

Via Facsimile and U.S. Mail
Mail Stop 4720

October 29, 2009

Ryan D. Maynard
Vice President and
Chief Financial Officer
Rigel Pharmaceuticals, Inc.
1180 Veterans Blvd.
South San Francisco, CA 94080

Re: Rigel Pharmaceuticals, Inc.
Form 10-K for the Fiscal Year Ended December 31, 2008
Filed February 27, 2009
Schedule 14A filed April 15, 2009
File Number: 000-29889

Dear Mr. Maynard:

We have reviewed your October 5, 2009 response to our September 21, 2009 letter and have the following comments. In our comments, we ask you to provide us with information to better understand your disclosure. Where a comment requests you to revise disclosure, the information you provide should show us what the revised disclosure will look like. Please identify the annual or quarterly filing, as applicable, in which you intend to first include it. If you do not believe that revised disclosure is necessary, explain the reason in your response. After reviewing the information provided, we may raise additional comments and/or request that you amend the above filings.

Form 10-K for the Fiscal Year Ended December 31, 2008

Business
Corporate Collaborations, page 8

1. We note that your draft disclosure regarding collaboration agreements does not include any of the milestone payment amounts or royalty rates you are eligible to receive under these agreements. Please expand your draft disclosure further to include aggregate potential milestone amounts payable and the milestone amounts paid to date. Please disclose the royalty rate or a royalty rate range, such as high-single digits, low-teens, etc.

Intellectual Property, page 9

2. Please expand your draft disclosure here to further individually describe each of your material patents. Please identify which product groups each material patent relates to and the jurisdiction(s) in which each material patent was granted. Include the expiration dates for each material patent.

Critical Accounting Policies and the Use of Estimates
Research and Development Accruals, page 35

3. We note your response to prior comment five and your proposed expanded disclosure in Exhibit B. On page 16 of your Form 10-K, you disclose that you have established anticipated timelines with respect to the initiation or completion of clinical studies based on existing knowledge of the compound. Please expand your proposed disclosure for your four product compounds in the clinical testing stage to disclose the estimated timing for the completion of the current clinical stage and initiation of the next stage, and or completion of the clinical studies.

Definitive Proxy Statement filed on Schedule 14A

Compensation Discussion and Analysis
2008 Executive Compensation, page 30

4. Please provide draft disclosure for your 2010 proxy statement which includes enumeration of the objectives set for use in determining base salaries for the coming year.

Short-Term Cash Incentive Compensation, page 31

5. We note your response to our prior comment 7 that, “the payment of bonuses is highly discretionary.” Despite the fact that the goals set by the compensation committee at the outset of the year may be modified, these goals are still material to an investor’s understanding of your compensation program, and as such we ask that you please expand your draft disclosure to specify the actual goals set for the named executive officers, quantify those goals where possible, explain how the achievement of those goals will affect the incentive compensation awarded, and confirm that you will discuss the extent of achievement of those goals in your 2010 proxy statement.

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Please provide us the information requested within 10 business days or tell us when you will provide us with a response. Please furnish a cover letter with your

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response that keys your response to our comments. Detailed cover letters greatly facilitate our review. Please furnish your letter on EDGAR under the form type label CORRESP.

Please contact Dana Hartz, Staff Accountant, at (202) 551-3648 or Don Abbott, Review Accountant, at (202) 551-3608 if you have any questions regarding the processing of your response as well as any questions regarding comments on the financial statements and related matters. You may contact Michael Rosenthal, Staff Attorney, at (202) 551-3674 or Jeffrey Riedler, Assistant Director, at (202) 551-3715 with questions on any of the other comments. In this regard, do not hesitate to contact me, at (202) 551-3679.

Sincerely,

Jim B. Rosenberg
Senior Assistant Chief
Accountant