

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

**FORM S-8**

**REGISTRATION STATEMENT  
UNDER  
THE SECURITIES ACT OF 1933**

**RIGEL PHARMACEUTICALS, INC.**

(Exact name of registrant as specified in its charter)

**Delaware**  
(State or other jurisdiction of  
incorporation or organization)

**94-3248524**  
(IRS Employer Identification No.)

**1180 Veterans Boulevard  
South San Francisco, California**  
(Address of Principal Executive Offices)

**94080**  
(Zip Code)

**2000 Equity Incentive Plan  
2000 Non-Employee Directors' Stock Option Plan**  
(Full title of the plans)

**James M. Gower**  
**Chairman of the Board and Chief Executive Officer**  
**Rigel Pharmaceuticals, Inc.**  
**1180 Veterans Boulevard**  
**South San Francisco, California 94080**  
(Name and address of agent for service)

**(650) 624-1100**  
(Telephone number, including area code, of agent for service)

**Copies to:**  
**Chrystal Jensen, Esq.**  
Cooley LLP  
101 California Street, 5th Floor  
San Francisco, California 94111-5800  
(415) 693-2000

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. (Check one):

Large accelerated filer

Non-accelerated filer  (Do not check if a smaller reporting company)

Accelerated filer

Smaller reporting company

**CALCULATION OF REGISTRATION FEE**

Title of securities to be registered	Amount to be registered(1)	Proposed maximum offering price per share(2)	Proposed maximum aggregate offering price(2)	Amount of registration fee
Common Stock (par value \$0.001)	1,600,000 shares	\$ 8.01	\$ 12,816,000	\$ 913.78

(1) Pursuant to Rule 416(a) promulgated under the Securities Act of 1933, as amended (the "Securities Act"), this Registration Statement shall cover any additional shares of common stock which become issuable under the plans covered hereby by reason of any stock split, stock dividend, recapitalization or any other similar transaction without receipt of consideration which results in an increase in the number of shares of the registrant's outstanding common stock.

(2) Estimated solely for the purpose of calculating the amount of the registration fee pursuant to Rule 457(h) under the Securities Act. The offering price per share and aggregate offering price are based upon the average of the high and low prices of the registrant's common stock as reported on the Nasdaq Global Market on July 30, 2010. The following chart illustrates the calculation of the registration fee.

Title of securities to be registered	Amount to be registered	Proposed maximum offering price per share	Proposed maximum aggregate offering price
Shares issuable pursuant to the 2000 Equity Incentive Plan	1,250,000	\$ 8.01	\$ 10,012,500
Shares issuable pursuant to the 2000 Non-Employee Directors' Stock Option Plan	350,000	\$ 8.01	\$ 2,803,500
Proposed Maximum Aggregate Offering Price	1,600,000	\$ 8.01	\$ 12,816,000

Approximate date of commencement of proposed sale to the public: as soon as practicable after this Registration Statement becomes effective.

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**EXPLANATORY NOTE**

This Registration Statement on Form S-8 is being filed for the purpose of registering an additional (a) 1,250,000 shares of the registrant's common stock to be issued pursuant to the registrant's 2000 Equity Incentive Plan, and (b) 350,000 shares of the registrant's common stock to be issued pursuant to the registrant's 2000 Non-Employee Directors' Stock Option Plan.

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**PART II**

**INCORPORATION BY REFERENCE OF CONTENTS OF  
REGISTRATION STATEMENTS ON FORM S-8**

The contents of the Registration Statements on Form S-8 previously filed with the Securities and Exchange Commission on November 4, 2008 (File No. 333-155031), December 18, 2007 (File No. 333-148132), June 1, 2006 (File No. 333-134622), June 17, 2005 (File No. 333-125895), January 8, 2004 (File No. 333-111782), June 26, 2003 (File No. 333-106532), October 30, 2001 (File No. 333-72492) and December 4, 2000 (File No. 333-51184) are incorporated by reference herein.

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**EXHIBITS**

<u>Number</u>	<u>Exhibit</u>
4.1	(1) Amended and Restated Certificate of Incorporation
4.2	(2) Amended and Restated Bylaws
4.3	(1) Specimen Common Stock Certificate
5.1	Opinion of Cooley LLP
23.1	Consent of Independent Registered Public Accounting Firm
23.2	Consent of Cooley LLP is contained in Exhibit 5.1 to this Registration Statement
24.1	Power of Attorney is contained on the signature pages to this Registration Statement
99.1	(3) 2000 Non-Employee Directors' Stock Option Plan, as amended and restated
99.2	(4) 2000 Equity Incentive Plan, as amended and restated

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- (1) Documents incorporated by reference to the registrant's Current Report on Form 8-K (No. 000-29889), filed with the Securities and Exchange Commission on June 24, 2003.
  - (2) Document incorporated by reference to the registrant's Current Report on Form 8-K (No. 000-29889), filed with the Securities and Exchange Commission on February 2, 2007.
  - (3) Documents incorporated by reference to the registrant's Quarterly Report on Form 10-Q, filed with the Securities and Exchange Commission on August 3, 2010.
  - (4) Document incorporated by reference to the registrant's Current Report on Form 8-K (No. 000-29889), filed with the Securities and Exchange Commission on June 1, 2010.

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**SIGNATURES**

Pursuant to the requirements of the Securities Act of 1933, as amended, the registrant certifies that it has reasonable grounds to believe that it meets all of the requirements for filing on Form S-8 and has duly caused this Registration Statement to be signed on its behalf by the undersigned, thereunto duly authorized, in the City of South San Francisco, State of California, on August 3, 2010.

**RIGEL PHARMACEUTICALS, INC.**

By: /s/ Ryan D. Maynard  
Ryan D. Maynard  
Executive Vice President and Chief Financial Officer

**POWER OF ATTORNEY**

**KNOW ALL PERSONS BY THESE PRESENTS**, that each person whose signature appears below constitutes and appoints James M. Gower and Ryan D. Maynard, and each or any one of them, his true and lawful attorney-in-fact and agent, with full power of substitution and resubstitution, for him and in his name, place and stead, in any and all capacities, to sign any and all amendments (including post-effective amendments) to this Registration Statement, and to file the same, with all exhibits

thereto, and other documents in connection therewith, with the Securities and Exchange Commission (the "SEC"), and generally to do all such things in their names and behalf in their capacities as officers and directors to enable the registrant to comply with the provisions of the Securities Act and all requirements of the SEC, granting unto said attorneys-in-fact and agents, and each of them, full power and authority to do and perform each and every act and thing requisite and necessary to be done in connection therewith, as fully to all intents and purposes as he might or could do in person, hereby ratifying and confirming all that said attorneys-in-fact and agents, or any of them, or their or his substitutes or substitute, may lawfully do or cause to be done by virtue hereof.

Pursuant to the requirements of the Securities Act of 1933, this Registration Statement has been signed by the following persons in the capacities and on the dates indicated.

Signature	Title	Date
<u>/s/ James M. Gower</u> James M. Gower	Chairman of the Board and Chief Executive Officer (Principal Executive Officer)	August 3, 2010
<u>/s/ Ryan D. Maynard</u> Ryan D. Maynard	Executive Vice President and Chief Financial Officer (Principal Financial and Accounting Officer)	August 3, 2010
<u>/s/ Donald G. Payan</u> Donald G. Payan	Executive Vice President, President of Discovery and Research and Director	August 3, 2010
<u>/s/ Jean Deleage</u> Jean Deleage	Director	August 3, 2010
<u>/s/ Bradford S. Goodwin</u> Bradford S. Goodwin	Director	August 3, 2010
<u>/s/ Gary A. Lyons</u> Gary A. Lyons	Director	August 3, 2010
<u>/s/ Walter H. Moos</u> Walter H. Moos	Director	August 3, 2010
<u>/s/ Hollings C. Renton</u> Hollings C. Renton	Director	August 3, 2010
<u>/s/ Peter S. Ringrose</u> Peter S. Ringrose	Director	August 3, 2010
<u>/s/ Stephen A. Sherwin</u> Stephen A. Sherwin	Director	August 3, 2010

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[COOLEY LLP LETTERHEAD]

August 3, 2010

Rigel Pharmaceuticals, Inc.  
1180 Veterans Boulevard  
South San Francisco, CA 94080

Ladies and Gentlemen:

You have requested our opinion with respect to certain matters in connection with the filing by Rigel Pharmaceuticals, Inc. (the "Company") of a Registration Statement on Form S-8 (the "Registration Statement") with the Securities and Exchange Commission covering the offering of up to an aggregate of 1,600,000 shares of the Company's common stock, \$0.001 par value (the "Shares"), with respect to the Company's 2000 Equity Incentive Plan, as amended and restated, and the Company's 2000 Non-Employee Directors' Stock Option Plan, as amended and restated (collectively, the "Plans").

In connection with this opinion, we have examined the Registration Statement, the Company's Amended and Restated Certificate of Incorporation and Amended and Restated Bylaws and such other documents, records, certificates, memoranda and other instruments as we deem necessary as a basis for this opinion. We have assumed the genuineness and authenticity of all documents submitted to us as originals, the conformity to originals of all documents submitted to us as copies thereof and the due execution and delivery of all documents where due execution and delivery are a prerequisite to the effectiveness thereof.

On the basis of the foregoing, and in reliance thereon, we are of the opinion that the Shares, when sold and issued in accordance with the Plans and the Registration Statement, will be validly issued, fully paid, and nonassessable (except as to shares issued pursuant to certain deferred payment arrangements, which will be fully paid when such deferred payments are made in full).

We consent to the filing of this opinion as an exhibit to the Registration Statement.

Very truly yours,

COOLEY LLP

By: /s/ Chrystal Jensen  
Chrystal Jensen, Esq.

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**CONSENT OF INDEPENDENT REGISTERED PUBLIC ACCOUNTING FIRM**

We consent to the incorporation by reference in the Registration Statement (Form S-8) of Rigel Pharmaceuticals, Inc. for the registration of 1,250,000 shares of Common Stock pertaining to the 2000 Equity Incentive Plan, and 350,000 shares of Common Stock pertaining to the 2000 Non-Employee Directors' Stock Option Plan of Rigel Pharmaceuticals, Inc. of our reports dated March 2, 2010, with respect to the financial statements of Rigel Pharmaceuticals, Inc., and the effectiveness of internal control over financial reporting of Rigel Pharmaceuticals, Inc., included in its Annual Report (Form 10-K) for the year ended December 31, 2009, filed with the Securities and Exchange Commission.

/s/ ERNST & YOUNG LLP

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Palo Alto, California  
August 3, 2010

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