more transparent, and requires substantially all leases be recognized by lessees on their balance sheet as a right-of-use asset and corresponding lease liability, including leases currently accounted for as operating leases. The guidance is

effective for all interim and annual reporting periods beginning after December 15, 2018. Early adoption is permitted. We plan to adopt this new standard on January 1, 2019. We are currently evaluating the potential impact of the adoption of ASU No. 2016-02 on our financial statements and cannot estimate the impact of adoption at this time.

In March 2016, the FASB issued ASU No. 2016-09—*Stock Compensation*, which is intended to simplify several aspects of the accounting for share-based payment award transactions, including the income tax consequences, an option to recognize gross stock compensation expense with actual forfeitures recognized as they occur, as well as certain classifications on the statement of cash flows. The guidance will be effective for the fiscal year beginning after December 15, 2016, including interim periods within that year. We plan to adopt this new standard on January 1, 2017. We are currently evaluating the potential impact of the adoption of ASU No. 2016-09 on our financial statements and cannot estimate the impact of adoption at this time.

Liquidity and Capital Resources

Cash Requirements

From inception, we have financed our operations primarily through sales of equity securities, contract payments under our collaboration agreements and equipment financing arrangements. We have consumed substantial amounts of capital to date as we continue our research and development activities, including preclinical studies and clinical trials.

As of June 30, 2016, we had approximately \$94.9 million in cash, cash equivalents and short term investments, as compared to approximately \$126.3 million as of December 31, 2015, a decrease of approximately \$31.4 million. The decrease was primarily attributable to the payments associated with funding our operating expenses for the six months ended June 30, 2016. In June 2016, we received payments from BerGenBio amounting to \$3.7 million pursuant to our exclusive license agreement which we signed in June 2011. In August 2015, we entered into Controlled Equity OfferingSM Sales Agreement with Cantor, as sales agent, pursuant to which we may sell, through Cantor, up to an aggregate of \$30.0 million in shares of our common stock. The common stock is sold at prevailing market prices at the time of the sale, and, as a result, prices may vary. During the six months ended June 30, 2016, 3,711,096 shares of common stock were sold under the Sales Agreement, with an aggregate net proceeds of \$9.3 million. As of June 30, 2016, 5,433,408 shares of our common stock had been issued under the Sales Agreement with aggregate net proceeds of \$14.9 million. As of June 30, 2016, we had approximately \$14.7 million of remaining common stock registered for sale under the Sales Agreement. In December 2014, we entered into a sublease agreement with an unrelated third party to occupy a portion of our research and office space. We expect to receive approximately \$4.4 million in future sublease income (excluding our subtenant's share of facility's operating expenses) over the remaining term of the sublease through January 2018. During the six months ended June 30, 2016, we received approximately \$2.2 million of sublease income and reimbursements.

We believe that our existing capital resources will be sufficient to support our current and projected funding requirements into the third quarter of 2017. We have based this estimate on assumptions that may prove to be wrong, and we could utilize our available capital resources sooner than we currently expect. Because of the numerous risks and uncertainties associated with the development of our product candidates and other research and development activities, including risks and uncertainties that could impact the rate of progress of our development activities, we are unable to estimate with certainty the amounts of increased capital outlays and operating expenditures associated with our current and anticipated clinical trials and other research and development activities.

Our operations will require significant additional funding for the foreseeable future. Unless and until we are able to generate a sufficient amount of product, royalty or milestone revenue, we expect to finance future cash needs through public and/or private offerings of equity securities, debt financings and/or collaboration and licensing arrangements, and to a much lesser extent through interest income earned on the investment of our excess cash balances and short term investments. With the exception of contingent and royalty payments that we may receive under our existing collaborations, we do not currently have any committed future funding. To the extent we raise additional capital by issuing equity securities, our stockholders could at that time experience substantial dilution. Any debt financing that we are able to obtain may involve operating covenants that restrict our business. To the extent that we raise additional

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funds through collaboration and licensing arrangements, we may be required to relinquish some of our rights to our technologies or product candidates, or grant licenses on terms that are not favorable to us.

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

- the progress and success of our clinical trials and preclinical activities (including studies and manufacture of materials) of our product candidates conducted by us;
- the success of our corporate collaborations or license agreements;
- the progress of research programs carried out by us;
- any changes in the breadth of our research and development programs;
- the ability to achieve the events identified in our collaborative agreements that trigger payments to us from our collaboration partners;
- the progress of the research and development efforts of our collaborative partners;
- our ability to manage our growth;
- competing technological and market developments;
- the costs and timing of obtaining, enforcing and defending our patent and other intellectual property rights; and
- the costs and timing of regulatory filings and approvals by us and our collaborators.

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.

For the six months ended June 30, 2016 and 2015, we maintained an investment portfolio primarily in money market funds, U. S. treasury bills, government-sponsored enterprise securities, and corporate bonds and commercial paper. Cash in excess of immediate requirements is invested with regard to liquidity and capital preservation. Wherever possible, we seek to minimize the potential effects of concentration and degrees of risk. We will continue to monitor the impact of the changes in the conditions of the credit and financial markets to our investment portfolio and assess if future changes in our investment strategy are necessary.

Cash Flows from Operating, Investing and Financing Activities

	<u>Six Months Ended June 30,</u>	
	<u>2016</u>	<u>2015</u>
	<u>(in thousands)</u>	
Net cash provided by (used in):		
Operating activities	\$ (40,854)	\$ (159)
Investing activities	12,377	1,217
Financing activities	9,967	1,029
Net increase (decrease) in cash and cash equivalents	<u>\$ (18,510)</u>	<u>\$ 2,087</u>

Net cash used in operating activities was approximately \$40.9 million for the six months ended June 30, 2016, compared to approximately \$159,000 for the six months ended June 30, 2015. Net cash used in operating activities for the six months ended June 30, 2016 was primarily due to the cash payments related to our research and development programs, partially offset by the \$3.7 million payments we received from BerGenBio. Net cash used in operating

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activities for the six months ended June 30, 2015 was primarily due to the cash payments related to our research and development programs, partially offset by the \$30.0 million upfront payment we received from BMS. The timing of cash requirements may vary from period to period depending on our research and development activities, including our planned preclinical and clinical trials, and future requirements to establish commercial capabilities for any products that we may develop.

Net cash provided by investing activities was approximately \$12.4 million for the six months ended June 30, 2016, compared to approximately \$1.2 million for the six months ended June 30, 2015. Net cash provided by investing activities in each period related to net maturities of short-term investments, partially offset by capital expenditures. Capital expenditures were approximately \$546,000 for the six months ended June 30, 2016, compared to approximately \$105,000 for the same period in 2015.

Net cash provided by financing activities was approximately \$10.0 million for the six months ended June 30, 2016, compared to approximately \$1.0 million for the six months ended June 30, 2015. Net cash provided by financing activities for the six months ended June 30, 2016 consisted of net proceeds of \$9.3 million from issuance of shares under our Sales Agreement as well as proceeds from exercise of outstanding options and issuance of shares under the Purchase Plan. Net cash provided by financing activities for the six months ended June 30, 2015 was primarily due to the proceeds from the issuance of shares under our Purchase Plan.

Off-Balance Sheet Arrangements

As of June 30, 2016, we had no off-balance sheet arrangements (as defined in Item 303(a)(4)(ii) of Regulation S-K under the Exchange Act).

Contractual Obligations

We conduct our research and development programs internally and through third parties that include, among others, arrangements with universities, consultants and contract research organizations. We have contractual arrangements with these parties, however our contracts with them are cancelable generally on reasonable notice within one year and our obligations under these contracts are primarily based on services performed. We do not have any purchase commitments under any collaboration arrangements.

As of June 30, 2016, we had the following contractual commitments:

	Total	Less than 1 Year	Payment Due By Period		More than 5 Years
			1 - 3 Years	3 - 5 Years	
(in thousands)					
Facilities lease(1)	\$ 25,294	\$ 15,841	\$ 9,453	\$ —	\$ —

- (1) In December 2014, we entered into a sublease agreement with an unrelated third party to lease up a portion of the research and office space. The facilities lease obligations above do not include the sublease income of \$4.4 million over the remaining term of the sublease.

Item 3. Quantitative and Qualitative Disclosures About Market Risk

During the six months ended June 30, 2016, there were no material changes to our market risk disclosures as set forth in Part II, Item 7A, "Quantitative and Qualitative Disclosures About Market Risk," of our Annual Report on Form 10-K for the year ended December 31, 2015.

Item 4. Controls and Procedures

Evaluation of Disclosure Controls and Procedures. Based on the evaluation of our disclosure controls and procedures (as defined in Rules 13a-15(e) and 15d-15(e) under the Exchange Act), our chief executive officer and chief financial officer have concluded that, as of the end of the period covered by this report, our disclosure controls and procedures were effective.

Changes in Internal Controls. There were no changes in our internal control over financial reporting that occurred during the quarter ended June 30, 2016 that have materially affected, or are reasonably likely to materially affect, our internal control over financial reporting.

Limitations on the Effectiveness of Controls. A control system, no matter how well conceived and operated, can provide only reasonable, not absolute, assurance that the objectives of the controls are met. Because of the inherent limitations in all control systems, no evaluation of controls can provide absolute assurance that all control issues, if any, within a company have been detected. Accordingly, our disclosure controls and procedures are designed to provide reasonable, not absolute, assurance that the objectives of our disclosure control system are met and, as set forth above, our chief executive officer and chief financial officer have concluded, based on their evaluation as of the end of the period covered by this report, that our disclosure controls and procedures were sufficiently effective to provide reasonable assurance that the objectives of our disclosure control system were met.

PART II. OTHER INFORMATION

Item 1. Legal Proceedings

None.

Item 1A. Risk Factors

In evaluating our business, you should carefully consider the following risks, as well as the other information contained in this Quarterly Report on Form 10-Q. These risk factors could cause our actual results to differ materially from those contained in forward-looking statements we have made in this Quarterly Report on Form 10-Q and those we may make from time to time. If any of the following risks actually occurs, our business, financial condition and operating results could be harmed. 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.

We have marked with an asterisk () those risk factors below that reflect a substantive change from the risk factors included in our Annual Report on Form 10-K filed with the Securities and Exchange Commission on March 8, 2016.*

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

We have consumed substantial amounts of capital to date as we continue our research and development activities, including preclinical studies and clinical trials. We may seek another collaborator or licensee in the future for further clinical development and commercialization of fostamatinib, as well as our other clinical programs, which we may not be able to obtain on commercially reasonable terms or at all. We believe that our existing capital resources will be sufficient to support our current and projected funding requirements into the third quarter of 2017. We have based this estimate on assumptions that may prove to be wrong, and we could utilize our available capital resources sooner than we currently expect. Because of the numerous risks and uncertainties associated with the development of our product candidates and other research and development activities, including risks and uncertainties that could impact the rate of progress of our development activities, we are unable to estimate with certainty the amounts of increased capital outlays and operating expenditures associated with our current and anticipated clinical trials and other research and development activities. We will continue to need additional capital and the amount of future capital needed will depend largely on the success of our internally developed programs as they proceed in later and more expensive clinical trials, including any additional clinical trials that we may decide to conduct with respect to fostamatinib. Unless and until we are able to generate a sufficient amount of product, royalty or milestone revenue, which may never occur, we expect to finance future cash needs through public and/or private offerings of equity securities, debt financings or collaboration and licensing arrangements, as well as through interest income earned on the investment of our cash balances and short-term investments. With the exception of contingent and royalty payments that we may receive under our existing collaborations, we do not currently have any commitments for future funding. We do not know whether additional financing will be available when needed, or that, if available, we will obtain financing on reasonable terms.

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To the extent we raise additional capital by issuing equity securities in the future, our stockholders could at that time experience substantial dilution. Any debt financing that we are able to obtain may involve operating covenants that restrict our business. To the extent that we raise additional funds through any new collaboration and licensing arrangements, we may be required to relinquish some rights to our technologies or product candidates, or grant licenses on terms that are not favorable to us.

Our future funding requirements will depend on many uncertain factors.*

Our future funding requirements will depend upon many factors, many of which are beyond our control, including, but not limited to:

- the progress and success of our clinical trials and preclinical activities (including studies and manufacture of materials) of our product candidates conducted by us;
- the progress of research and development programs carried out by us and our collaborative partners;
- any changes in the breadth of our research and development programs;
- the ability to achieve the events identified in our collaborative agreements that may trigger payments to us from our collaboration partners;
- our ability to acquire or license other technologies or compounds that we may seek to pursue;
- our ability to manage our growth;
- competing technological and market developments;
- the costs and timing of obtaining, enforcing and defending our patent and other intellectual property rights;
- the costs and timing of regulatory filings and approvals by us and our collaborators; and
- expenses associated with any unforeseen litigation, including any securities class action lawsuits.

Insufficient funds may require us to delay, scale back or eliminate some or all of our research and 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.

There is a high risk that drug discovery and development efforts might not generate successful product candidates.*

At the present time, the majority of our operations are focused on various stages of drug identification and development. We currently have various product candidates in the clinical testing stage. In our industry, it is statistically unlikely that the limited number of compounds that we have identified as potential product candidates will actually lead to successful product development efforts. We have invested a significant portion of our efforts and financial resources into the development of fostamatinib. Our ability to generate product revenue, which will not occur until after regulatory approval, if ever, will depend on the successful development, regulatory approval and eventual commercialization of one of our product candidates. For example, we do not know if our Phase 3 clinical program to study fostamatinib in ITP will be successful, or when fostamatinib in ITP will be granted regulatory approval, if at all.

Our compounds in clinical trials and our future leads for potential drug compounds are subject to the risks and failures inherent in the development of pharmaceutical products. These risks include, but are not limited to, the inherent difficulty in selecting the right drug and drug target and avoiding unwanted side effects, as well as unanticipated problems relating to product development, testing, enrollment, obtaining regulatory approvals, maintaining regulatory compliance, manufacturing, competition and costs and expenses that may exceed current estimates. In future clinical trials, we or our partners may discover additional side effects and/or higher frequency of side effects than those observed

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in previously completed clinical trials. The results of preliminary and mid-stage clinical trials do not necessarily predict clinical or commercial success, and larger later-stage clinical trials may fail to confirm the results observed in the previous clinical trials. Similarly, a clinical trial may show that a product candidate is safe and effective for certain patient populations in a particular indication, but other clinical trials may fail to confirm those results in a subset of that population or in a different patient population, which may limit the potential market for that product candidate. With respect to our own compounds in development, we have established anticipated timelines with respect to the initiation of clinical trials based on existing knowledge of the compounds. However, we cannot provide assurance that we will meet any of these timelines for clinical development. Additionally, the initial results of the completed Phase 2 clinical trial of fostamatinib in ITP do not necessarily predict final results and the results may not be repeated in later clinical trials.

Because of the uncertainty of whether the accumulated preclinical evidence (pharmacokinetic, pharmacodynamic, safety and/or other factors) or early clinical results will be observed in later clinical trials, we can make no assurances regarding the likely results from our future clinical trials or the impact of those results on our business. If our clinical trials fail to meet the primary efficacy endpoints, the commercial prospects of our business may be harmed, our ability to generate product revenues may be delayed or eliminated or we may be forced to undertake other strategic alternatives that are in our shareholders' best interests, including cost reduction measures. If we are unable to obtain adequate financing or engage in a strategic transaction on commercially reasonable terms or at all, we may be required to implement further cost reduction strategies which could significantly impact activities related to our research and development of our future product candidates, and could significantly harm our business, financial condition and results of operations. In addition, these cost reduction strategies could cause us to further curtail our operations or take other actions that would adversely impact our shareholders.

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

Commercialization of our product candidates depends upon successful completion of extensive preclinical studies and clinical trials to demonstrate their safety and efficacy for humans. Preclinical testing and clinical development are long, expensive and uncertain processes.

In connection with clinical trials of our product candidates, we face the risks that:

- the product candidate may not prove to be effective;
- the product candidate may cause harmful side effects;
- the clinical results may not replicate the results of earlier, smaller trials;
- we, or the FDA or similar foreign regulatory authorities, may terminate or suspend the trials;
- our results may not be statistically significant;
- patient recruitment and enrollment may be slower than expected;
- patients may drop out of the trials; and
- regulatory and clinical trial requirements, interpretations or guidance may change.

We do not know whether we will be permitted to undertake clinical trials of potential products beyond the trials already concluded and the trials currently in process. It will 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. For example, R348, our topical ophthalmic JAK/SYK inhibitor, did not meet the primary or secondary endpoints in a completed Phase 2 clinical trial in patients with dry eye disease. Moreover, we or our collaborative partners or regulators may decide to discontinue development of any or all of these projects at any time for commercial, scientific or other reasons. For example, in August 2014, we have

discontinued our indirect AMPK activator program, R118, due to its side-effect profile in Phase 1 clinical trials.

We cannot assure you that we will be able to successfully complete the clinical development of our product candidates or receive regulatory approval to ultimately commercialize any of our other product candidates. For example, if we are unable to ultimately commercialize fostamatinib, our business will be harmed.

If we are unable to obtain regulatory approval to market products in the United States and foreign jurisdictions, we will not be permitted to commercialize products we or our collaborative partners may develop.

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

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

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

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

Before receiving FDA approval to market a product, we must demonstrate with substantial clinical evidence that the product is safe and effective in the patient population and the indication that will be treated. Data obtained from preclinical and clinical activities are susceptible to varying interpretations that could delay, limit or prevent regulatory approvals. In addition, delays or rejections may be encountered based upon additional government regulation from future legislation or administrative action or changes in FDA policy during the period of product development, clinical trials and FDA regulatory review. Failure to comply with applicable FDA or other applicable regulatory requirements may result in criminal prosecution, civil penalties, recall or seizure of products, total or partial suspension of production or injunction, adverse publicity, as well as other regulatory action against our potential products or us. Additionally, we have limited experience in conducting and managing the clinical trials necessary to obtain regulatory approval.

If regulatory approval of a product is granted, this approval will be limited to those indications or disease states and conditions for which the product is demonstrated through clinical trials to be safe and efficacious. We cannot assure you 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 approval.

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 and costs associated with FDA approval described above and may also include

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additional risks and costs, such as the risk that such foreign regulatory authorities, which often have different regulatory and clinical trial requirements, interpretations and guidance from the FDA, may require additional clinical trials or results for approval of a product candidate, any of which could result in delays, significant additional costs or failure to obtain such regulatory approval. For example, there can be no assurance that we or our collaborative partners will not have to provide additional information or analysis, or conduct additional clinical trials, before receiving approval to market product candidates.

Even if our product candidates receive regulatory approval, they may fail to achieve the degree of market acceptance by physicians, patients, healthcare payors and others in the medical community necessary for commercial success.*

If any of our product candidates receive regulatory approval, they may nonetheless fail to gain sufficient market acceptance by physicians, hospital administrators, patients, healthcare payors and others in the medical community. The degree of market acceptance of our product candidates, if approved for commercial sale, will depend on a number of factors, including the following:

- relative convenience and ease of administration;
- the willingness of the target patient population to try new therapies and of physicians to prescribe these therapies;
- the willingness of physicians to change their current treatment practices;
- the willingness of hospitals and hospital systems to include our product candidates as treatment options;
- demonstration of efficacy and safety in clinical trials;
- the prevalence and severity of any side effects;
- the ability to offer product candidates for sale at competitive prices;
- the price we charge for our product candidates;
- the strength of marketing and distribution support; and
- the availability of third-party coverage or reimbursement.

If any of our product candidates are approved, if at all, but do not achieve an adequate level of acceptance, we may not generate significant product revenue and we may not become profitable on a sustained basis.

We are in the initial stages of developing our sales, marketing and distribution capabilities. If we are unable to develop effective sales, marketing and distribution capabilities on our own or through collaborations or other marketing partners, we will not be successful in commercializing one or more of our product candidates.*

We are in the early stages of developing our sales and marketing infrastructure and have never sold, marketed or distributed therapeutic products. To achieve commercial success for any of our product candidates, if at all approved, we must either develop a sales and marketing organization or outsource these functions to third parties. There are risks involved with establishing our own sales and marketing capabilities, as well as entering into arrangements with third parties to perform these services. Developing an internal sales force is expensive and time-consuming and could delay any product launch. If the commercial launch of one or more of our product candidates for which we recruit a sales force and establish marketing capabilities is delayed or does not occur for any reason, we would have prematurely or unnecessarily incurred these commercialization expenses. This may be costly, and our investment would be lost if we cannot retain or reposition our sales and marketing personnel. On the other hand, if we enter into arrangements with third parties to perform sales, marketing and distribution services, our product revenues will be lower than if we market and sell any products that we develop ourselves.

We also may not be successful entering into arrangements with third parties to sell and market one or more of our product candidates or may be unable to do so on terms that are favorable to us. We likely will have little control over such third parties, and any of them may fail to devote the necessary resources and attention to sell and market one or more of our product candidates effectively, which could damage our reputation. If we do not establish sales and marketing capabilities successfully, either on our own or in collaboration with third parties, we will not be successful in commercializing our product candidates.

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

We may not be able to initiate or continue clinical studies or trials for our product candidates if we are unable to locate and enroll a sufficient number of eligible patients to participate in these clinical trials as required by the FDA or other regulatory authorities. Even if we are able to enroll a sufficient number of patients in our clinical trials, if the pace of enrollment is slower than we expect, the development costs for our product candidates may increase and the completion of our clinical trials may be delayed or our clinical trials could become too expensive to complete. Significant delays in clinical testing could materially impact our product development costs and timing. Our estimates regarding timing are based on a number of assumptions, including assumptions based on past experience with our other clinical programs. If we are unable to enroll the patients in these trials at the projected rate, the completion of the clinical program could be delayed and the costs of conducting the program could increase, either of which could harm our business.

Clinical trials can be delayed for a variety of reasons, including delays in obtaining regulatory approval to commence a study, delays from scaling up of a study, delays in reaching agreement on acceptable clinical trial agreement terms with prospective clinical sites, delays in obtaining institutional review board approval to conduct a study at a prospective clinical site or delays in recruiting subjects to participate in a study. In addition, we typically rely on third-party clinical investigators to conduct our clinical trials and other third-party organizations to oversee the operations of such trials and to perform data collection and analysis. The clinical investigators are not our employees, and we cannot control the amount or timing of resources that they devote to our programs. Failure of the third-party organizations to meet their obligations could adversely affect clinical development of our products. As a result, we may face additional delaying factors outside our control if these parties do not perform their obligations in a timely fashion. For example, any number of those issues could arise with our clinical trials causing a delay. Delays of this sort could occur for the reasons identified above or other reasons. If we have delays in conducting the clinical trials or obtaining regulatory approvals, our product development costs will increase. For example, we may need to make additional payments to third-party investigators and organizations to retain their services or we may need to pay recruitment incentives. If the delays are significant, our financial results and the commercial prospects for our product candidates will be harmed, and our ability to become profitable will be delayed. Moreover, these third-party investigators and organizations may also have relationships with other commercial entities, some of which may compete with us. If these third-party investigators and organizations assist our competitors at our expense, it could harm our competitive position.

We lack the capability to manufacture compounds for clinical development and rely on third parties to manufacture our product candidates, and we may be unable to obtain required material in a timely manner, at an acceptable cost or at a quality level required to receive regulatory approval. *

We currently do not have the manufacturing capabilities or experience necessary to produce our product candidates for clinical trials, including fostamatinib for ITP, AIHA and IgAN. For each clinical trial of our unpartnered product candidates, we rely on third-party manufacturers for the active pharmaceutical ingredients, as well as various manufacturers to manufacture starting components, excipients and formulated drug products. We rely on manufacturers to produce and deliver all of the materials required for our clinical trials, and many of our preclinical efforts, on a timely basis and to comply with applicable regulatory requirements, including the FDA's current Good Manufacturing Practices (cGMP). In addition, we rely on our suppliers to deliver sufficient quantities of materials produced under cGMP conditions to enable us to conduct planned preclinical studies and clinical trials.

Our current and anticipated future dependence upon these third-party manufacturers may adversely affect our ability to develop and commercialize product candidates on a timely and competitive basis. These manufacturers may not be able to produce material on a timely basis or manufacture material at the quality level or in the quantity required

to meet our development timelines and applicable regulatory requirements and may also experience a shortage in qualified personnel. We may not be able to maintain or renew our existing third-party manufacturing arrangements, or enter into new arrangements, on acceptable terms, or at all. Our third party manufacturers could terminate or decline to renew our manufacturing arrangements based on their own business priorities, at a time that is costly or inconvenient for us. If we are unable to contract for the production of materials in sufficient quantity and of sufficient quality on acceptable terms, our planned clinical trials may be significantly delayed. Manufacturing delays could postpone the filing of our IND applications and/or the initiation or completion of clinical trials that we have currently planned or may plan in the future.

Drug manufacturers are subject to ongoing periodic unannounced inspection by the FDA, the Drug Enforcement Administration, and other federal and state agencies to ensure strict compliance with cGMP and other government regulations and corresponding foreign standards. We do not have control over third-party manufacturers' compliance with these regulations and standards and they may not be able to comply. Switching manufacturers may be difficult because the number of potential manufacturers is limited. It may be difficult or impossible for us to find a replacement manufacturer quickly on acceptable terms, or at all. Additionally, if we are required to enter into new supply arrangements, we may not be able to obtain approval from the FDA of any alternate supplier in a timely manner, or at all, which could delay or prevent the clinical development and commercialization of any related product candidates. Failure of our third-party manufacturers or us to comply with applicable regulations could result in sanctions being imposed on us, including fines, civil penalties, delays in or failure to grant marketing approval of our product candidates, injunctions, delays, suspension or withdrawal of approvals, license revocation, seizures or recalls of products and compounds, operating restrictions and criminal prosecutions, any of which could significantly and adversely affect our business.

We have obtained orphan drug designation from the FDA for fostamatinib for the treatment of ITP, but we may be unable to maintain the benefits associated with orphan drug designation, including the potential for market exclusivity.

Under the Orphan Drug Act, the FDA may grant orphan drug designation to a drug or biologic intended to treat a rare disease or condition, which is defined as one occurring in a patient population of fewer than 200,000 in the United States, or a patient population greater than 200,000 in the United States where there is no reasonable expectation that the cost of developing the drug or biologic will be recovered from sales in the United States. In the United States, orphan drug designation entitles a party to financial incentives such as opportunities for grant funding towards clinical trial costs, tax advantages and user-fee waivers. In addition, if a product that has orphan drug designation subsequently receives the first FDA approval for the disease for which it has such designation, the product is entitled to orphan drug exclusivity, which means that the FDA may not approve any other applications, including a full Biologics License Application, or BLA, to market the same biologic for the same indication for seven years, except in limited circumstances, such as a showing of clinical superiority to the product with orphan drug exclusivity or where the manufacturer is unable to assure sufficient product quantity.

Even though we have received orphan drug designation for fostamatinib for the treatment of ITP, we may not be the first to obtain marketing approval for the orphan-designated indication due to the uncertainties associated with developing pharmaceutical products. In addition, exclusive marketing rights in the United States may be limited if we seek approval for an indication broader than the orphan-designated indication or may be lost if the FDA later determines that the request for designation was materially defective or if the manufacturer is unable to assure sufficient quantities of the product to meet the needs of patients with the rare disease or condition. Further, even if we obtain orphan drug exclusivity for a product, that exclusivity may not effectively protect the product from competition because different drugs with different active moieties can be approved for the same condition. Even after an orphan product is approved, the FDA can subsequently approve the same drug with the same active moiety for the same condition if the FDA concludes that the later drug is safer, more effective, or makes a major contribution to patient care. Orphan drug designation neither shortens the development time or regulatory review time of a drug nor gives the drug any advantage in the regulatory review or approval process.

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

We incurred a loss from operations of approximately \$31.2 million for the six months ended June 30, 2016. Other than for 2010, we have historically incurred losses from operations each year since we were incorporated in June 1996, due in large part to the significant research and development expenditures required to identify and validate new product candidates and pursue our development efforts. We expect to continue to incur losses from operations and there can be no assurance that we will generate operating income in the foreseeable future. Currently, our only potential sources of revenues are upfront payments, research and development contingent payments and royalty payments pursuant to our collaboration arrangements, which may never materialize if our collaborators do not achieve certain events or generate net sales to which these contingent payments are dependent on. If our drug candidates fail or do not gain regulatory approval, or if our drugs do not achieve market acceptance, we may not be profitable. As of June 30, 2016, we had an accumulated deficit of approximately \$1.0 billion. The extent of our future losses or profitability, if any, is highly uncertain.

If our corporate collaborations or license agreements are unsuccessful, or if we fail to form new corporate collaborations or license agreements, 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 now and in the future. We rely on these arrangements for not only financial resources, but also for expertise we need now and 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 these collaborations or additional collaborations with third parties, if any, will dedicate sufficient resources or if any development or commercialization efforts by third parties will be successful. In addition, our corporate collaborators may delay clinical trials, provide insufficient funding for a clinical trial program, stop a clinical trial or abandon a drug candidate or development program. Should a collaborative partner fail to develop or commercialize a compound or product to which it has rights from us for any reason, including corporate restructuring, such failure might delay our ongoing research and development efforts, because we might not receive any future payments, and we would not receive any royalties associated with such compound or product. We conducted a Phase 3 clinical program to study fostamatinib in ITP on our own. We may seek another collaborator or licensee in the future for clinical development and commercialization of fostamatinib, as well as our other clinical programs, which we may not be able to obtain on commercially reasonable terms or at all. If we are unable to form new collaborations or enter into new license agreements, our research and development efforts could be delayed. 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.

Each of our collaborations could be terminated by the other party at any time, and 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. If these collaborations terminate or are not renewed, any resultant loss of revenues from these collaborations or loss of the resources and expertise of our collaborative partners could adversely affect our business.

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. Additionally, the management teams of our collaborators may change for various reasons including due to being acquired. Different management teams or an acquiring company of our collaborators may have different priorities which may have adverse results on the collaboration with us.

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 or otherwise adversely affected.

If conflicts arise between our collaborators or advisors and us, any of them may act in their self-interest, which may be adverse to our stockholders' 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 or may be acquired or merged with a company having a competing program. In some of our collaborations, we have agreed not to conduct, independently or with any third party, any research that is competitive with the research conducted under our collaborations. Our collaborators, however, may develop, either alone or with others, products in related fields that are competitive with the products or potential products that are the subject of these collaborations. Competing products, either developed by our collaborators or to which our collaborators have rights, may result in their withdrawal of support for our product candidates.

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

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

Our success will depend to a large part on our own, our licensees' and our licensors' ability to obtain and defend patents for each party's respective technologies and the compounds and other products, if any, resulting from the application of such technologies. We have about 63 pending patent applications and about 336 issued and active patents in the United States, as well as corresponding pending foreign patent applications and issued foreign patents. In the future, our patent position might be highly uncertain and involve complex legal and factual questions. For example, we may be involved in post-grant proceedings before the United States Patent and Trademark Office. Post-grant proceedings are complex and expensive legal proceedings and there is no assurance we will be successful in any such proceedings. A post-grant proceeding could result in our losing our patent rights and/or our freedom to operate and/or require us to pay significant royalties. Additional uncertainty may result because no consistent policy regarding the breadth of legal claims allowed in biotechnology patents has emerged to date. Accordingly, we cannot predict the breadth of claims allowed in our or other companies' patents.

Because the degree of future protection for our proprietary rights is uncertain, we cannot assure you 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, our ability to receive patent protection or protect our proprietary information may otherwise 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. Certain of our in-licenses may be terminated if we fail to meet specified obligations. If we fail to meet such obligations and any of our licensors exercise their termination rights, we could lose our rights under those agreements. If we lose any of our rights, it may adversely affect the way we conduct our business. In addition, because certain of our licenses are sublicenses, the actions of our licensors may affect our rights under those licenses.

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 and partnering.

Our success will 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 our licensors or ours, and others may be filed in the future. There may also be copyrights or trademarks that third parties hold. There can be no assurance that our activities, or those of our licensors, will not violate intellectual property rights of others. We believe that there may be significant litigation in the industry regarding patent and other intellectual property rights, and we do not know if our collaborators or we 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.

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

As a small company, 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 development, regulatory and clinical personnel. If we lose the services of any of our key personnel, our research and development efforts could be seriously and adversely affected. Our employees can terminate their employment with us at any time.

Our ability to use net operating losses and certain other tax attributes is uncertain and may be limited.

Our ability to use our federal and state net operating losses to offset potential future taxable income and related income taxes that would otherwise be due is dependent upon our generation of future taxable income before the expiration dates of the net operating losses, and we cannot predict with certainty when, or whether, we will generate sufficient taxable income to use all of our net operating losses. In addition, utilization of net operating losses to offset potential future taxable income and related income taxes that would otherwise be due is subject to annual limitations under the “ownership change” provisions of Sections 382 and 383 of the Internal Revenue Code of 1986, as amended (Internal Revenue Code) and similar state provisions, which may result in the expiration of net operating losses before future utilization. In general, under the Code, if a corporation undergoes an “ownership change,” generally defined as a greater than 50% change (by value) in its equity ownership over a three-year period, the corporation’s ability to use its pre-change net operating losses and other pre-change tax attributes (such as research and development credit carryforwards) to offset its post-change taxable income or taxes may be limited. Our equity offerings and other changes in our stock ownership, some of which are outside of our control, may have resulted or could in the future result in an ownership change. Although we have completed studies to provide reasonable assurance that an ownership change limitation would not apply, we cannot be certain that a taxing authority would reach the same conclusion. If, after a review or audit, an ownership change limitation were to apply, utilization of our domestic net operating losses and tax credit carryforwards could be limited in future periods and a portion of the carryforwards could expire before being available to reduce future income tax liabilities.

Because we expect to be dependent upon collaborative and license agreements, we might not meet our strategic objectives.

Our ability to generate revenue in the near term depends on the timing of recognition of certain upfront payments, achievement of certain payment triggering events with our existing collaboration agreements and our ability to enter into additional collaborative agreements with third parties. 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 one or more new collaborations, our business prospects could be harmed, which could have an immediate adverse effect on our ability to continue to develop our compounds and on the trading price of our stock. Our ability to enter into a collaboration may be dependent on many factors, such as the results of our clinical trials, competitive factors and the fit of one of our programs with another company’s risk tolerance, including toward regulatory issues, patent portfolio, clinical pipeline, the stage of the available data, particularly if it is early, overall corporate goals and financial position.

To date, a portion of our revenues have been related to the research or transition 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 at least partially offset by corresponding research costs. Following the completion of the research or transition phase of each collaborative agreement, additional revenues may come only from payments triggered by milestones and/or the achievement of other contingent events, and royalties, which may not be paid, if at all, until certain conditions are met. This risk is heightened due to the fact that unsuccessful research efforts may preclude us from receiving any contingent payments under these agreements. Our receipt of revenues 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. We have received payments from our collaborations with Aclaris, BMS, AZ, BerGenBio, Janssen Pharmaceutica N.V., a division of Johnson & Johnson, Novartis Pharma A.G., Daiichi, Merck & Co., Inc., Merck Serono and Pfizer. Under many agreements, future payments may not be earned until the collaborator has advanced product candidates into clinical testing, which may never occur or may not occur until some time well into the future. If we are not able to generate revenue under our collaborations when and in accordance with our expectations or the expectations of industry analysts, this failure could harm our business and have an immediate adverse effect on the trading price of our common stock.

Our business requires us to generate meaningful revenue from royalties and licensing agreements. To date, we have not received any revenue from royalties for the commercial sale of drugs, and we do not know when we will receive any such revenue, if at all.

Securities class action lawsuits or other litigation could result in substantial damages and may divert management's time and attention from our business.

We have been subject to class action lawsuits in the past, including a securities class action lawsuit commenced in the United States District Court for the Northern District of California in February 2009, that was ultimately dismissed in November 2012. However, we may be subject to similar or completely unrelated claims in the future, such as those that might occur if there was to be a change in our corporate strategy. These and other lawsuits are subject to inherent uncertainties, and the actual costs to be incurred relating to the lawsuit will depend upon many unknown factors. The outcome of litigation is necessarily uncertain, and we could be forced to expend significant resources in the defense of such suits, and we may not prevail. Monitoring and defending against legal actions is time-consuming for our management and detracts from our ability to fully focus our internal resources on our business activities. In addition, we may incur substantial legal fees and costs in connection with any such litigation. We have not established any reserves for any potential liability relating to any such potential lawsuits. It is possible that we could, in the future, incur judgments or enter into settlements of claims for monetary damages. A decision adverse to our interests on any such actions could result in the payment of substantial damages, or possibly fines, and could have a material adverse effect on our cash flow, results of operations and financial position.

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. For example, there are existing therapies and drug candidates in development for the treatment of ITP that may be alternative therapies to fostamatinib, if it is ultimately approved for commercialization. We face, and will continue to face, intense competition from pharmaceutical and biotechnology companies, as well as from academic and research institutions and government agencies, both in the United States and abroad. Some of these competitors are pursuing the development of pharmaceuticals that target the same diseases and conditions as our research programs. Our major competitors include fully integrated pharmaceutical companies that have extensive drug discovery efforts and are developing novel small-molecule pharmaceuticals. We also face significant competition from organizations that are pursuing the same or similar technologies, including the discovery of targets that are useful in compound screening, as the technologies used by us in our drug discovery efforts.

Competition may also arise from:

- new or better methods of target identification or validation;
- other drug development technologies and methods of preventing or reducing the incidence of disease;
- new small molecules; or
- other classes of therapeutic agents.

Our competitors or their collaborative partners 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 and larger research and development staffs 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 collaborators' 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 any of our collaborators or us in any of those areas may prevent the successful commercialization of our potential drug targets.

Many of our competitors, either alone or together with their collaborative partners, have significantly greater experience than we do in:

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

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

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 product candidates obsolete and noncompetitive. In addition, our competitors may succeed in obtaining the approval of the FDA or other regulatory agencies for product candidates more rapidly. Companies that complete clinical trials, obtain required regulatory agency approvals and commence commercial sale of their drugs before us 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 obtain regulatory approval in the United States or elsewhere.

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

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

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

- the progress and success of our clinical trials and preclinical activities (including studies and manufacture of materials) of our product candidates conducted by us;
- the receipt or failure to receive the additional funding necessary to conduct our business;
- selling by large stockholders;
- presentations of detailed clinical trial data at medical and scientific conferences and investor perception thereof;
- 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 or arbitration;
- economic and other external factors or other disaster or crisis; and
- period-to-period fluctuations in financial results.

If we fail to continue to meet the listing standards of NASDAQ, our common stock may be delisted, which could have a material adverse effect on the liquidity of our common stock.

Our common stock is currently listed on the Nasdaq Global Market. The NASDAQ Stock Market LLC has requirements that a company must meet in order to remain listed on NASDAQ. In particular, NASDAQ rules require us to maintain a minimum bid price of \$1.00 per share of our common stock. If the closing bid price of our common stock were to fall below \$1.00 per share for 30 consecutive trading days or we do not meet other listing requirements, we would fail to be in compliance with NASDAQ's listing standards. There can be no assurance that we will continue to meet the minimum bid price requirement, or any other requirement in the future. If we fail to meet the minimum bid price requirement, The NASDAQ Stock Market LLC may initiate the delisting process with a notification letter. If we were to receive such a notification, we would be afforded a grace period of 180 calendar days to regain compliance with the minimum bid price requirement. In order to regain compliance, shares of our common stock would need to maintain a minimum closing bid price of at least \$1.00 per share for a minimum of 10 consecutive trading days. In addition, we may be unable to meet other applicable NASDAQ listing requirements, including maintaining minimum levels of stockholders' equity or market values of our common stock in which case, our common stock could be delisted. If our common stock were to be delisted, the liquidity of our common stock would be adversely affected and the market price of our common stock could decrease.

The vote by the United Kingdom (U.K.) electorate in favor of the U.K.'s exit from the European Union (E.U.) could adversely impact our business, results of operations and financial condition.*

The passage of the referendum on the U.K.'s membership in the E.U., referred to as "Brexit," in June 2016

resulted in a determination that the U.K. should exit the E.U. Such an exit from the E.U. could cause uncertainty in the credit markets and financial services industry which could result in lower interest paid on certain of our investments and the value of certain securities we hold may decline in the future, which could negatively affect our financial condition, results of operations and cash flow, as well as limit our future access to the capital markets. The Brexit could also cause disruptions to and create uncertainty surrounding the business environment in which we operate. For example, we conduct clinical trials in the U.K. and other E.U. member states. Although the terms of U.K.'s exit from and its future relationship with E.U. are unknown, it is possible that there will be increased regulatory complexities which can disrupt the timing of our clinical trials and regulatory approvals, if any, of our current and future product candidates.

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

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 payers 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 we or any of our collaborators would receive for any products in the future. Further, cost control initiatives could adversely affect our and 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 payers.

Significant uncertainty exists as to the reimbursement status of newly-approved healthcare products. Third-party payers, including Medicare, are challenging the prices charged for medical products and services. Government and other third-party payers 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 payers do not provide adequate coverage and reimbursement levels for our products, the market acceptance of these products may be reduced.

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

The testing and marketing of medical products entail an inherent risk of product liability. If we cannot successfully defend ourselves against product liability claims, we may incur substantial liabilities or be required to limit commercialization of our products. We carry product liability insurance that is limited in scope and amount and may not be adequate to fully protect us against product liability claims. 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.

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

We work extensively with various scientific consultants and advisors. The potential success of our drug discovery and development 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 our employees 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, penalties or fines.

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 or for penalties or fines that may be imposed, and such liability could exceed our resources. We are also 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 internal computer systems, or those used by our contract research organizations or other contractors or consultants, may fail or suffer security breaches.

Despite the implementation of security measures, our internal computer systems and those of our contract research organizations and other contractors and consultants are vulnerable to damage from computer viruses, unauthorized access, natural disasters, terrorism, war and telecommunication and electrical failures. While we have not experienced any such system failure, accident or security breach to date, if such an event were to occur and cause interruptions in our operations, it could result in a disruption of our drug development programs. For example, the loss of clinical trial data from completed or ongoing clinical trials for a product candidate could result in delays in our regulatory approval efforts and significantly increase our costs to recover or reproduce the data. To the extent that any disruption or security breach were to result in a loss of or damage to our data or applications, or inappropriate disclosure of confidential or proprietary information, we could incur liability and the further development of any product candidates could be delayed.

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 our losses resulting from disasters or other business interruptions.

Future equity issuances or a sale of a substantial number of shares of our common stock may cause the price of our common stock to decline.

Because we will continue to need additional capital in the future to continue to expand our business and our

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research and development activities, among other things, we may conduct additional equity offerings. For example, under the universal shelf registration statement filed by us in May 2015 and declared effective by the SEC in July 2015, we may offer and sell any combination of common stock, preferred stock, debt securities and warrants in one or more offerings, up to a cumulative value of \$150 million. If we or our stockholders sell, or if it is perceived that we or they will sell, substantial amounts of our common stock (including pursuant to our Sales Agreement with Cantor or shares issued upon the exercise of options and warrants) in the public market, the market price of our common stock could fall. A decline in the market price of our common stock could make it more difficult for us to sell equity or equity-related securities in the future at a time and price that we deem appropriate. In addition, future sales by us of our common stock, including pursuant to our Sales Agreement with Cantor, may be dilutive to existing stockholders. Furthermore, if we obtain funds through a credit facility or through the issuance of debt or preferred securities, these securities would likely have rights senior to the rights of our common stockholders, which could impair the value of our common stock.

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 a majority 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;
- provide for a board of directors with staggered terms; and
- provide that the authorized number of directors may be changed only by a resolution of our board of directors.

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

Item 2. Unregistered Sales of Equity Securities and Use of Proceeds

None.

Item 3. Defaults Upon Senior Securities

None.

Item 4. Mine Safety Disclosures

Not applicable.

Item 5. Other Information

None.

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Item 6. Exhibits

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

Exhibit Number	Description of Document
3.1	Amended and Restated Certificate of Incorporation. (1)
3.2	Amended and Restated Bylaws. (2)
4.1	Form of warrant to purchase shares of common stock. (3)
4.2	Specimen Common Stock Certificate. (4)
4.3	Warrant issued to HCP BTC, LLC for the purchase of shares of common stock. (5)
10.1	Separation Agreement by and between Rigel Pharmaceuticals, Inc. and Elliot Grossbard, M.D., dated June 30, 2016 .
10.2	Clinical Research Consulting Agreement by and between Rigel Pharmaceuticals, Inc. and Elliot Grossbard, M.D., dated June 27, 2016.
10.3	2000 Non-Employee Directors' Stock Option Plan, as amended.
10.4	2011 Equity Incentive Plan, as amended.
31.1	Certification required by Rule 13a-14(a) or Rule 15d-14(a) of the Exchange Act.
31.2	Certification required by Rule 13a-14(a) or Rule 15d-14(a) of the Exchange Act.
32.1	Certification required by Rule 13a-14(b) or Rule 15d-14(b) of the Exchange Act and Section 1350 of Chapter 63 of Title 18 of the United States Code (18 U.S.C. 1350).
101.INS	XBRL Instance Document
101.SCH	XBRL Taxonomy Extension Schema Document
101.CAL	XBRL Taxonomy Extension Calculation Linkbase Document
101.LAB	XBRL Taxonomy Extension Labels Linkbase Document
101.PRE	XBRL Taxonomy Extension Presentation Linkbase Document
101.DEF	XBRL Taxonomy Extension Definition Linkbase Document

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- (1) Filed as an exhibit to Rigel's Current Report on Form 8-K (No. 000-29889) filed on May 29, 2012 and incorporated herein by reference.
 - (2) Filed as an exhibit to Rigel's Current Report on Form 8-K (No. 000-29889) filed on February 2, 2007 and incorporated herein by reference.
 - (3) Filed as an exhibit to Rigel's Registration Statement on Form S-1 (No. 333-45864), as amended, and incorporated herein by reference.
 - (4) Filed as an exhibit to Rigel's Current Report on Form 8-K (No. 000-29889) filed on June 24, 2003, and incorporated herein by reference.
 - (5) Filed as an exhibit to Rigel's Quarterly Report on Form 10-Q (No. 000-29889) for the quarter ended March 31, 2009, and incorporated herein by reference.

SIGNATURES

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

RIGEL PHARMACEUTICALS, INC.

By: /s/ RAUL R. RODRIGUEZ

Raul R. Rodríguez
Chief Executive Officer
(Principal Executive Officer)

Date: August 2, 2016

By: /s/ RYAN D. MAYNARD

Ryan D. Maynard
Executive Vice President and Chief Financial Officer
(Principal Financial and Accounting Officer)

Date: August 2, 2016

INDEX TO EXHIBIT S

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SEVERANCE AGREEMENT AND GENERAL RELEASE

This Severance Agreement and General Release (hereinafter "Agreement") is made and voluntarily entered into between Elliott Grossbard ("Employee") and Rigel Pharmaceuticals, Inc., its affiliated companies, subsidiaries, agents, attorneys, successors, assigns, and representatives (hereinafter collectively, the "Company"). The Company and Employee are collectively referred to herein as the "Parties."

WHEREAS, Employee's employment with the Company terminated effective June 30, 2016;

WHEREAS, Employee is not aware of any work-related injury or illness that has not already been disclosed to the Company;

WHEREAS, Employee represents that Employee has not initiated, and is not aware of, any action in any forum, including any state or federal court or agency, on his behalf that involves the Company;

WHEREAS, in exchange for separation compensation, Employee releases the Company from any claims arising from or related to the employment relationship and the termination thereof;

WHEREAS, Employee has agreed to resolve any and all disputes, claims, complaints, grievances, charges, actions, petitions and demands that Employee may have, including, but not limited to, any and all claims arising or in any way related to Employee's employment with, or termination from, the Company;

WHEREAS, Employee also understands that in order to receive severance compensation under this Agreement, Employee must sign and return this Agreement to Dolly Vance, Executive Vice President and General Counsel on or before July 21, 2016 and not revoke the Agreement as set forth below.

NOW, THEREFORE, in consideration of the mutual covenants and promises herein contained and other good and valuable consideration, receipt of which is hereby acknowledged, it is hereby agreed by and between the Parties as follows:

1. Company's Consideration.

a. In consideration for the release of all claims as set forth below and other obligations under this Agreement, and upon Employee's delivery on or before July 21, 2016 to Dolly Vance, Executive Vice President and General Counsel, of a fully signed original of this Agreement and does not revoke this Agreement as described below, the Company shall cause all unvested time-vesting stock options as of Employee's last day of employment to become vested (*see* Exhibit A) and the period for the Employee to exercise all stock options vested on the last day of his employment to be extended until March 31, 2018. Such extension of exercise term shall be made no sooner than the seventh day and no later than the twelfth day following the Company's receipt of a signed copy of this Agreement, provided that Employee does not revoke this Agreement by the means identified below. Finally, the Compensation Committee of the Board of Directors of Company will grant to Employee a cash bonus equal to the total percentage of goals reached under the Rigel 2016 Cash Incentive Plan at 50% of Employee's salary and consulting fees earned during calendar year 2016, subject to all applicable taxes and other withholdings authorized by Employee or required by law and provided that Employee does not terminate his consulting agreement before the end of 2016.

b. Employee agrees that the foregoing acceleration of unvested stock options, extension of term to exercise stock options and eligibility for cash bonus, hereinafter called "Severance Benefits", shall constitute the entire amount of monetary consideration provided to Employee under this Agreement and that Employee will not seek any further compensation for any claimed damages, costs or attorney's fees in connection with the matters encompassed by this Agreement.

2. Tax Indemnification. Employee acknowledges and agrees that the Company has made no representations or warranties regarding the tax consequences of any amounts paid by the Company pursuant to this Agreement. Employee agrees to pay all federal or state taxes owed by Employee, if any, which are required by law to be paid with respect to the payments herein. Employee further agrees to indemnify and hold the Company harmless from any taxes owed by Employee, including interest or penalties owed by Employee, on account of this Agreement. Employee further agrees to reimburse Company for any attorney's fees and costs incurred by Company as a result of having to obtain indemnification under this Agreement.

3. Effective Dates. The "Effective Date" of this Agreement is the date it is signed by Employee and not revoked within seven (7) calendar days after signing as described in Paragraph 7, below. The "Effective Date" of the ADEA is 12:01 a.m. on the eighth (8th) calendar day from the signature date.

4. Consent to Amendment of Incentive Stock Options. Employee holds certain options to purchase common stock of the Company, which were granted pursuant to the Company's 2000 Equity Incentive Plan and 2011 Equity Incentive Plan (the "**Plans**") and, as of June 30, 2016, such options will not be all vested, and the remaining vested options would not be exercisable for a period longer than three (3) months from the date of termination of Employee's continuous service with the Company (the "**Options**"). Certain of the Options are "incentive stock options" (within the meaning of Section 422 of the Internal Revenue Code of 1986, as amended (the "**Code**")). Employee's continuous service with the Company will terminate effective the end of day June 30, 2016 (the "**Separation Date**"). At a date shortly following the Effective Date of this Agreement, the Compensation Committee of the Board of Directors of the Company (the "**Board**") will approve an amendment to the Options to accelerate vesting of all unvested Options to be fully vested on the Effective Date and to extend the exercise period for all of the Options to March 31, 2018, regardless of Employee's employment status (the "**Amendment**"). The Amendment impacts the status of some of the Options that are incentive stock options, as summarized in this Paragraph 4 and the attached Exhibit B. The Plans permit the Board to amend the terms of the Options, but provides that Employee's rights and obligations under the Options shall not be impaired by any such amendment unless the Company obtains Employee's consent and Employee consents to the amendment in writing. Employee acknowledges that because the Amendment adversely impacts the incentive stock option status of many of the Options, the Amendment will not be effective as to the Options unless and until Employee consents to the Amendment, as part of this Agreement. Employee understands that Employee is under no obligation to consent to the Amendment. Employee acknowledges that she has read this Paragraph 4 and attached Exhibit B and has had sufficient time to review and discuss this matter. Employee further understands that this Paragraph 4 and Exhibit B are intended as a brief summary of the amendment to the Options and, thus, if there is any inconsistency between the information included in this Paragraph 4 and the Options, the terms of the Options shall govern. Employee acknowledges that the Amendment shall not override any contrary provision in the terms of the Options, the applicable Plan and option agreement under which the Options were granted that would provide for earlier termination of any Options in connection with a corporate transaction, change in control, or other similar transaction, and that in any event, the Options may not be exercised beyond their original termination date. Employee acknowledges that neither the Company nor its agents have recommended or influenced his decision to consent to the amendment of the Options. Employee further acknowledges that she has had the opportunity to seek independent advice regarding this matter from his legal counsel and tax advisor and she is not relying on any tax advice from the Company or its agents. After due consideration of the above, by signing and not revoking this Agreement, Employee agrees to the Amendment of all of the Options as described in this Paragraph 4.

5. Payment in Full. Employee acknowledges and agrees that Employee has received all salary, wages, accrued vacation, bonuses, commissions, expense reimbursements, or other such sums due to Employee other than amounts to be paid pursuant to this Agreement. In light of the payment by the Company of all wages due, the Parties further acknowledge and agree that California Labor Code § 206.5 is not violated by virtue of Employees execution of this Agreement. That section provides in pertinent part as follows:

No employer shall require the execution of any release of any claim or right on account of wages due, or to become due, or made as an advance on wages to be earned, unless payment of such wages has been made.

6. Release of Claims. In consideration for the Company's promises and premium contributions set forth above, all of which are in excess of any regular Company policy, Employee agrees (except as otherwise indicated in the final paragraph of this Paragraph 6) to forever and fully release and discharge the Company, defined to

include its successors, affiliates, subsidiaries, assigns, executives, directors, employees, managers, officers, investors, insurers, and attorneys, from all claims and damages of every kind and nature, known and unknown, which exist or can arise out of Employee's employment and/or termination of employment with the Company, through and including the date of his signing of this Agreement. This release includes, but is not limited to, any rights or claims arising under the California Constitution; California statutory and common law (including contract law, employment law and tort law); the California Fair Employment and Housing Act; the California Labor Code; the Age Discrimination in Employment Act (ADEA); Title VII of the Civil Rights Act of 1964; the Americans with Disabilities Act; federal and state family leave statutes; and any and all other federal, state and local laws, statutes, executive orders, regulations and common law; any claim for any loss, cost, damage, or expense arising out of any dispute over the non-withholding or other tax treatment of any of the proceeds received by Employee as a result of this Agreement; any and all claims for attorneys' fees and costs; and any and all claims relating to, or arising from, Employee's right to purchase, or actual purchase of shares of stock of the Company, including, without limitation, any claims for fraud, misrepresentation, breach of fiduciary duty, breach of duty under applicable state corporate law, and securities fraud under any state or federal law. Employee and the Company agree that this is a compromise settlement of all such claims and therefore, this Agreement does not constitute any admission of liability on the part of the Company.

Employee further agrees and acknowledges that the release provided for in this Section shall apply to all unknown and unanticipated injuries and/or damages (as well as those now disclosed). Employee acknowledges and understands that Section 1542 of the Civil Code of the State of California provides as follows:

A general release does not extend to claims which the creditor does not know or suspect to exist in his/her favor at the time of executing the release, which if known by him/her must have materially affected his/her settlement with the debtor.

Being aware of Section 1542 of the California Civil Code, Employee by signing this Agreement expressly waives the provisions of Section 1542 of the California Civil Code and any other similar provisions of law that may be applicable.

Notwithstanding the release of claims otherwise provided for in this Section of the Agreement, it is expressly understood that nothing in this Agreement will prevent Employee from filing a charge of discrimination with any state or federal agency, including but not limited to the National Labor Relations Board or the Equal Employment Opportunity Commission or any of its state or local deferral agencies, or participating in any investigation by the National Labor Relations Board, the Equal Employment Opportunity Commission or any of its state or local deferral agencies, although Employee understands and agrees that by signing this Agreement she waives his right (if any) to any monetary or other recovery should any governmental agency or other third party pursue any claims on Employee's behalf, either individually, or as part of any class, collective or representative action. Further, it is expressly understood that nothing in this Agreement shall be construed to be a waiver by Employee of any benefit that vested in any benefit plan prior to his termination date or as a waiver of his right to continue any benefit in accordance with the terms of a benefit plan. Likewise nothing in this Agreement shall be construed to waive any right that is not subject to waiver by private agreement, including any right that Employee may have under California Labor Code Section 2802 to indemnification of any employee expenses or losses incurred in discharging his duties. It is also expressly understood that nothing in this Agreement shall in any way prohibit Employee from bringing any complaint, claim or action seeking to challenge the validity of this Agreement and/or bringing any complaint claim or action alleging a breach of this Agreement by the Company.

7. Acknowledgement of Waiver of Claims Under ADEA Employee acknowledges waiving and releasing any rights under the Age Discrimination in Employment Act of 1967 ("ADEA") and that this waiver and release is knowing and voluntary. Employee and the Company agree that this waiver and release does not apply to any rights or claims that may arise under the ADEA after the Effective Date of this Agreement. Employee acknowledges that the consideration given for this waiver and release Agreement is in addition to anything of value to which Employee was already entitled. Employee further acknowledges notice by this writing that:

- (a) Employee should consult with an attorney prior to executing this Agreement;
- (b) Employee has up to twenty-one (21) calendar days within which to consider this Agreement;

- (c) Employee has seven (7) calendar days following Employee's execution of this Agreement to revoke the Agreement;
- (d) the ADEA waiver in this Agreement shall not be effective until the seven (7) day revocation period has expired; and
- (e) nothing in this Agreement prevents or precludes Employee from challenging or seeking a determination in good faith of the validity of this waiver under the ADEA, nor does it impose any condition precedent, penalties or costs for doing so, unless specifically authorized by federal law;
- (f) Employee understands that, notwithstanding any contrary language in this Agreement, rights or claims that may not be released, waived or compromised by private agreement are not waived, and that nothing in this Agreement prevents him from filing any charges or claims with the EEOC, the NLRB or any other federal agency, or from participating fully in any investigation or matter pending before any state or federal agency.
- (g) in order to revoke this Agreement, Employee must deliver to **Dolly Vance**'s attention at the following address a written revocation before 12:00 a.m. (midnight) p.s.t. on the seventh calendar day following the date Employee signs the Agreement:

Dolly Vance
Executive Vice President and General Counsel
1180 Veterans Boulevard
South San Francisco, CA 94080
Fax: 650-624-1101

8. No Pending or Future Lawsuits. Employee attests that Employee has not filed any lawsuits, administrative complaints or made any other charges, either in Employee's name or on behalf of any other person or entity, against the Company in any local, state or federal court or with any local, state, federal or administrative agency. Employee further represents that Employee will not bring any action in the future in which Employee seeks to recover any damages from the Company relating to or arising from Employee's employment or the termination of Employee's employment with the Company, other than an action to enforce Employee's rights under this Agreement. If any organization (governmental or nongovernmental) brings an action against the Company for any reason, and any money or other benefit is given to Employee as a result of the action, Employee agrees to give the proceeds of said action given to Employee to the Company.

9. Confidentiality. Employee understands that the terms and existence of this Agreement are personal to Employee and that maintaining the confidential nature of this Agreement is a material term of the Agreement. Employee covenants that Employee has not disclosed and will not disclose the existence or terms of this Agreement to anyone other than Employee's spouse, registered domestic partner, attorney, and accountant. It is further provided that any party hereto may make such disclosures as is required by law and as is necessary for legitimate law enforcement or compliance purposes.

10. Liquidated Damages. The Parties acknowledge and agree that the time and expense involved in proving actual damages of the confidentiality agreement set forth in Paragraph 9 render any breach appropriate for liquidated damages. Accordingly, in lieu of requiring actual proof of damages or losses, the Parties agree that the liquidated damage for any breach of the confidentiality agreement (but not as a penalty), the Employee shall pay the Company the sum of \$1,000. This liquidated damage amount shall be enforceable pursuant to final and binding arbitration as set forth below. The party seeking liquidated damages shall have the burden of proof by a preponderance of the evidence. Attorneys' fees and costs shall be awarded to the prevailing party. Neither the breach of the confidentiality agreement nor the payment of liquidated damages shall affect the continuing validity or enforceability of this Agreement.

11. Future Employment. While Employee is free to apply for future positions with the Company, Employee understands and agrees that Employee will not receive any special treatment or position in the reapplication process.

12. Non-Disclosure of Confidential and Proprietary Information. Employee specifically acknowledges that Employee's employment with the Company created a relationship of trust between Employee and the Company with respect to any information of a confidential or secret nature of which Employee became aware during the period of his employment and which (i) relates to the business of the Company, or to the business of any customer or supplier of the Company; or (ii) is processed by the Company and has been created, discovered, or developed by, or has otherwise become known to the Company that has commercial value to the business in which the Company is engaged. All said information is herein called "Proprietary Information." By way of illustration, and not in limitation, proprietary information includes trade secrets, patents, patent applications, inventions, processes, computer programs, data, know how, strategies, forecasts, customer lists, pricing, policies, operational procedures, staffing, billing, and collection practices, contract provisions, philosophies or other intellectual property rights of the Company. At all times Employee will keep in confidence and trust all such proprietary information and will not use or disclose any such Proprietary Information or anything relating to it without the written consent of the Company. Employee hereby agrees that all Proprietary Information shall be the sole and exclusive property of the Company and its assigns. Employee further acknowledges and agrees that Employee's Proprietary Information and Inventions Agreement with the Company remains in full force and effect and is unaffected by this Agreement.

13. Return of Company Property. Within five (5) days of Employee's signing this agreement, Employee will deliver to the Company all property, documents, data, and proprietary information of any nature pertaining to the Company or its affiliated companies. Employee also affirms that employee has not taken from the Company or its affiliated companies any documents or data of any description or any reproduction containing or pertaining to any Proprietary Information nor has Employee utilized nor will Employee utilize Proprietary Information outside of Employee's duties as an Employee of the Company.

14. Non-Disparagement. Employee agrees to refrain from communicating any disparaging, derogatory, libelous, or scandalous statements to any third party regarding the Company, including its employees. Employee further agrees to refrain from tortious interference with the contracts and relationships of the Company. Employee further agrees that Employee shall not act, in any way, as an agent of the Company, or state or imply that Employee has any authority to bind the Company.

15. No Admission of Liability. This Agreement and compliance with this Agreement shall not be construed as an admission by the Company of any liability whatsoever, or as an admission by the Company of any violation of the rights of Employee or any person, or of the violation of any order, law, statute, duty, or contract whatsoever against Employee or any person. The Company specifically disclaims any liability to Employee or any other person for any alleged violation of the rights of Employee or any person, or for any alleged violation of any order, law, statute, duty, or contract on the part of the Company, its employees or agents or related companies or their employees or agents.

16. No Representations. Each party represents that it has had the opportunity to consult with an attorney, and has carefully read and understands the scope and effect of the provisions of this Agreement. The Parties hereto further represent and acknowledge that in executing this Agreement they do not rely and have not relied upon any representation or statement made by any of the Parties or by any of the Parties' agents, attorneys, or representatives with regard to the subject matter, basis, or effect of the Agreement or otherwise, other than those specifically stated in this written Agreement.

17. Final and Binding. This Agreement shall be binding upon the Parties hereto and upon their heirs, administrators, representatives, executors, successors, and assigns, and shall inure to the benefit of said Parties and each of them and to their heirs, administrators, representatives, executors, successors, and assigns. Employee expressly warrants that such Employee has not transferred to any person or entity any rights, causes of action, or claims released in the Agreement.

18. Severability. Should any provision of this Agreement be found by a court of competent jurisdiction or an arbitrator to be illegal, invalid, unenforceable or void, that provision shall be considered severable and the remaining provisions shall remain in full force and effect without said provision.

19. Entire Agreement. With the exception of any agreement with the Company pertaining to proprietary, trade secret, or other confidential information, which shall remain in full force and effect, this Agreement sets forth the entire agreement and understanding between the Parties hereto concerning the subject matter of this Agreement and fully supersedes any and all prior agreements or understandings, written or oral, between the Parties hereto pertaining to the subject matter hereof.

20. Plain Meaning. This Agreement shall be interpreted in accordance with the plain meaning of its terms and not strictly for or against any of the Parties hereto.

21. Governing Law. This Agreement shall be deemed to have been executed and delivered within the State of California, and it shall be construed, interpreted, governed, and enforced in accordance with the laws of the State of California, without regard to the State of California's conflict of law principles.

22. No Knowledge of Wrongdoing. Employee represents that Employee has no knowledge of any wrongdoing involving a federal or state governmental agency, or any other wrongdoing that involves Employee or other present or former Company employees.

23. Costs. The Parties shall each bear their own attorneys' fees and other fees incurred in connection with this Agreement.

24. Arbitration. The Parties agree that any dispute regarding any aspect of this Agreement, including the confidentiality provisions, shall be submitted exclusively to final and binding arbitration before a mutually agreed upon arbitrator in accordance with the Federal Arbitration Act ("FAA"), 9 U.S.C. §§ 1, *et seq.* In the event the FAA does not apply for any reason, then the arbitration will proceed pursuant to the California Arbitration Act, California Code of Civil Procedure §§ 1280, *et seq.* The arbitrator shall be empowered to award any appropriate relief, including remedies at law, in equity or injunctive relief. Arbitration proceedings shall be held in San Francisco, California or at any other location mutually agreed upon by the Parties. The Parties agree that this arbitration shall be the exclusive means of resolving any dispute under this Agreement and that no other action will be brought by them in any court or other forum. If the Parties cannot agree on an arbitrator, then an arbitrator will be selected using the alternate striking method from a list of five (5) neutral arbitrators provided by JAMS (Judicial Arbitration & Mediation Services). Employee will have the option of making the first strike. Each Party will pay the fees for their own counsel, subject to any remedies to which that party may later be entitled under applicable law. However, in all cases where required by applicable law, the Company will pay the arbitrator's fees and the arbitration costs. If under applicable law the Company is not required to pay the arbitrator's fees and the arbitration costs, then such fees and costs will be apportioned equally between each set of adverse parties.

25. Authority. The Company represents and warrants that the undersigned has the authority to act on behalf of the Company and to bind the Company and all that may claim through it, to the terms and conditions of this Agreement. Employee represents and warrants that Employee has the capacity to act on Employee's own behalf, and on behalf of all others, to bind them to the terms and conditions of this Agreement. Each party warrants and represents that there are no liens or claims of lien, or assignments in law or equity or otherwise, of or against any of the claims or causes of action released herein.

26. No Waiver. The failure of any party to insist upon the performance of any of the terms and conditions in this Agreement, or the failure to prosecute any breach of any of the terms and conditions of this Agreement, shall not be construed thereafter as a waiver of any such terms or conditions. This entire Agreement shall remain in full force and effect as if no such forbearance or failure of performance had occurred.

27. No Oral Modification. Any modification or amendment of this Agreement, or additional obligation assumed by either party in connection with this Agreement, shall be effective only if placed in writing and

signed by both Parties or by authorized representatives of each party. No provision of this Agreement can be changed, altered, modified, or waived except by an executed writing by the Parties.

28. Attorneys' Fees. In the event that either Party brings an action to enforce or affect its rights under this Agreement, the prevailing party shall be entitled to recover its costs and expenses, including the costs of mediation, arbitration, litigation, and court fees, plus reasonable attorneys' fees, incurred in connection with such an action, provided that such recovery is consistent with applicable law.

29. Counterparts. This Agreement may be executed in counterparts and each counterpart, when executed, shall have the efficacy of a second original. Photographic copies of such signed counterparts may be used in lieu of the original for any purpose.

30. Voluntary Execution of Agreement. This Agreement is executed voluntarily and without any duress or undue influence on the part or behalf of the Parties hereto, with the full intent of releasing all claims. The Parties acknowledge that:

- (a) they have read this Agreement;
- (b) they have been represented in the preparation, negotiation, and execution of this Agreement by legal counsel of their own choice or that they have voluntarily declined to seek such counsel;
- (c) they understand the terms and consequences of this Agreement and of the releases it contains; and
- (d) they are fully aware of the legal and binding effect of this Agreement.

IN WITNESS WHEREOF, the Parties have executed this Agreement on the respective dates set forth below.

Dated: June 30, 2016 /s/ Elliott Grossbard
Employee

For Rigel Pharmaceuticals, Inc.

Dated: June 30, 2016 /s/ Dolly Vance
Title: General Counsel, EVP, Corp. Affairs

Exhibit A

ELLIOTT GROSSBARD OPTION GRANTS AS OF 06/30/2016

Grant#	Grant Date	Plan/Type	Shares	Price	Exercised	Vested	Cancelled	Unvested	Outstanding	Exercisable
00000815	07/16/2003	2000/NQ	15,277	\$ 8.25	0	0	15,277	0	0	0
00000816	07/16/2003	2000/NQ	134,723	\$ 8.25	0	0	134,723	0	0	0
R0000131	07/28/2003	2000/NQ	24,064	\$ 9.20	0	0	24,064	0	0	0
R0000132	07/28/2003	2000/NQ	3,714	\$ 9.20	0	0	3,714	0	0	0
00001000	06/03/2004	2000/NQ	7,378	\$ 17.66	0	0	7,378	0	0	0
00001001	06/03/2004	2000/NQ	27,622	\$ 17.66	0	0	27,622	0	0	0
00001170	01/20/2005	2000/NQ	32,222	\$ 22.17	0	0	32,222	0	0	0
00001288	10/04/2005	2000/NQ	5,083	\$ 24.56	0	0	5,083	0	0	0
00001289	10/04/2005	2000/NQ	59,917	\$ 24.56	0	0	59,917	0	0	0
00001490	01/25/2006	2000/NQ	60,000	\$ 7.40	0	0	60,000	0	0	0
00001591	08/07/2006	2000/NQ	625	\$ 9.56	0	625	0	0	625	625
00001592	08/07/2006	2000/NQ	27,153	\$ 9.56	0	27,153	0	0	27,153	27,153
00001845	01/31/2007	2000/NQ	80,000	\$ 11.73	0	80,000	0	0	80,000	80,000
00001999	01/31/2008	2000/NQ	130,000	\$ 26.45	0	130,000	0	0	130,000	130,000
00002347	03/30/2009	2000/ISO	30,816	\$ 6.49	0	30,816	0	0	30,816	30,816
00002348	03/30/2009	2000/NQ	84,184	\$ 6.49	0	84,184	0	0	84,184	84,184
00002371	01/20/2010	2000/ISO	9,584	\$ 9.62	0	9,584	0	0	9,584	9,584
00002372	01/20/2010	2000/NQ	105,416	\$ 9.62	0	105,416	0	0	105,416	105,416
00002831	02/01/2011	2000/ISO	6,576	\$ 6.73	0	6,576	0	0	6,576	6,576
00002832	02/01/2011	2000/NQ	58,424	\$ 6.73	0	58,424	0	0	58,424	58,424
00003085	01/25/2012	2011/ISO	20,065	\$ 8.15	0	20,065	0	0	20,065	20,065
00003086	01/25/2012	2011/NQ	129,935	\$ 8.15	0	129,935	0	0	129,935	129,935
00003113	01/30/2013	2011/ISO	21,611	\$ 6.51	0	21,611	0	0	21,611	21,611
00003114	01/30/2013	2011/NQ	128,389	\$ 6.51	0	128,389	0	0	128,389	128,389
00003693	02/27/2014	2011/ISO	75,357	\$ 3.59	0	30,449	0	44,908	75,357	30,449
00003694	02/27/2014	2011/NQ	74,643	\$ 3.59	0	60,175	0	14,468	74,643	60,175
00003702	02/27/2014	2011/NQ	150,000	\$ 3.59	0	75,000	0	75,000	150,000	75,000
00003906	01/26/2015	2011/NQ	175,000	\$ 2.14	0	123,958	0	51,042	175,000	123,958
00003911	01/26/2015	2011/NQ	175,000	\$ 2.14	0	175,000	0	0	175,000	175,000
00004132	01/26/2016	2000/ISO	6,250	\$ 2.74	0	0	0	6,250	6,250	0
00004133	01/26/2016	2000/NQ	143,750	\$ 2.74	0	31,250	0	112,500	143,750	31,250
00004134	01/26/2016	2000/NQ	150,000	\$ 2.74	0	0	0	150,000	150,000	0
			2,152,778		0	1,328,610	370,000	454,168	1,782,778	1,328,610

Exhibit B

Upon the exercise of a nonstatutory stock option, an optionee generally is taxed based on the excess of the fair market value of the stock on the date of exercise over the exercise price of the option. In general, potentially favorable tax treatment is provided to the holders of stock options that qualify as incentive stock options. Upon the exercise of an incentive stock option, an optionee is typically not subject to tax except for the possible imposition of alternative minimum tax. Rather, the optionee is taxed at the time he or she disposes of the stock subject to the option. Additionally, if the date on which the optionee disposes of the stock subject to an incentive stock option is more than two years from the date on which the incentive stock option was granted (the "2-Year Holding Period") and more than one year from the date on which the optionee exercised the option (the "1-Year Holding Period"), then the optionee's entire gain or loss is characterized as long-term capital gain or loss, rather than ordinary income.

On the other hand, if the optionee fails to satisfy either the 2-Year Holding Period and the 1-Year Holding Period, then a portion of the optionee's profit from the sale of the stock subject to the incentive stock option will be characterized as ordinary income. The portion of the profit that is characterized as ordinary income will be equal to the lesser of (a) the excess of the fair market value of the stock on the date of exercise over the exercise price of the option and (b) the excess of the sales price over the exercise price of the option. Any profit over the amount characterized as ordinary income will be characterized as capital gain. This deferral of the recognition of tax until the time of sale of the stock, as well as the possible treatment of the "spread" as capital gain, are the principal advantages of the Options being treated as incentive stock options.

Section 424(h) of the Code provides that if the terms of an incentive stock option are modified, then such modification shall be considered as the granting of a new option. The proposed Amendment would be deemed a modification and, thus, the grant of a new option. As a result, the 2-Year Holding Period would restart as of the date of the Amendment.

Section 422(d) of the Code provides that to the extent that the aggregate fair market value of stock with respect to which incentive stock options are exercisable for the first time by any individual during any calendar year exceeds \$100,000, such options shall be treated as options which are not incentive stock options. An amendment extending the post-termination exercise period of the Options would be treated as the grant of a new option (as described above) and, thus, would require a reapplication of the \$100,000 exercisability limitation. As a result, absent a delay in exercisability until a later calendar year, a portion of Employee's Options may fail to be treated as incentive stock options.

Section 422(b) of the Code provides that an option is treated as an incentive stock option only if the option price is not less than the fair market value of the stock at the time such option is granted. An amendment extending the post-termination exercise period of each Option would be treated as the grant of a new option (as described above) and, thus, would require a new comparison of the option price and the current fair market value of the stock. As a result, to the extent that one or more of the Options has an exercise price less than the fair market value of the Company's common stock as of the date of the Amendment, then each such Option would fail to be treated as an incentive stock option.

CLINICAL RESEARCH CONSULTING AGREEMENT

This **Clinical Research Consulting Agreement** (the "Agreement") is made and entered into by and between **Rigel Pharmaceuticals, Inc.**, a Delaware corporation located at 1180 Veterans Boulevard, South San Francisco, CA 94080 ("**Rigel**"), and **Elliott Grossbard** located at ("**Consultant**"). Rigel and Consultant are sometimes referred to herein individually as a "**Party**" and collectively as the "**Parties**".

Whereas, Rigel desires to engage Consultant to assist Rigel in connection with the clinical development of its proprietary compounds;

Whereas, Consultant has the requisite expertise in the area of clinical trials and is willing to serve as a clinical research consultant to Rigel;

Therefore, Rigel and Consultant desire to enter into this Agreement.

In consideration of the foregoing and the mutual promises and covenants contained in this Agreement, Rigel and Consultant agree to the following:

1. Engagement of Services; Compensation. Consultant, pursuant to the provisions of this Agreement, agrees to provide consulting services to Rigel as such services are further described in Exhibit A (collectively, the "**Services**"). Exhibit A also sets forth the nature and amount of Services, the location and time for providing Services (if designated), the rate of payment for Consultant's Services, the timing of such payments, the nature of any equity compensation Consultant will receive as compensation for Services (if applicable), reimbursable expenses, and other terms and conditions appropriate or necessary for or relevant to the performance of Services. Consultant will perform all Services for Rigel in good faith and to the best of Consultant's ability, consistent with accepted standards for human clinical trial program management in the biopharmaceutical industry.

2. Rigel's Confidential Information.

(a) "Confidential Information" During the term of this Agreement and in the course of Consultant's performance hereunder, Consultant may receive and otherwise be exposed to confidential and proprietary information relating to Rigel's business practices, strategies and technologies as well as information of third parties as to which Rigel has an obligation of confidentiality. Such confidential and proprietary information may include, but is not limited to: information relating to Rigel's proprietary compounds in clinical development, protocols and clinical research programs, pre-clinical or clinical data, standard operating procedures, patents, trade secrets, research technology and business strategies, Consultant Work Product and Consulting Inventions (as defined in 3(a) and 3(c) respectively), developments, designs, applications, improvements, trade secrets, formulae, compound structures, ideas, know-how, methods or processes, discoveries, techniques, information regarding plans for research, development, new products, marketing business plans, budgets and unpublished financial statements, licenses, prices and costs, suppliers and customers; and information regarding the skills and compensation of employees of Rigel. Consultant agrees that all Confidential Information, whether presently existing or developed in the future, whether or not patentable or registrable under copyright law, shall be the sole property of Rigel and its assigns, and that Rigel and its assigns shall be the sole owner of intellectual property and other rights in connection with such Confidential Information.

(b) Recognition of Rigel's Rights; Nondisclosure. During the term of this Agreement and for seven (7) years after its termination, Consultant will keep in confidence and trust all Confidential Information. Consultant shall not use, or disclose to any third party, Confidential Information or anything related to such information without the prior written consent of Rigel, unless such actions are required in the ordinary course of performing Services for Rigel pursuant to this Agreement. Consultant agrees not to disclose, without the prior written consent of Rigel the terms and

conditions under which Consultant will provide Services under this Agreement. Consultant may disclose the fact that Consultant serves as a Consultant to Rigel Pharmaceuticals, Inc., a biotechnology company. Consultant agrees not to reproduce Confidential Information in any format, except as necessary and as permitted by Rigel for Consultant's performance of Services.

(c) **Nondisclosure of Third-Party Information.** Consultant understands that Rigel has received, and in the future will receive, information from third parties that is confidential or proprietary ("**Third-Party Information**"). Consultant recognizes Rigel's duty to maintain the confidentiality of such information. During the term of this Agreement and thereafter, Consultant will hold Third-Party Information in the strictest confidence and will not disclose or use Third-Party Information except as permitted by the agreement between Rigel and such third party, and as necessary for performing Services under this Agreement, unless expressly authorized to act otherwise by a written statement of an authorized representative of Rigel.

3. **Ownership of Work Product; Background Technology and Consulting Inventions.**

(a) **Work Product.** Consultant may, in the course of providing Services on Rigel's behalf, generate, create, conceive of and modify work product (collectively "**Work Product**"), and Consultant agrees that all such Work Product is considered "work made for hire" (as defined in 17 USC §§ 101 et seq.) and is the sole and exclusive property of Rigel. To the extent that any Work Product does not qualify as a "work made for hire", Consultant shall assign all Work Product to Rigel in accordance with the terms of this Section 3. Consultant hereby assigns all of its right, title and interest in and to all Work Product to Rigel, including without limitation, all patents, trademarks, copyrights and other proprietary rights relating thereto.

(b) **Consulting Inventions; Assignment.** Consultant agrees to disclose to Rigel, and hereby assigns to Rigel, Consultant's entire right, title and interest in and to any and all inventions, ideas, methods, works of authorship, know-how or discoveries made, conceived or reduced to practice by Consultant, alone or jointly with others, in the performance of Services hereunder or arising from Consultant's use of Rigel's Confidential Information, whether or not patentable or otherwise protectable (the "**Consulting Inventions**"). Consultant agrees that all such Consulting Inventions are the sole and exclusive property of Rigel.

(c) **Assistance.** Consultant further agrees to execute all papers, including patent applications, invention assignments and copyright assignments, and otherwise assist Rigel as reasonably required to perfect in Rigel all right, title and interest in Consultant's Work Product and Consultant Inventions expressly granted to Rigel under this Agreement. Such assistance shall include but not be limited to providing affidavits or testimony in connection with patent interference, validity or infringement proceedings and other legal proceedings. Costs related to such assistance, if required, shall be paid by Rigel. Consultant's obligation to assist Rigel as described above in this paragraph shall continue beyond the termination of this Agreement. If Rigel is unable, after reasonable effort, to secure Consultant's signature on any document as provided in this Section 3(d), Consultant hereby designates and appoints Rigel and its duly authorized officers and agents as its agent and attorney in fact to execute, verify and file applications, and to do all other lawfully permitted acts necessary to achieve the intent of this Section 3(d) with the same legal force and effect as if executed by Consultant.

4. **No Conflicting Obligation.** Consultant certifies that Consultant has not and will not enter into any agreement either written or oral, in conflict with this Agreement. Absent a conflict of interest, Consultant is free to provide Services to any other entity during the performance of this Agreement. Consultant shall list the names of all other entities for which Consultant performs consulting services on Exhibit B, which shall be updated from time to time during the term of this Agreement to reflect Consultant's consulting relationships.

5. **No Improper Use of Third-Party Materials.** Consultant agrees not to bring to Rigel or to use in the performance of Services any materials or documents of a present or former employer of Consultant, or of Consultant's employees, or any materials or documents obtained by Consultant under a binder of confidentiality imposed by reason of another of Consultant's contracting relationships, unless such materials or documents are generally available to the public or Consultant has authorization from such present or former employer or client for the possession and unrestricted use of such materials. Consultant understands that Consultant is not to breach any obligation of confidentiality or non-

use of confidential information that Consultant has to present or former employers and agrees to fulfill all such obligations during the term of this Agreement.

6. Independent Contractor. Rigel and Consultant agree that Consultant is an independent contractor and not an agent or employee of Rigel. Consultant has no authority to act on behalf of Rigel or obligate Rigel by contract or otherwise except as expressly authorized by Rigel's Vice President of Clinical Development or her designee. Consultant shall be responsible for payment of any applicable income taxes or other taxes in connection with his/her work and Consultant will not be eligible to participate in any benefit plan, program, employment policies, or workers' compensation insurance provided by Rigel.

7. Term and Termination. Unless previously terminated as set forth below, the term of this Agreement shall commence on July 2, 2016 and shall terminate **twenty four (24) months** thereafter (the "Initial Term"), subject to renewal for additional six (6) month periods (each a "Renewal Term") upon the mutual written consent of both parties. Notwithstanding the foregoing, if the Consultant continues to provide Services at Rigel's request beyond Initial Term or Renewal Term, this Agreement shall be deemed to be in full force and effect until such Services are complete. Consultant may terminate this Agreement upon two weeks written notice to Rigel. Rigel may terminate this Agreement at any time with notice to Consultant.

8. Effect of Termination.

(a) Upon the termination of this Agreement, Consultant shall be released from all obligations to perform Services, except that any termination of this Agreement shall not relieve Consultant of Consultant's obligations under Sections 2, 3, 6, 8, 9 and 10 hereof, nor shall any such termination relieve Consultant or Rigel from any liability arising from any breach of this Agreement.

(b) Upon any termination of this Agreement pursuant to Section 7, Consultant shall promptly deliver to Rigel all documents and other materials of any nature in Consultant's possession pertaining to the Services, together with all documents and other items containing or pertaining to any Confidential Information. Consultant shall not retain copies of any such documents or other materials after termination of this Agreement.

9. Legal and Equitable Remedies. Because Consultant's services are personal and unique and because Consultant will have access to and become acquainted with the Confidential Information of Rigel, Rigel shall have the right to enforce this Agreement and any of its provisions by injunction, specific performance or other equitable relief without prejudice to any other rights and remedies that Rigel may have for a breach of this Agreement.

10. General. This Agreement shall inure to the benefit of and be binding upon the successors and assigns of the parties hereto; provided that Consultant may not assign or delegate Consultant's obligations under this Agreement. This Agreement shall be interpreted and enforced in accordance with the laws of the State of California, regardless of its choice of law principles. In connection with any claim or controversy arising out of or related to this Agreement, each of the Parties hereby consents to a court of applicable jurisdiction in the state of California, and each party hereby consents to the jurisdiction and venue of such court. If one or more of the provisions in this Agreement are deemed unenforceable by law, then such provision will be deemed stricken from this Agreement and the remaining provisions will continue in full force and effect. This Agreement, together with its Exhibits, constitute the final, exclusive and complete understanding and agreement of the parties hereto and supersede all prior understandings and agreements. Any waiver, modification or amendment of any provision of this Agreement shall be effective only if in writing and signed by an authorized representative of each party. All notices under this Agreement shall be in writing and shall be deemed given upon personal delivery or sent by certified or registered mail, three (3) days after the date of mailing to the Party's address listed in the preamble of this Agreement.

In Witness Whereof, the parties hereto have executed this Agreement as of the Effective Date.

Rigel Pharmaceuticals, Inc.

Elliott Grossbard

By: /s/ James Diehl
Name: James Diehl
Title: VP of IP & Assoc. GC

By: /s/ Elliott Grossbard

Exhibit A

SERVICES AND COMPENSATION

Consulting Services (the “Services”):

Consult

Provision of Services; Location for Provision of Services; Reporting:

Consultant shall provide Services under this Agreement *as requested or authorized in writing by Rigel’s Chief Medical Officer (CMO) or her designee*. Services will be performed either remotely or in person at Rigel’s facilities located at 1180 Veterans Boulevard, South San Francisco, California. During the term of the Consulting Period, Consultant will report to Rigel’s CMO, who will supervise Consultant’s performance of the Services.

Compensation for Services; Contingencies on Term:

Consultant shall be paid \$500.00 (USD) per hour for Services requested by Rigel’s CMO and actually provided, up to 30 hours per month, to a maximum amount of \$180,000 (USD) per year over the two (2) year term.

Invoicing and Timing of payment(s); Retainer:

Consultant shall invoice Rigel within thirty (30) days from the date of Services provided for the Services provided in the preceding 30 day period. Consultant and Rigel may agree on weekly or bi-monthly invoicing and payment, if preferred by Consultant and approved by Rigel. Consultant’s invoice shall contain the date(s) and the number of hours of Service actually provided, a description of the Services, as well as the total amount due to Consultant by Rigel. Rigel will issue payment by check within thirty (30) days of receipt of each invoice and send payment to the Address for Payment listed below.

Address for Payment:

/s/ JD
Initials
Rigel Pharmaceuticals, Inc.

/s/ EG
Initials
Consultant



Exhibit B

OTHER CONSULTING ACTIVITIES

None

/s/ JD
Initials
Rigel Pharmaceuticals, Inc.

/s/ EG
Initials
Consultant

RIGEL PHARMACEUTICALS, INC.

2000 NON-EMPLOYEE DIRECTORS' STOCK OPTION PLAN

ADOPTED AUGUST 18, 2000
APPROVED BY STOCKHOLDERS SEPTEMBER 11, 2000
EFFECTIVE DATE: DECEMBER 4, 2000
AMENDED AND RESTATED APRIL 24, 2003
AMENDED AND RESTATED JUNE 20, 2003
APPROVED BY STOCKHOLDERS JUNE 20, 2003
AMENDED AND RESTATED APRIL 22, 2005
APPROVED BY STOCKHOLDERS JUNE 2, 2005
AMENDED AND RESTATED JANUARY 31, 2007
APPROVED BY STOCKHOLDERS MAY 31, 2007
AMENDED AND RESTATED SEPTEMBER 18, 2007
AMENDED AND RESTATED FEBRUARY 21, 2008
APPROVED BY STOCKHOLDERS MAY 29, 2008
AMENDED AND RESTATED MAY 19, 2009
AMENDED AND RESTATED JANUARY 28, 2010
APPROVED BY STOCKHOLDERS MAY 27, 2010
AMENDED AND RESTATED JANUARY 28, 2010
APPROVED BY STOCKHOLDERS MAY 27, 2010
AMENDED AND RESTATED FEBRUARY 4, 2011
APPROVED BY STOCKHOLDERS MAY 19, 2011
AMENDED AND RESTATED FEBRUARY 8, 2013
APPROVED BY STOCKHOLDERS MAY 14, 2013
AMENDED BY THE COMPENSATION COMMITTEE FEBRUARY 27, 2014
AMENDED BY THE BOARD JANUARY 27, 2015
AMENDED BY THE COMPENSATION COMMITTEE JUNE 16, 2015
AMENDED AND RESTATED MAY 2, 2016
APPROVED BY STOCKHOLDERS MAY 10, 2016

1. PURPOSES.

(a) **Eligible Option Recipients.** The persons eligible to receive Options are the Non-Employee Directors of the Company.

(b) **Available Options.** The purpose of the Plan is to provide a means by which Non-Employee Directors may be given an opportunity to benefit from increases in value of the Common Stock through the granting of Nonstatutory Stock Options.

(c) **General Purpose.** The Company, by means of the Plan, seeks to retain the services of its Non-Employee Directors, to secure and retain the services of new Non-Employee Directors and to provide incentives for such persons to exert maximum efforts for the success of the Company and its Affiliates.

2. DEFINITIONS.

(a) "**Affiliate**" means, at the time of determination, any "parent" or "subsidiary" of the Company as such terms are defined in Rule 405 of the Securities Act. The Board shall have the authority to determine the time or times at which "parent" or "subsidiary" status is determined within the foregoing definition.

(b) "**Annual Grant**" means an Option granted annually to all Non-Employee Directors who meet the criteria specified in subsection 6(b) of the Plan.

(c) “**Annual Meeting**” means the annual meeting of the stockholders of the Company.

(d) “**Board**” means the Board of Directors of the Company.

(e) A “**Change in Control**,” with respect to Options granted on or after the effective date of the Plan, will be deemed to have occurred upon the first to occur of an event set forth in any one of the following paragraphs:

(i) the acquisition (other than from the Company, by any person (as such term is defined in Section 13(c) or 14(d) of the Exchange Act of beneficial ownership (within the meaning of Rule 13d-3 promulgated under the Exchange Act) of fifty percent (50%) or more of the combined voting power of the Company’s then outstanding voting securities;

(ii) the individuals who, as of the effective date of the Plan, are members of the Board (the “**Incumbent Board**”), cease for any reason to constitute at least a majority of the Board, unless the election, or nomination for election by the Company’s stockholders, of any new director was approved by a vote of at least a majority of the Incumbent Board, and such new director shall, for purposes of this Plan, be considered as a member of the Incumbent Board; or

(iii) the closing of:

(1) a merger or consolidation involving the Company if the stockholders of the Company, immediately before such merger or consolidation, do not, as a result of such merger or consolidation, own, directly or indirectly, more than fifty percent (50%) of the combined voting power of the then outstanding voting securities of the corporation resulting from such merger or consolidation in substantially the same proportion as their ownership of the combined voting power of the voting securities of the Company outstanding immediately before such merger or consolidation; or

(2) a complete liquidation or dissolution of the Company or an agreement for the sale or other disposition of all or substantially all of the assets of the Company.

Notwithstanding the foregoing, a Change in Control shall not be deemed to occur solely because fifty percent (50%) or more of the combined voting power of the Company’s then outstanding securities is acquired by (i) a trustee or other fiduciary holding securities under one or more employee benefit plans maintained by the Company or any of its subsidiaries or (ii) any corporation which, immediately prior to such acquisition, is owned directly or indirectly by the stockholders of the Company in the same proportion as their ownership of stock in the Company immediately prior to such acquisition.

For the avoidance of doubt, the term Change in Control shall not include a sale of assets, merger or other transaction effected exclusively for the purpose of changing the domicile of the Company.

Notwithstanding the foregoing or any other provision of this Plan, the definition of Change in Control (or any analogous term) in an individual written agreement between the Company or any Affiliate and the Optionholder shall supersede the foregoing definition with respect to Options subject to such agreement; *provided, however*, that if no definition of Change in Control or any analogous term is set forth in such an individual written agreement, the foregoing definition shall apply.

(f) “**Code**” means the Internal Revenue Code of 1986, as amended.

(g) “**Common Stock**” means the common stock of the Company.

(h) “**Company**” means Rigel Pharmaceuticals, Inc., a Delaware corporation.

(i) “**Consultant**” means any person, including an advisor, (i) engaged by the Company or an Affiliate to render consulting or advisory services and who is compensated for such services or (ii) who is a member of the Board of Directors of an Affiliate. However, the term “Consultant” shall not include either Directors of the Company who are not compensated by the Company for their services as Directors or Directors of the Company who are merely paid a director’s fee by the Company for their services as Directors.

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

(k) “**Director**” means a member of the Board of Directors of the Company.

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

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

(n) “**Exchange Act**” means the Securities Exchange Act of 1934, as amended.

(o) “**Fair Market Value**” means, as of any date, the value of the Common Stock determined as follows:

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

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

(p) “**Initial Grant**” means an Option granted to a Non-Employee Director who meets the criteria specified in subsection 6(a) of the Plan.

(q) “**IPO Date**” means the effective date of the initial public offering of the Common Stock.

(r) “**Non-Employee Director**” means a Director who is not an Employee.

(s) “**Nonstatutory Stock Option**” means an Option not intended to qualify as an incentive stock option within the meaning of Section 422 of the Code and the regulations promulgated thereunder.

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

(u) “**Option**” means a Nonstatutory Stock Option granted pursuant to the Plan.

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

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

(x) “**Plan**” means this Rigel Pharmaceuticals, Inc. 2000 Non-Employee Directors’ Stock Option Plan.

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

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

3. ADMINISTRATION.

(a) **Administration by Board.** The Board shall administer the Plan. The Board may not delegate administration of the Plan to a committee.

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

(i) To determine the provisions of each Option to the extent not specified in the Plan.

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

(iii) To amend the Plan or an Option as provided in Section 12.

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

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

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

(d) **Cancellation and Re-Grant of Options.** Notwithstanding anything to the contrary in the Plan, neither the Board nor any Committee shall have the authority to: (i) reprice any outstanding Option under the Plan, (ii) cancel and re-grant any outstanding Option under the Plan, or (iii) effect any other action that is treated as a repricing under generally accepted accounting principles unless, in each case, the stockholders of the Company have approved such an action within twelve (12) months prior to such an event.

4. SHARES SUBJECT TO THE PLAN.

(a) **Share Reserve.** Subject to the provisions of Section 11 relating to adjustments upon changes in the Common Stock, the Common Stock that may be issued pursuant to Options shall not exceed in the aggregate 1,235,000 shares of Common Stock, which number consists of (i) 33,333 shares of Common stock initially reserved for issuance under the Plan plus (ii) 66,667 shares of Common stock approved by the Board in April 2003 and subsequently approved by the Company’s stockholders plus (iii) 225,000 shares of Common Stock approved by the Board in April 2005 and subsequently approved by the Company’s stockholders plus (iv) 110,000 shares of Common Stock approved by the Board in January 2007 and subsequently approved by the Company’s stockholders plus (v) 100,000 shares of Common Stock approved by the Board in February 2008 and subsequently approved by the Company’s stockholders plus (vi) 350,000 shares of Common Stock approved by the Board in January 2010 and subsequently approved by the Company’s stockholders plus (vii) 250,000 shares of Common Stock approved by the Board in February 2011 and subsequently approved by the Company’s stockholders plus (viii) 100,000 shares of Common Stock approved by the Board in February 2013 and subsequently approved by the Company’s stockholders.

(b) **Reversion of Shares to the Share Reserve.** If any Option shall for any reason expire or otherwise terminate, in whole or in part, without having been exercised in full, the shares of Common Stock not acquired under such Option shall revert to and again become available for issuance under the Plan. If any shares subject to an Option are not delivered to an Optionholder because the Option is exercised through a reduction of shares subject to the Option (*i.e.*, “net exercised”), the number of shares that are not delivered to the Optionholder shall not remain available for issuance under the Plan. If any shares subject to an Option are not delivered to an Optionholder because such shares are

withheld in satisfaction of the withholding of taxes incurred in connection with the exercise of an Option, the number of shares that are not delivered to the Optionholder shall not remain available for subsequent issuance under the Plan. If the exercise price of any Option is satisfied by tendering shares of Common Stock held by the Optionholder (either by actual delivery or attestation), then the number of shares so tendered shall not remain available for subsequent issuance under the Plan.

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

5. ELIGIBILITY.

The Options as set forth in section 6 automatically shall be granted under the Plan to all Non-Employee Directors who meet the specified criteria.

6. NON-DISCRETIONARY GRANTS.

(a) **Initial Grants.** Without any further action of the Board, each person who is elected or appointed for the first time to be a Non-Employee Director automatically shall, upon the date of his or her initial election or appointment to be a Non-Employee Director by the Board or stockholders of the Company, be granted an Initial Grant to purchase eighty thousand (80,000) shares of Common Stock on the terms and conditions set forth herein.

(b) **Annual Grants.** Without any further action of the Board, a Non-Employee Director shall be granted an Annual Grant as follows: On the day following each Annual Meeting commencing with the Annual Meeting in 2014, each person who is then a Non-Employee Director automatically shall be granted an Annual Grant to purchase forty thousand (40,000) shares of Common Stock on the terms and conditions set forth herein; *provided, however*, that if the person has not been serving as a Non-Employee Director for the entire period since the preceding Annual Meeting, then the number of shares subject to the Annual Grant shall be reduced pro rata for each full quarter prior to the date of grant during which such person did not serve as a Non-Employee Director.

(c) **Limitation on Grants to Non-Employee Directors.** The maximum number of shares of Common Stock subject to Stock Awards granted under the Plan or otherwise during any one calendar year to any Non-Employee Director shall not exceed the limits described in Sections 6(a) and 6(b) above. The maximum amount of cash compensation that may be payable by the Company to a Non-Employee Director shall not exceed \$150,000 per year. The Board may make exceptions to the cash compensation limit in the immediately preceding sentence of this Section 6(c) for individual Non-Employee Directors in extraordinary circumstances (for example, to compensate such individual for interim service in the capacity of an officer of the Company), as the Board may determine in its discretion, provided that the Non-Employee Director receiving such additional cash compensation may not participate in the decision to award such compensation.

7. OPTION PROVISIONS.

Each Option shall be in such form and shall contain such terms and conditions as required by the Plan. Each Option shall contain such additional terms and conditions, not inconsistent with the Plan, as the Board shall deem appropriate. Each Option shall include (through incorporation of provisions hereof by reference in the Option or otherwise) the substance of each of the following provisions:

(a) **Term.** No Option shall be exercisable after the expiration of ten (10) years from the date it was granted.

(b) **Exercise Price.** The exercise price of each Option shall be one hundred percent (100%) of the Fair Market Value of the stock subject to the Option on the date the Option is granted. Notwithstanding the foregoing, an Option may be granted with an exercise price lower than that set forth in the preceding sentence if such Option is granted pursuant to an assumption or substitution for another option in a manner satisfying the provisions of Section 424(a) of the Code.

(c) **Consideration.** The purchase price of stock acquired pursuant to an Option may be paid, to the extent permitted by applicable statutes and regulations, in any combination of the following methods:

(i) By cash or check.

(ii) Provided that at the time of exercise the Common Stock is publicly traded and quoted regularly in *The Wall Street Journal*, by delivery to the Company of shares of Common Stock that are owned free and clear of any liens, claims, encumbrances or security interests, and that are valued at Fair Market Value on the date of exercise. "Delivery" for these purposes shall include delivery to the Company of the Optionholder's attestation of ownership of such shares of Common Stock in a form approved by the Company. Notwithstanding the foregoing, the Optionholder may not exercise the Option by tender to the Company of Common Stock to the extent such tender would violate the provisions of any law, regulation or agreement restricting the redemption of the Company's stock.

(iii) Provided that at the time of exercise the Common Stock is publicly traded and quoted regularly in *The Wall Street Journal*, pursuant to a program developed under Regulation T as promulgated by the Federal Reserve Board that, prior to the issuance of Common Stock, results in either the receipt of cash (or check) by the Company or the receipt of irrevocable instructions to pay the aggregate exercise price to the Company from the sales proceeds.

(iv) By a "net exercise" arrangement pursuant to which the Company will reduce the number of shares of Common Stock issued upon exercise by the largest whole number of shares with a Fair Market Value that does not exceed the aggregate exercise price; *provided, however*, that the Company shall accept a cash or other payment from the Optionholder to the extent of any remaining balance of the aggregate exercise price not satisfied by such holding back of whole shares; *provided, further, however*, that shares of Common Stock will no longer be outstanding under an Option and will not be exercisable thereafter to the extent that (i) shares are used to pay the exercise price pursuant to the "net exercise," (ii) shares are delivered to the Optionholder as a result of such exercise, and (iii) shares are withheld to satisfy tax withholding obligations.

(d) **Transferability.** The Board may, in its sole discretion, impose such limitations on the transferability of Options as the Board shall determine. In the absence of such a determination by the Board to the contrary, the following restrictions on the transferability of Options shall apply:

(i) **Restrictions on Transfer.** An Option shall not be transferable except by will or by the laws of descent and distribution and shall be exercisable during the lifetime of the Optionholder only by the Optionholder; *provided, however*, that the Board may, in its sole discretion, permit transfer of the Option in a manner that is not prohibited by applicable tax and securities laws upon the Optionholder's request. Except as explicitly provided herein, an Option may not be transferred for consideration.

(ii) **Domestic Relations Orders.** Notwithstanding the foregoing, an Option may be transferred pursuant to a domestic relations order.

(iii) **Beneficiary Designation.** Notwithstanding the foregoing, the Optionholder may, by delivering written notice to the Company, in a form provided by or otherwise satisfactory to the Company and any broker designated by the Company to effect Option exercises, designate a third party who, in the event of the death of the Optionholder, shall thereafter be entitled to exercise the Option and receive the Common Stock or other consideration resulting from such exercise. In the absence of such a designation, the executor or administrator of the Optionholder's estate shall be entitled to exercise the Option and receive the Common Stock or other consideration resulting from such exercise.

(e) **Exercise Schedule.** The Option shall be exercisable as the shares of Common Stock subject to the Option vest.

(f) **Vesting Schedule.**

(i) Each Option granted as an initial grant shall vest in accordance with the schedule set forth below that results in a shorter period of full vesting:

(1) 1/36th of the shares of Common Stock subject to the Option shall vest each month after the date of grant over a period of three (3) years; or

(2) the Option shall vest in equal monthly installments after the date of grant over a period commencing on the date that the Optionholder is appointed for the first time to be a Non-Employee Director by the Board and ending on the date of the Annual Meeting at which the Optionholder is first scheduled to be considered for election to be a Non-Employee Director by the stockholders of the Company.

(ii) Each Option granted as an annual grant before the Annual Meeting in 2008 shall vest such that 1/36th of the shares of Common Stock subject to such Option shall vest each month after the date of grant over a period of three (3) years; and each Option granted as an annual grant on or after the Annual Meeting in 2008 shall vest such that 1/12th of the shares of Common Stock subject to such Option shall vest each month after the date of grant over a period of one (1) year.

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

(h) **Extension of Termination Date.** If the exercise of the Option following the termination of the Optionholder's Continuous Service (other than upon the Optionholder's death or Disability) would be prohibited at any time solely because the issuance of shares would violate the registration requirements under the Securities Act, then the Option shall terminate on the earlier of (i) the expiration of the term of the Option set forth in subsection 7(a) or (ii) the expiration of a total period of three (3) months (that need not be consecutive) after the termination of the Optionholder's Continuous Service during which the exercise of the Option would not be in violation of such registration requirements.

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

(j) **Death of Optionholder.** In the event (i) an Optionholder's Continuous Service terminates as a result of the Optionholder's death or (ii) the Optionholder dies within the three-month period after the termination of the Optionholder's Continuous Service for a reason other than death, then the Option may be exercised (to the extent the Optionholder was entitled to exercise the Option as of the date of death) by the Optionholder's estate, by a person who acquired the right to exercise the Option by bequest or inheritance or by a person designated to exercise the Option upon the Optionholder's death, but only within the period ending on the earlier of (1) the date eighteen (18) months following the date of death or (2) the expiration of the term of such Option as set forth in the Option Agreement. If, after death, the Option is not exercised within the time specified herein, the Option shall terminate.

8. COVENANTS OF THE COMPANY.

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

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

9. USE OF PROCEEDS FROM STOCK.

Proceeds from the sale of stock pursuant to Options shall constitute general funds of the Company.

10. MISCELLANEOUS.

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

(b) **No Service Rights.** Nothing in the Plan or any instrument executed or Option granted pursuant thereto shall confer upon any Optionholder any right to continue to serve the Company as a Non-Employee Director or shall affect the right of the Company or an Affiliate to terminate (i) the employment of an Employee with or without notice and with or without cause, (ii) the service of a Consultant pursuant to the terms of such Consultant's agreement with the Company or an Affiliate or (iii) the service of a Director pursuant to the Bylaws of the Company or an Affiliate, and any applicable provisions of the corporate law of the state in which the Company or the Affiliate is incorporated, as the case may be.

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

(d) **Withholding Obligations.** The Optionholder may satisfy any federal, state or local tax withholding obligation relating to the exercise or acquisition of stock under an Option by any of the following means (in addition to the Company's right to withhold from any compensation paid to the Optionholder by the Company) or by a combination of such means: (i) tendering a cash payment; (ii) authorizing the Company to withhold shares from the shares of the Common Stock otherwise issuable to the Optionholder as a result of the exercise or acquisition of stock under the Option, provided, however, that no shares of Common Stock are withheld with a value exceeding the minimum amount of tax required to be withheld by law; or (iii) delivering to the Company owned and unencumbered shares of the Common Stock.

(e) **Electronic Delivery.** Any reference herein to a "written" agreement or document shall include any agreement or document delivered electronically or posted on the Company's intranet.

11. ADJUSTMENTS UPON CHANGES IN STOCK.

(a) **Capitalization Adjustments.** If any change is made in the stock subject to the Plan, or subject to any Option, without the receipt of consideration by the Company (through merger, consolidation, reorganization, recapitalization, reincorporation, stock dividend, dividend in property other than cash, stock split, liquidating dividend, combination of shares, exchange of shares, change in corporate structure or other transaction not involving the receipt of consideration by the Company), the Board shall appropriately and proportionately adjust (i) the class(es) and maximum number of securities subject both to the Plan pursuant to subsection 4(a) and to the nondiscretionary Options specified in Section 5, (ii) the class(es) and number of securities and price per share of stock subject to outstanding Options. The Board shall make such adjustments, and its determination shall be final, binding and conclusive. (The conversion of any convertible securities of the Company shall not be treated as a transaction "without receipt of consideration" by the Company.)

(b) **Corporate Transaction.** In the event of (i) a sale, lease or other disposition of all or substantially all of the securities or assets of the Company, (ii) a merger or consolidation in which the Company is not the surviving corporation or (iii) a reverse merger in which the Company is the surviving corporation but the shares of Common Stock outstanding

immediately preceding the merger are converted by virtue of the merger into other property, whether in the form of securities, cash or otherwise, then any surviving corporation or acquiring corporation may assume any Options outstanding under the Plan or may substitute similar Options (including an option to acquire the same consideration paid to the stockholders in the transaction described in this subsection 11(b)) for those outstanding under the Plan. In the event no surviving corporation or acquiring corporation assumes such Options or substitutes similar Options for those outstanding under the Plan, then with respect to Options held by Optionholders who are in Continuous Service immediately prior to such an event, the vesting of such Options (and the time during which such Options may be exercised) shall be accelerated in full, and the Options shall terminate if not exercised at or prior to such event. With respect to any other Options outstanding under the Plan, such Options shall terminate if not exercised prior to such event.

(c) **Change in Control.** Upon a Change in Control, all Options held by each Optionholder whose Continuous Service has not terminated immediately prior to the Change in Control shall become fully vested and exercisable immediately prior to the effectiveness of such Change in Control.

12. AMENDMENT OF THE PLAN AND OPTIONS.

(a) **Amendment of Plan.** The Board at any time, and from time to time, may amend the Plan. However, except as provided in Section 11 relating to adjustments upon changes in stock, no amendment shall be effective unless approved by the stockholders of the Company to the extent stockholder approval is necessary to satisfy the requirements of Rule 16b-3 or any Nasdaq or securities exchange listing requirements; provided, however, that the Board may not amend Section 6 to increase the non-discretionary grants or limitations on cash compensation described therein without stockholder approval.

(b) **Stockholder Approval.** The Board may, in its sole discretion, submit any other amendment to the Plan for stockholder approval.

(c) **No Impairment of Rights.** Rights under any Option granted before amendment of the Plan shall not be impaired by any amendment of the Plan unless (i) the Company requests the consent of the Optionholder and (ii) the Optionholder consents in writing.

(d) **Amendment of Options.** The Board at any time, and from time to time, may amend the terms of any one or more Options including, but not limited to, amendments to provide terms more favorable than previously provided in the agreement evidencing an Option, subject to any specified limits in the Plan that are not subject to Board discretion; provided, however, that the rights under any Option shall not be impaired by any such amendment unless (i) the Company requests the consent of the Optionholder and (ii) the Optionholder consents in writing.

13. TERMINATION OR SUSPENSION OF THE PLAN.

(a) **Plan Term.** The Board may suspend or terminate the Plan at any time. No Options may be granted under the Plan while the Plan is suspended or after it is terminated.

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

14. EFFECTIVE DATE OF PLAN.

The Plan shall become effective on the IPO Date, but no Option shall be exercised unless and until the Plan has been approved by the stockholders of the Company, which approval shall be within twelve (12) months before or after the date the Plan is adopted by the Board.

15. CHOICE OF LAW.

All questions concerning the construction, validity and interpretation of this Plan shall be governed by the law of the State of Delaware, without regard to such state's conflict of laws rules.

RIGEL PHARMACEUTICALS, INC.
2011 EQUITY INCENTIVE PLAN

ADOPTED: MARCH 23, 2011
APPROVED BY STOCKHOLDERS MAY 19, 2011
AMENDED FEBRUARY 3, 2012
APPROVED BY STOCKHOLDERS MAY 22, 2012
AMENDED FEBRUARY 8, 2013
APPROVED BY STOCKHOLDERS MAY 14, 2013
AMENDED JANUARY 26, 2016
APPROVED BY STOCKHOLDERS MAY 10, 2016
TERMINATION DATE: MARCH 22, 2021

1. PURPOSES.

- (a) The persons eligible to receive Stock Awards are the Employees, Directors and Consultants of the Company and its Affiliates.
- (b) The purpose of the Plan is to provide a means by which eligible recipients of Stock Awards may be given an opportunity to benefit from increases in value of the Common Stock through the granting of the following Stock Awards: (i) Incentive Stock Options, (ii) Nonstatutory Stock Options, (iii) stock bonuses and (iv) rights to acquire restricted stock.
- (c) The Company, by means of the Plan, seeks to retain the services of the group of persons eligible to receive Stock Awards, to secure and retain the services of new members of this group and to provide incentives for such persons to exert maximum efforts for the success of the Company and its Affiliates.

2. DEFINITIONS.

- (a) “*Affiliate*” means, at the time of determination, any “parent” or “subsidiary” of the Company as such terms are defined in Rule 405 of the Securities Act. The Board shall have the authority to determine the time or times at which “parent” or “subsidiary” status is determined within the foregoing definition.
- (b) “*Board*” means the Board of Directors of the Company.
- (c) “*Code*” means the Internal Revenue Code of 1986, as amended.
- (d) “*Committee*” means a committee of one or more members of the Board appointed by the Board in accordance with subsection 3(c).
- (e) “*Common Stock*” means the common stock of the Company.
- (f) “*Company*” means Rigel Pharmaceuticals, Inc., a Delaware corporation.
- (g) “*Consultant*” means any person, including an advisor, (i) engaged by the Company or an Affiliate to render consulting or advisory services and who is compensated for such services or (ii) who is a member of the Board of Directors of an Affiliate. However, the term “Consultant” shall not include either Directors who are not compensated by the Company for their services as Directors or Directors who are merely paid a director’s fee by the Company for their services as Directors.

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

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

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

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

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

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

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

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

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

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

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

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

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

(s) **“Option”** means an Incentive Stock Option or a Nonstatutory Stock Option granted pursuant to the Plan.
(t) **“Option Agreement”** means a written agreement between the Company and an Optionholder evidencing the terms and conditions of an individual Option grant. Each Option Agreement shall be subject to the terms and conditions of the Plan.

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

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

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

(x) **“Performance Criteria”** means the one or more criteria that the Board shall select for purposes of establishing the Performance Goals for a Performance Period. The Performance Criteria that shall be used to establish such Performance Goals may be based on any one of, or combination of, the following: (i) earnings per share; (ii) earnings before interest, taxes and depreciation; (iii) earnings before interest, taxes, depreciation and amortization (EBITDA); (iv) net earnings; (v) total stockholder return; (vi) return on equity; (vii) return on assets, investment, or capital employed; (viii) operating margin; (ix) gross margin; (x) operating income; (xi) net income (before or after taxes); (xii) net operating income; (xiii) net operating income after tax; (xiv) pre- and after-tax income; (xv) pre-tax profit; (xvi) operating cash flow; (xvii) sales or revenue targets; (xviii) increases in revenue or product revenue; (xix) expenses and cost reduction goals; (xx) improvement in or attainment of expense levels; (xxi) improvement in or attainment of working capital levels; (xxii) economic value added (or an equivalent metric); (xxiii) market share; (xxiv) cash flow; (xxv) cash flow per share; (xxvi) share price performance; (xxvii) debt reduction; (xxviii) implementation or completion of projects or processes; (xxix) customer satisfaction; (xxx) total stockholder return; (xxxi) stockholders’ equity; and (xxxii) other measures of performance selected by the Board. Partial achievement of the specified criteria may result in the payment or vesting corresponding to the degree of achievement as specified in the Stock Award Agreement. The Board shall, in its sole discretion, define the manner of calculating the Performance Criteria it selects to use for such Performance Period.

(y) **“Performance Goals”** means, for a Performance Period, the one or more goals established by the Board for the Performance Period based upon the Performance Criteria. The Board is authorized at any time in its sole discretion, to adjust or modify the calculation of a Performance Goal for such Performance Period in order to prevent the dilution or enlargement of the rights of Participants, (a) in the event of, or in anticipation of, any items that are “unusual” in nature or occur “infrequently” as determined under generally accepted accounting principles; (b) in response to, or in anticipation of, changes in applicable laws, regulations, accounting principles, or business conditions; or (c) in view of the Board’s assessment of the business strategy of the Company, performance of comparable organizations, economic and business conditions, and any other circumstances deemed relevant. Specifically, the Board is authorized to make adjustment in the method of calculating attainment of Performance Goals and objectives for a Performance Period as follows: (i) to exclude the dilutive effects of acquisitions or joint ventures; (ii) to assume that any business divested by the Company achieved performance objectives at targeted levels during the balance of a Performance Period following such divestiture; and (iii) to exclude the effect of any change in the outstanding shares of common stock of the Company by reason of any stock dividend or split, stock repurchase, reorganization, recapitalization, merger, consolidation, spin-off, combination or exchange of shares or other similar corporate change, or any distributions to common stockholders other than regular cash dividends. In addition, the Board

is authorized to make adjustment in the method of calculating attainment of Performance Goals and objectives for a Performance Period as follows: (i) to exclude restructuring and/or other nonrecurring charges; (ii) to exclude exchange rate effects, as applicable, for non-U.S. dollar denominated net sales and operating earnings; (iii) to exclude the effects of changes to generally accepted accounting standards required by the Financial Accounting Standards Board; (iv) to exclude the effects to any statutory adjustments to corporate tax rates; and (v) to exclude the effects of items that are "unusual" in nature or occur "infrequently" as determined under generally accepted accounting principles.

(z) **"Performance Period"** means the one or more periods of time, which may be of varying and overlapping durations, as the Board may select, over which the attainment of one or more Performance Goals will be measured for the purpose of determining a Participant's right to and the payment of a Stock Award.

(aa) **"Plan"** means this Rigel Pharmaceuticals, Inc. 2011 Equity Incentive Plan.

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

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

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

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

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

3. ADMINISTRATION.

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

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

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

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

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

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

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

(c) Delegation to Committee.

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

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

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

(e) Cancellation and Re-Grant of Stock Awards. Notwithstanding anything to the contrary in the Plan, neither the Board nor any Committee shall have the authority to: (i) reprice any outstanding Stock Awards under the Plan, (ii) cancel any outstanding Options or Stock Appreciation Rights that have an exercise price or strike price greater than the current Fair Market Value of the Common Stock in exchange for cash or other Stock Awards under the Plan, or (iii) effect any other action that is treated as a repricing under generally accepted accounting principles unless, in each case, the stockholders of the Company have approved such an action within twelve (12) months prior to such an event.

4. SHARES SUBJECT TO THE PLAN.

(a) Share Reserve. Subject to the provisions of subsection 11(a) relating to adjustments upon changes in Common Stock, the shares of Common Stock that may be issued pursuant to Stock Awards shall not exceed in the aggregate 13,250,000 shares of Common Stock, which number consists of (i) 3,500,000 shares of Common Stock initially reserved for issuance under the Plan plus (ii) 600,000 shares of Common Stock approved by the Board in February 2012 and subsequently approved by the Company's stockholders plus (iii) 7,000,000 shares of Common Stock approved by the Board in February 2013 and subsequently approved by the Company's stockholders plus (iii) 2,150,000 shares of Common Stock approved by the Board in January 2016 and subsequently approved by the Company's stockholders..

(b) Subject to subsection 4(c), the number of shares available for issuance under the Plan shall be reduced by: (i) one (1) share for each share of stock issued pursuant to (A) an Option granted under Section 6, or (B) a Stock Appreciation Right granted under subsection 7(d) with respect to which the strike price is at least one hundred percent (100%) of the Fair Market Value of the underlying Common Stock on the date of grant; and (ii) one and sixty-four hundredths (1.64) shares for each share of Common Stock issued pursuant to a Stock Bonus Award, Restricted Stock Award, Stock Unit Award or Performance Stock Award.

(c) Reversion of Shares to the Share Reserve.

(i) Shares Available For Subsequent Issuance. If any (i) Stock Award shall for any reason expire or otherwise terminate, in whole or in part, without having been exercised in full, (ii) shares of Common Stock issued to a Participant pursuant to a Stock Award are forfeited to or repurchased by the Company, including any repurchase or forfeiture caused by the failure to meet a contingency or condition required for the vesting of such shares, or (iii) Stock Award is settled in cash, then the shares of Common Stock not issued under such Stock Award, or forfeited to or repurchased by the Company, shall revert to and again become available for issuance under the Plan. To the extent there is issued a share of Common Stock pursuant to a Stock Award that counted as one and sixty-four hundredths (1.64) shares against the number of shares available for issuance under the Plan pursuant to subsection 4(b) and such share of Common Stock again becomes available for issuance under the Plan pursuant to this subsection 4(c)(i), then the number of shares of Common Stock available for issuance under the Plan shall increase by one and sixty-four hundredths (1.64) shares.

(ii) Shares Not Available For Subsequent Issuance. If any shares subject to a Stock Award are not delivered to a Participant because the Stock Award is exercised through a reduction of shares subject to the Stock Award (*i.e.*, “net exercised”), the number of shares that are not delivered to the Participant shall not remain available for issuance under the Plan. If any shares subject to a Stock Award are not delivered to a Participant because such shares are withheld in satisfaction of the withholding of taxes incurred in connection with the exercise of an Option or stock appreciation right, or the issuance of shares under a stock bonus award, restricted stock award or stock unit award, the number of shares that are not delivered to the Participant shall not remain available for subsequent issuance under the Plan. If the exercise price of any Stock Award is satisfied by tendering shares of Common Stock held by the Participant (either by actual delivery or attestation), then the number of shares so tendered shall not remain available for subsequent issuance under the Plan.

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

5. ELIGIBILITY.

(a) Eligibility for Specific Stock Awards. Incentive Stock Options may be granted only to employees of the Company or a “parent corporation” or “subsidiary corporation” thereof (as such terms are defined in Sections 424(e) and (f) of the Code). Stock Awards other than Incentive Stock Options may be granted to Employees, Directors and Consultants; *provided, however*, Nonstatutory Stock Options and stock appreciation rights may not be granted to Employees, Directors, and Consultants who are providing Continuous Services only to any “parent” of the Company, as such term is defined in Rule 405 promulgated under the Securities Act, unless such Stock Awards comply with the distribution requirements of Section 409A of the Code.

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

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

(d) Consultants.

(i) A Consultant shall not be eligible for the grant of a Stock Award if, at the time of grant, a Form S-8 Registration Statement under the Securities Act (“Form S-8”) is not available to register either the offer or the sale of the Company’s securities to such Consultant because of the nature of the services that the Consultant is providing to the Company, or because the Consultant is not a natural person, or as otherwise provided by the rules governing the use of Form S-8, unless the Company determines both (i) that

such grant (A) shall be registered in another manner under the Securities Act (*e.g.*, on a Form S-3 Registration Statement) or (B) does not require registration under the Securities Act in order to comply with the requirements of the Securities Act, if applicable, and (ii) that such grant complies with the securities laws of all other relevant jurisdictions.

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

6. OPTION PROVISIONS.

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

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

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

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

(d) **Consideration.** The purchase price of Common Stock acquired pursuant to an Option shall be paid, to the extent permitted by applicable statutes and regulations, either (i) in cash at the time the Option is exercised or (ii) at the discretion of the Board (1) by delivery to the Company of other Common Stock; (2) according to a deferred payment or other similar arrangement with the Optionholder; (3) by a "net exercise" arrangement pursuant to which the Company will reduce the number of shares of Common Stock issued upon exercise by the largest whole number of shares with a Fair Market Value that does not exceed the aggregate exercise price; *provided, however*, that the Company shall accept a cash or other payment from the Participant to the extent of any remaining balance of the aggregate exercise price not satisfied by such holding back of whole shares; *provided, further, however*, that shares of Common Stock will no longer be outstanding under an Option and will not be exercisable thereafter to the extent that (i) shares are used to pay the exercise price pursuant to the "net exercise," (ii) shares are delivered to the Participant as a result of such exercise, and (iii) shares are withheld to satisfy tax withholding obligations; or (4) in any other form of legal consideration that may be acceptable to the Board. At any time that the Company is incorporated in Delaware, payment of the Common Stock's "par value," as defined in the Delaware General Corporation Law, shall not be made by deferred payment.

In the case of any deferred payment arrangement, interest shall be compounded at least annually and shall be charged at the minimum rate of interest necessary to avoid (1) the treatment as interest, under any applicable provisions of the Code, of any amounts other than amounts stated to be interest under the deferred payment arrangement and (2) the treatment of the Option as a variable award for financial accounting purposes.

(e) Transferability of Options. The Board may, in its sole discretion, impose such limitations on the transferability of Options, as the Board shall determine. In the absence of such a determination by the Board to the contrary, the following restrictions on the transferability of Options shall apply:

(i) Restrictions on Transfer. An Option shall not be transferable except by will or by the laws of descent and distribution and shall be exercisable during the lifetime of the Optionholder only by the Optionholder; *provided, however*, that the Board may, in its sole discretion, permit transfer of the Option in a manner that is not prohibited by applicable tax and securities laws upon the Optionholder's request. Except as explicitly provided herein, an Option may not be transferred for consideration.

(ii) Domestic Relations Orders. Notwithstanding the foregoing, an Option may be transferred pursuant to a domestic relations order; *provided, however*, that if an Option is an Incentive Stock Option, such Option may be deemed to be a Nonstatutory Stock Option as a result of such transfer.

(iii) Beneficiary Designation. Notwithstanding the foregoing, the Optionholder may, by delivering written notice to the Company, in a form provided by or otherwise satisfactory to the Company and any broker designated by the Company to effect Option exercises, designate a third party who, in the event of the death of the Optionholder, shall thereafter be entitled to exercise the Option and receive the Common Stock or other consideration resulting from such exercise. In the absence of such a designation, the executor or administrator of the Optionholder's estate shall be entitled to exercise the Option and receive the Common Stock or other consideration resulting from such exercise.

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

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

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

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

(j) Death of Optionholder. In the event (i) an Optionholder's Continuous Service terminates as a result of the Optionholder's death or (ii) the Optionholder dies within the period (if any) specified in the Option Agreement after the

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

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

(l) Non-Exempt Employees. No Option granted to an Employee who is a non-exempt employee for purposes of the Fair Labor Standards Act of 1938, as amended, shall be first exercisable for any shares of Common Stock until at least six months following the date of grant of the Option. Notwithstanding the foregoing, consistent with the provisions of the Worker Economic Opportunity Act, (i) in the event of the Participant's death or Disability, (ii) upon a Corporate Transaction (as defined in section 11(c)) in which such Option is not assumed, continued, or substituted, or (iii) upon the Participant's retirement (as such term may be defined in the Participant's Option Agreement or in another applicable agreement or in accordance with the Company's then current employment policies and guidelines), any such vested Options may be exercised earlier than six months following the date of grant. The foregoing provision is intended to operate so that any income derived by a non-exempt employee in connection with the exercise or vesting of an Option will be exempt from his or her regular rate of pay.

7. PROVISIONS OF STOCK AWARDS OTHER THAN OPTIONS.

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

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

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

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

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

(b) Restricted Stock Awards. Each restricted stock purchase agreement shall be in such form and shall contain such terms and conditions as the Board shall deem appropriate. The terms and conditions of the restricted stock purchase agreements may change from time to time, and the terms and conditions of separate restricted stock purchase

agreements need not be identical, but each restricted stock purchase agreement shall include (through incorporation of provisions hereof by reference in the agreement or otherwise) the substance of each of the following provisions:

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

(ii) Consideration. The purchase price of Common Stock acquired pursuant to the restricted stock purchase agreement shall be paid either: (i) in cash at the time of purchase; (ii) at the discretion of the Board, according to a deferred payment or other similar arrangement with the Participant; or (iii) in any other form of legal consideration that may be acceptable to the Board in its discretion; *provided, however*, that at any time that the Company is incorporated in Delaware, then payment of the Common Stock's "par value," as defined in the Delaware General Corporation Law, shall not be made by deferred payment.

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

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

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

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

(i) Consideration. At the time of grant of a stock unit award, the Board will determine the consideration, if any, to be paid by the Participant upon delivery of each share of Common Stock subject to the stock unit award. The consideration to be paid (if any) by the Participant for each share of Common Stock subject to a stock unit award may be paid in any form of legal consideration that may be acceptable to the Board in its sole discretion and permissible under applicable law.

(ii) Vesting. At the time of the grant of a stock unit award, the Board may impose such restrictions or conditions to the vesting of the stock unit award as it, in its sole discretion, deems appropriate.

(iii) Payment. A stock unit award may be settled by the delivery of shares of Common Stock, their cash equivalent, any combination thereof or in any other form of consideration, as determined by the Board and contained in the stock unit award agreement.

(iv) Additional Restrictions. At the time of the grant of a stock unit award, the Board, as it deems appropriate, may impose such restrictions or conditions that delay the delivery of the shares of Common Stock (or their cash equivalent) subject to a stock unit award after the vesting of such stock unit award.

(v) Dividend Equivalents. Dividend equivalents may be credited in respect of shares of Common Stock covered by a stock unit award, as determined by the Board and contained in the stock unit award

agreement. At the sole discretion of the Board, such dividend equivalents may be converted into additional shares of Common Stock covered by the stock unit award in such manner as determined by the Board. Any additional shares covered by the stock unit award credited by reason of such dividend equivalents will be subject to all the terms and conditions of the underlying stock unit award agreement to which they relate.

(vi) Termination of Participant's Continuous Service. Except as otherwise provided in the applicable stock unit award agreement, such portion of the stock unit award that has not vested will be forfeited upon the Participant's termination of Continuous Service.

(d) Stock Appreciation Rights. Each stock appreciation right agreement shall be in such form and shall contain such terms and conditions as the Board shall deem appropriate. The terms and conditions of stock appreciation right agreements may change from time to time, and the terms and conditions of separate stock appreciation right agreements need not be identical; *provided, however*, that each stock appreciation right agreement shall include (through incorporation of the provisions hereof by reference in the agreement or otherwise) the substance of each of the following provisions:

(i) Strike Price and Calculation of Appreciation. Each stock appreciation right will be denominated in shares of Common Stock equivalents. The appreciation distribution payable on the exercise of a stock appreciation right will be not greater than an amount equal to the excess of (i) the aggregate Fair Market Value (on the date of the exercise of the stock appreciation right) of a number of shares of Common Stock equal to the number of shares of Common Stock equivalents in which the Participant is vested under such stock appreciation right, and with respect to which the Participant is exercising the stock appreciation right on such date, over (ii) an amount (the strike price) that will be determined by the Board at the time of grant of the stock appreciation right.

(ii) Vesting. At the time of the grant of a stock appreciation right, the Board may impose such restrictions or conditions to the vesting of such stock appreciation right as it, in its sole discretion, deems appropriate.

(iii) Exercise. To exercise any outstanding stock appreciation right, the Participant must provide written notice of exercise to the Company in compliance with the provisions of the stock appreciation right agreement evidencing such stock appreciation right.

(iv) Payment. The appreciation distribution in respect to a stock appreciation right may be paid in Common Stock, in cash, in any combination of the two or in any other form of consideration, as determined by the Board and contained in the stock appreciation right agreement evidencing such stock appreciation right.

(v) Termination of Continuous Service. In the event that a Participant's Continuous Service terminates, the Participant may exercise his or her stock appreciation right (to the extent that the Participant was entitled to exercise such stock appreciation right as of the date of termination) but only within such period of time ending on the earlier of (i) the date three (3) months following the termination of the Participant's Continuous Service (or such longer or shorter period specified in the stock appreciation right agreement), or (ii) the expiration of the term of the stock appreciation right as set forth in the stock appreciation right agreement. If, after termination, the Participant does not exercise his or her stock appreciation right within the time specified herein or in the stock appreciation right agreement (as applicable), the stock appreciation right shall terminate.

8. COVENANTS OF THE COMPANY.

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

(b) Securities Law Compliance. The Company shall seek to obtain from each regulatory commission or agency having jurisdiction over the Plan such authority as may be required to grant Stock Awards and to issue and sell shares of Common Stock upon exercise of the Stock Awards; *provided, however*, that this undertaking shall not require

the Company to register under the Securities Act the Plan, any Stock Award or any Common Stock issued or issuable pursuant to any such Stock Award. If, after reasonable efforts, the Company is unable to obtain from any such regulatory commission or agency the authority which counsel for the Company deems necessary for the lawful issuance and sale of Common Stock under the Plan, the Company shall be relieved from any liability for failure to issue and sell Common Stock upon exercise of such Stock Awards unless and until such authority is obtained.

(c) **No Obligation to Notify or Minimize Taxes.** The Company shall have no duty or obligation to any Participant to advise such holder as to the time or manner of exercising such Stock Award. Furthermore, the Company shall have no duty or obligation to warn or otherwise advise such holder of a pending termination or expiration of a Stock Award or a possible period in which the Stock Award may not be exercised. The Company has no duty or obligation to minimize the tax consequences of a Stock Award to the holder of such Stock Award.

9. USE OF PROCEEDS FROM STOCK.

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

10. MISCELLANEOUS.

(a) **Corporate Action Constituting Grant of Stock Awards.** Corporate action constituting a grant by the Company of a Stock Award to any Participant shall be deemed completed as of the date of such corporate action, unless otherwise determined by the Board, regardless of when the instrument, certificate, or letter evidencing the Stock Award is communicated to, or actually received or accepted by, the Participant.

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

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

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

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

(f) **Investment Assurances.** The Company may require a Participant, as a condition of exercising or acquiring Common Stock under any Stock Award, (i) to give written assurances satisfactory to the Company as to the Participant's knowledge and experience in financial and business matters and/or to employ a purchaser representative reasonably satisfactory to the Company who is knowledgeable and experienced in financial and business matters and that he or she is capable of evaluating, alone or together with the purchaser representative, the merits and risks of exercising the Stock Award; and (ii) to give written assurances satisfactory to the Company stating that the Participant is acquiring Common Stock subject to the Stock Award for the Participant's own account and not with any present intention of selling or otherwise distributing the Common Stock. The foregoing requirements, and any assurances given pursuant to such

requirements, shall be inoperative if (1) the issuance of the shares of Common Stock upon the exercise or acquisition of Common Stock under the Stock Award has been registered under a then currently effective registration statement under the Securities Act or (2) as to any particular requirement, a determination is made by counsel for the Company that such requirement need not be met in the circumstances under the then applicable securities laws. The Company may, upon advice of counsel to the Company, place legends on stock certificates issued under the Plan as such counsel deems necessary or appropriate in order to comply with applicable securities laws, including, but not limited to, legends restricting the transfer of the Common Stock.

(g) Withholding Obligations. To the extent provided by the terms of a Stock Award Agreement, the Participant may satisfy any federal, state or local tax withholding obligation relating to the exercise or acquisition of Common Stock under a Stock Award by any of the following means (in addition to the Company's right to withhold from any compensation paid to the Participant by the Company) or by a combination of such means: (i) tendering a cash payment; (ii) authorizing the Company to withhold shares of Common Stock from the shares of Common Stock otherwise issuable to the Participant as a result of the exercise or acquisition of Common Stock under the Stock Award, *provided, however*, that no shares of Common Stock are withheld with a value exceeding the minimum amount of tax required to be withheld by law (or such lesser amount as may be necessary to avoid variable award accounting); or (iii) delivering to the Company (either by actual delivery or attestation) owned and unencumbered shares of Common Stock of the Company.

(h) Performance Stock Awards. A Stock Award may be granted, may vest, or may be exercised based upon service conditions, upon the attainment during a Performance Period of certain Performance Goals, or both. The length of any Performance Period, the Performance Goals to be achieved during the Performance Period, and the measure of whether and to what degree such Performance Goals have been attained shall be conclusively determined by the Board in its sole discretion. The maximum benefit to be received by any individual in any calendar year attributable to Stock Awards described in this subsection 10(h) shall not exceed the value of one million five hundred thousand (1,500,000) shares of Common Stock.

(i) Electronic Delivery. Any reference herein to a "written" agreement or document shall include any agreement or document delivered electronically or posted on the Company's intranet.

(j) Compliance with Section 409A. To the extent that the Board determines that any Stock Award granted hereunder is subject to Section 409A of the Code, the Stock Award Agreement evidencing such Stock Award shall incorporate the terms and conditions necessary to avoid the consequences specified in Section 409A(a)(1) of the Code. To the extent applicable, the Plan and Stock Award Agreements shall be interpreted in accordance with Section 409A of the Code. Notwithstanding anything to the contrary in this Plan (and unless the Stock Award Agreement specifically provides otherwise), if the Shares are publicly traded and a Participant holding a Stock Award that constitutes "deferred compensation" under Section 409A of the Code is a "specified employee" for purposes of Section 409A of the Code, no distribution or payment of any amount shall be made upon a "separation from service" before a date that is six (6) months following the date of such Participant's "separation from service" (as defined in Section 409A of the Code without regard to alternative definitions thereunder) or, if earlier, the date of the Participant's death.

11. ADJUSTMENTS UPON CHANGES IN STOCK.

(a) Capitalization Adjustments. If any change is made in the Common Stock subject to the Plan, or subject to any Stock Award, without the receipt of consideration by the Company (through merger, consolidation, reorganization, recapitalization, reincorporation, stock dividend, dividend in property other than cash, stock split, liquidating dividend, combination of shares, exchange of shares, change in corporate structure or other transaction not involving the receipt of consideration by the Company), the Board shall appropriately and proportionately adjust: (i) the class(es) and maximum number of securities subject to the Plan pursuant to subsection 4(a) and the maximum number of securities subject to award to any person pursuant to subsection 5(c) and 10(h) and (ii) the class(es) and number of securities and price per share of Common Stock subject to such outstanding Stock Awards. The Board shall make such adjustments, and its determination shall be final, binding and conclusive. (The conversion of any convertible securities of the Company shall not be treated as a transaction "without receipt of consideration" by the Company.)

(b) Dissolution or Liquidation. In the event of a dissolution or liquidation of the Company, then all outstanding Stock Awards shall terminate immediately prior to such event, and shares of Common Stock subject to the Company's repurchase option may be repurchased by the Company notwithstanding the fact that the holder of such stock is still in Continuous Service. Notwithstanding the foregoing, Options granted under the 1997 Stock Option Plan shall be subject to subsection 11(c) below in the event of a dissolution or liquidation of the Company.

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

12. AMENDMENT OF THE PLAN AND STOCK AWARDS.

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

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

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

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

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

13. TERMINATION OR SUSPENSION OF THE PLAN.

(a) Plan Term. Unless sooner terminated by the Board pursuant to Section 3, the Plan shall automatically terminate on the day before the tenth (10th) anniversary of the date the Plan is adopted by the Board or approved by the stockholders of the Company, whichever is earlier. No Stock Awards may be granted under the Plan while the Plan is suspended or after it is terminated.

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

14. EFFECTIVE DATE OF PLAN.

The Plan shall become effective upon its adoption by the Board, but no Stock Award shall be exercised (or, in the case of a stock bonus, shall be granted) unless and until the Plan has been approved by the stockholders of the Company, which approval shall be within twelve (12) months before or after the date the Plan is adopted by the Board.

15. CHOICE OF LAW.

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

CERTIFICATIONS

I, Raul R. Rodriguez, certify that:

1. I have reviewed this quarterly report on Form 10-Q of Rigel Pharmaceuticals, Inc.;
2. Based on my knowledge, this 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 report;
3. Based on my knowledge, the financial statements, and other financial information included in this 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 report;
4. The registrant's other certifying officer(s) and I are responsible for establishing and maintaining disclosure controls and procedures (as defined in Exchange Act Rules 13a-15(e) and 15d-15(e)) and internal control over financial reporting (as defined in Exchange Act Rules 13a-15(f) and 15d-15(f)) for the registrant and have:
 - a) Designed such disclosure controls and procedures, or caused such disclosure controls and procedures to be designed under our supervision, 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 report is being prepared;
 - b) Designed such internal control over financial reporting, or caused such internal control over financial reporting to be designed under our supervision, to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external purposes in accordance with generally accepted accounting principles;
 - c) Evaluated the effectiveness of the registrant's disclosure controls and procedures and presented in this report our conclusions about the effectiveness of the disclosure controls and procedures, as of the end of the period covered by this report based on such evaluation; and
 - d) Disclosed in this report any change in the registrant's internal control over financial reporting that occurred during the registrant's most recent fiscal quarter (the registrant's fourth fiscal quarter in the case of an annual report) that has materially affected, or is reasonably likely to materially affect, the registrant's internal control over financial reporting; and
5. The registrant's other certifying officer(s) and I have disclosed, based on our most recent evaluation of internal control over financial reporting, to the registrant's auditors and the audit committee of the registrant's board of directors (or persons performing the equivalent functions):
 - a) All significant deficiencies and material weaknesses in the design or operation of internal control over financial reporting which are reasonably likely to adversely affect the registrant's ability to record, process, summarize and report financial information; and
 - b) Any fraud, whether or not material, that involves management or other employees who have a significant role in the registrant's internal control over financial reporting.

Date: August 2, 2016

/s/ RAUL R. RODRIGUEZ
Raul R. Rodriguez
Chief Executive Officer

CERTIFICATIONS

I, Ryan D. Maynard, certify that:

1. I have reviewed this quarterly report on Form 10-Q of Rigel Pharmaceuticals, Inc.;
2. Based on my knowledge, this 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 report;
3. Based on my knowledge, the financial statements, and other financial information included in this 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 report;
4. The registrant's other certifying officer(s) and I are responsible for establishing and maintaining disclosure controls and procedures (as defined in Exchange Act Rules 13a-15(e) and 15d-15(e)) and internal control over financial reporting (as defined in Exchange Act Rules 13a-15(f) and 15d-15(f)) for the registrant and have:
 - a) Designed such disclosure controls and procedures, or caused such disclosure controls and procedures to be designed under our supervision, 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 report is being prepared;
 - b) Designed such internal control over financial reporting, or caused such internal control over financial reporting to be designed under our supervision, to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external purposes in accordance with generally accepted accounting principles;
 - c) Evaluated the effectiveness of the registrant's disclosure controls and procedures and presented in this report our conclusions about the effectiveness of the disclosure controls and procedures, as of the end of the period covered by this report based on such evaluation; and
 - d) Disclosed in this report any change in the registrant's internal control over financial reporting that occurred during the registrant's most recent fiscal quarter (the registrant's fourth fiscal quarter in the case of an annual report) that has materially affected, or is reasonably likely to materially affect, the registrant's internal control over financial reporting; and
5. The registrant's other certifying officer(s) and I have disclosed, based on our most recent evaluation of internal control over financial reporting, to the registrant's auditors and the audit committee of the registrant's board of directors (or persons performing the equivalent functions):
 - a) All significant deficiencies and material weaknesses in the design or operation of internal control over financial reporting which are reasonably likely to adversely affect the registrant's ability to record, process, summarize and report financial information; and
 - b) Any fraud, whether or not material, that involves management or other employees who have a significant role in the registrant's internal control over financial reporting.

Date: August 2, 2016

/s/ RYAN D. MAYNARD

Ryan D. Maynard

Executive Vice President and Chief Financial Officer

CERTIFICATION

Pursuant to the requirement set forth in Rule 13a-14(b) of the Securities Exchange Act of 1934, as amended (the "Exchange Act"), and Section 1350 of Chapter 63 of Title 18 of the United States Code (18 U.S.C. §1350), Raul R. Rodriguez, Chief Executive Officer of Rigel Pharmaceuticals, Inc. (the "Company"), and Ryan D. Maynard, Executive Vice President and Chief Financial Officer of the Company, each hereby certifies that, to the best of his knowledge:

1. The Company's Quarterly Report on Form 10-Q for the period ended June 30, 2016, to which this Certification is attached as Exhibit 32.1 (the "Periodic Report"), fully complies with the requirements of Section 13(a) or Section 15(d) of the Exchange Act, and
2. The information contained in the Periodic Report fairly presents, in all material respects, the financial condition and results of operations of the Company.

In Witness Whereof, the undersigned have set their hands hereto as of August 2, 2016.

/s/ RAUL R. RODRIGUEZ

Raul R. Rodriguez
Chief Executive Officer

/s/ RYAN D. MAYNARD

Ryan D. Maynard
Executive Vice President and Chief Financial Officer

This certification accompanies the Form 10-Q to which it relates, is not deemed filed with the Securities and Exchange Commission and is not to be incorporated by reference into any filing of Rigel Pharmaceuticals, Inc. under the Securities Act of 1933, as amended, or the Securities Exchange Act of 1934, as amended (whether made before or after the date of the Form 10-Q), irrespective of any general incorporation language contained in such filing.
