RIGEL

RIGEL, INC.

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November 12, 2009

VIA EDGAR AND FACSIMILE (202.772.9217)

Mr. Jim B. Rosenberg
Senior Assistant Chief Accountant
U.S. Securities and Exchange Commission
Division of Corporation Finance
100 F. Street, N.E.
Mail Stop 4720
Washington, D.C. 20549

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

Dear Mr. Rosenberg,

Rigel Pharmaceuticals, Inc. (the "Company") hereby responds to the Staff's comment letter, dated October 29, 2009 (the "Comment Letter"), regarding the Company's Annual Report on Form 10-K for the fiscal year ended December 31, 2008 (the "Form 10-K") and the Company's Definitive Proxy Statement filed on Schedule 14A on April 15, 2009 (the "Proxy Statement"). We note the Comment Letter was received in response to our previous letter that we submitted on October 5, 2009 (the "Prior Response Letter") in response to the Staff's comment letter dated September 21, 2009. The following information is provided in response to the Staff's comments, which comments are included below in bold. Please note that the heading and numbering of the responses set forth below correspond to the heading and numbering of the comments contained in the Comment Letter.

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

Business - - Corporate Collaborations, page 8

1. *Comment.* 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.

Response. The Company submits that, for the reasons set forth below, (i) the Inactive Collaboration Agreements (as defined below) currently are not material to the Company and, as such, the Company does not believe it would be appropriate or necessary to include disclosure of the significant terms of such

agreements, including with respect to aggregate potential milestone amounts, milestone amounts paid to date, if any, and/or royalty rates or royalty rate ranges paid or payable pursuant to an Inactive Collaboration Agreement, in the Company's Form 10-K or other SEC filings, and, accordingly, have updated our proposed disclosure submitted with the Prior Response Letter to remove disclosure of the material terms of the Inactive Collaboration Agreements; and (ii) commencing with its Annual Report on Form 10-K for the fiscal year ending December 31, 2009, the Company will provide additional disclosure regarding aggregate potential milestone amounts, milestone amounts paid to date, if any, and royalty rate ranges paid or payable pursuant to an Active Collaboration Agreement (as defined below).

The Company advises the Staff that it considers inactive the collaboration agreements with Janssen Pharmaceutica N.V. (relating to oncology therapeutics and diagnostics), Pfizer, Inc. (relating to immunology), Novartis Pharma AG (with respect to four different programs relating to immunology, oncology and chronic bronchitis) and Merck & Co., Inc. (relating to oncology) (together, the "Inactive Collaboration Agreements"). None of the Inactive Collaboration Agreements relate to the Company's currently material product development programs, and we do not currently believe that any of the collaboration partners will advance the product candidates related to such agreements into clinical testing. Since we initially entered into the Inactive Collaboration Agreements, we have reduced or altered our development efforts in related research programs, and currently we do not anticipate that we will focus a material portion of our research and development efforts in these areas at the development stages contemplated by the Inactive Collaboration Agreements. In addition, none of the collaboration partners under the Inactive Collaboration Agreements has indicated to us that they will advance the relevant product candidates into clinical testing. For these reasons, upon further evaluation of these agreements, we do not consider any of the Inactive Collaboration Agreements to be material to our business, and we do not believe that disclosure of the material terms of the Inactive Collaboration Agreements, including with respect to milestones and royalties paid or payable pursuant to an Inactive Collaboration Agreement, would provide additional material information relevant to an investor's investment decision with respect to the Company's securities. In fact, since we do not expect to receive additional milestones or royalties under the Inactive Collaboration Agreements, disclosure of the terms of potential future payments may be misleading to investors. As such, we do not believe it would be appropriate or necessary to include disclosure of the material terms of the Inactive Collaboration Agreements in our Form 10-K or other SEC filings and have updated the proposed disclosure under the heading "Business — Corporate Collaborations", initially attached as Exhibit A to the Prior Response Letter, in order to remove disclosure of the material terms of the Inactive Collaboration Agreements, as reflected in the updated proposed disclosure set forth on Exhibit A attached hereto.

The Company also advises the Staff that, commencing with its Annual Report on Form 10-K for the fiscal year ending December 31, 2009, the Company will provide enhanced disclosure under the heading "Business — Corporate Collaborations" regarding aggregate potential milestone amounts, milestone amounts paid to date (to the extent we have received any such amounts as of the applicable reporting period) and royalty rate ranges payable pursuant to the collaboration agreements with Pfizer, Inc. (relating to intrapulmonary asthma and allergy therapeutics), Daiichi (relating to oncology) and Merck Serono (relating to our aurora kinase inhibitor program), as well as pursuant to any additional material collaboration agreements that we complete in the applicable reporting period (together, the "Active Collaboration Agreements"), as reflected in the updated proposed disclosure set forth on Exhibit A attached hereto. The Company may in the future determine that any Active Collaboration Agreement is no longer material to its business. To the extent that the Company makes such a determination, the Company may determine that it is no longer appropriate or necessary to include disclosure of the material terms of such collaboration agreement in its Form 10-K or other SEC filings.

The Company acknowledges its obligation to regularly review each of its collaboration agreements and other similar arrangements to evaluate their materiality, and include additional disclosure regarding such arrangements if at any time the Company determines it has become material and additional disclosure is required.

Intellectual Property, page 9

2. ***Comment.*** **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.**

Response. In response to the Staff's comment, commencing with our Annual Report on Form 10-K for the fiscal year ending December 31, 2009, we will enhance the disclosure under the heading "Business - Intellectual Property" to include the following description of the Company's existing material patents:

We currently hold a number of issued patents in the United States, as well as corresponding applications that allow us to pursue patents in other countries, some of which have been allowed and/or granted and others of which we expect to be granted. Specifically, in each case where we hold a U.S. issued patent, the subject matter is covered at least by an application filed under the Patent Cooperation Treaty, or the PCT, which is then used or has been used to pursue protection in certain countries that are members of the treaty. Our material patents relate to R406, an oral syk kinase inhibitor, and R788, a pro-drug of R406 and our lead product candidate.

R788. R788 is covered as a composition of matter in a U.S. issued patent that has an expiration date in September 2026, after taking into account a patent term adjustment, and may be granted further protection under the patent term extension rules related to conducting clinical trials. R788 is also covered under broader composition of matter claims in a U.S. issued patent that has an expiration date in March 2026, after taking into account a patent term adjustment. Methods of using R788 to treat various indications, methods of making R788, and compositions of matter covering certain intermediates used to make R788 are also covered, respectively, in three U.S. issued patents; the earliest expiration date of any of these patents is in April 2023 and the latest expiration date is in June 2026, after taking into account patent term adjustments. Corresponding applications have been filed in foreign jurisdictions under the PCT, and are at various stages of prosecution.

R406. R406 is covered as a composition of matter in a U.S. issued patent and, with a patent term adjustment, currently has an expiration date in February 2025. R406 is also covered under two broader composition of matter patents issued in the U.S. expiring in February 2023 and July 2024. Methods of using R406 to treat various indications and compositions of matter covering certain intermediates used to make R406 are also covered under patents described above. Corresponding applications have been filed in foreign jurisdictions under the PCT, and are at various stages of prosecution.

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

3. ***Comment.*** **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.**

Response. In response to the Staff's comment, commencing with our Annual Report on Form 10-K for the fiscal year ending December 31, 2009, we will enhance the disclosure under the heading "Research and Development Expenses" before "Recent Accounting Pronouncements" in "Management's Discussion and Analysis of Financial Condition and Results of Operations" to include disclosure regarding the estimated timelines for the completion of the current clinical stages and initiation of the next clinical stages with respect to our product candidates in a table in the form proposed below, which would supplement the proposed disclosure included in Exhibit B of the Prior Response Letter and which we will update and finalize based on our expectations of the estimated clinical timelines, our determination of whether a product candidate is material to our business and whether such disclosure for a product candidate that is no longer material to our business is appropriate or necessary, and our ability to obtain sufficient information to provide such disclosure for clinical studies managed by third parties, each as at the time of filing our Annual Report on Form 10-K:

The following table presents our currently estimated timelines for the completion of the current clinical stages and initiation of the next clinical stages related to our product candidates in clinical testing.

PIPELINE	CURRENT STAGE	ESTIMATED CLINICAL TIMELINE
R788 - Oral Syk Inhibitor		
RA	Phase 3	Completed Phase 2 clinical trials in 2009 and [initiated][expect to initiate] Phase 3 clinical trial [in 2010][in the first half of 2010].
B-cell lymphoma	Phase 2	Completed Phase 2 clinical trial in 2008 and expect to [announce interim results in 20][initiate Phase 3 clinical trial in 20].
T-cell lymphoma	Phase 2	Expect to complete Phase 2 clinical trials [in the second half of 2010][20] and to initiate Phase 3 clinical trial in [20].
Certain Solid Tumors	Phase 2 - NCI	Expect NCI to complete Phase 2 clinical trial in [20] [and initiate Phase 3 clinical trial in [20]].
ITP	Phase 2	Completed Phase 2 clinical trial in 2007. Postponed further clinical development until collaboration partner for R788 is secured.
Lupus	—	Completed preclinical studies in 2008. Postponed initiation of clinical development until collaboration partner for R788 is secured.

R348 - JAK3 Inhibitor		
Psoriasis	Phase 1	Initiated Phase 1 clinical trials in 2008. Postponed further clinical development until collaboration partner for R788 is secured.
R763 - Oral Aurora Kinase Inhibitor		

Oncology	Phase 2 - Merck Serono	Merck Serono completed Phase 1 clinical trials in 2009. [Expect] Merck Serono [to initiate][initiated] Phase 2 clinical trials in [2010][the first half of 2010].
R343 - Inhaled Syk Inhibitor		
Asthma	Phase 1b - Pfizer	Expect Pfizer to complete Phase 1b clinical trial and initiate Phase 2 clinical trial in [2010].

Definitive Proxy Statement filed on Schedule 14A

Compensation Discussion and Analysis - 2008 Executive Compensation, page 30

4. ***Comment.*** **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.**

Response. In response to the Staff's comment, under the heading "Compensation Discussion and Analysis - 2010 Executive Compensation - Base Salary" in our 2010 Proxy Statement to be filed on Schedule 14A, we propose to include the following disclosure regarding the objectives used by the Compensation Committee to determine 2010 base salaries of our Named Executive Officers, to the extent such objectives are relevant in establishing 2010 base salaries:

As discussed under "Competitive Market Review and Benchmarking" below, when establishing base salaries of the Named Executive Officers, our Compensation Committee primarily reviewed the base salaries of similarly-situated executive officers at companies that we consider to be our peers. In addition to competitive market conditions, our Compensation Committee also took into account a number of performance-based factors in establishing 2010 base salaries of the Named Executive Officers, including: each executive officer's experience, position and functional role, level of responsibility, uniqueness of applicable skills, and the demand and competitiveness for attracting and retaining an individual with each Named Executive Officer's specific expertise and experience in the biotechnology industry. The Compensation Committee also assessed each Named Executive Officer's contributions to the Company's achievement of its 2009 corporate goals and the individual's 2009 personal performance in light of performance criteria, as discussed in more detail below.

The Compensation Committee considered the following 2009 objective corporate goals: clinical development of product candidates, building the pipeline of potential product candidates and the Company's financial performance, including the Company's cash position at December 31, 2009. Regarding the clinical development goal, the Compensation Committee considered the execution and results of the clinical trials for R788, including the rheumatoid arthritis (RA) and lymphoma trials, with a focus on the Phase 2 clinical trials for RA. The Compensation Committee also considered the results of our end of Phase 2 meeting with the FDA, with a focus on our ability to advance R788 in a timely manner following the FDA meeting. Regarding the goal of building the pipeline, the Committee considered whether we identified any novel compounds to take into pre-clinical development. With respect to our year end cash position, the Committee considered a certain number, which is confidential, in conjunction with whether or not we had completed a partnership deal to develop R788 in RA, or if we had not, how close we were to securing such partnership.

See "- 2009 Executive Compensation - Short-Term Cash Incentive Compensation" below for a discussion of the Compensation Committee's assessment of the extent to which we met our 2009 corporate goals. In light of meeting our 2009 corporate goals, each Named Executive Officer's responsibilities are expected to increase in 2010, particularly in order to maximize the value of R788 to the Company.

The Compensation Committee did not establish individual 2009 personal performance criteria for each Named Executive Officer, but considered subjective performance-based factors, including: an executive officer's ability to lead, organize and motivate teams and instill loyalty, develop the skills necessary to mature with the Company, set realistic goals to be achieved in his or her respective area, and recognize and pursue new business opportunities that enhance our growth and success. The Compensation Committee also considered turn-over trends within a group, meeting deadlines and results of certain projects. In establishing 2010 base salaries of the Named Executive Officers, the Compensation Committee assessed each Named Executive Officer's individual performance against these performance criteria and determined that each Named Executive Officer performed satisfactorily.

Short-Term Cash Incentive Compensation, page 31

5. ***Comment.*** **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.**

Response. In response to the Staff's comment, under the heading "Compensation Discussion and Analysis - 2009 Executive Compensation - Short-Term Cash Incentive Compensation" in our 2010 Proxy Statement on Schedule 14A, we propose to include the following disclosure regarding the 2009 corporate goals:

For performance in fiscal year 2009, an individual was eligible to receive a cash incentive award equal to a percentage of his or her 2009 base salary based on the

achievement of specific corporate goals recommended by the Compensation Committee and approved by the Board at the beginning of fiscal year 2009, pursuant to our 2009 Cash Incentive Plan (which was filed as an exhibit to our current report on Form 8-K on April 1, 2009). Under the 2009 Cash Incentive Plan, target bonus levels for our executive officers if the Company performs at plan range from 40% to 60% of the executive officer's base salary for 2009, and the Compensation Committee, in its discretion, may grant bonuses in excess of target bonus levels, up to a maximum of 80% to 120% of the executive officer's base salary, depending on the executive officer's position and responsibilities. The Compensation Committee considered the following 2009 corporate goals in connection with the payment of bonuses under the 2009 Cash Incentive Plan: clinical development of product candidates, building the pipeline of potential product candidates and the Company's financial performance, including the Company's cash position at December 31, 2009. Pursuant to its charter, the Compensation Committee has the authority to use its discretion in setting the goals and bonus targets to which short-term compensation is tied, as well as to modify these goals and targets. Pursuant to its discretionary authority, the Compensation Committee also considered other performance goals, current economic conditions and exceptional and/or inadequate performances by each executive officer when evaluating whether and to what extent to award any bonus.

Our 2009 corporate goals do not include minimum, target and maximum levels of performance with respect to each goal. However, to award any bonus, the Compensation Committee required at least some progress in meeting the clinical development goal. The corporate goals are not quantifiable in that they do not include specific quantitative elements or quantitative weighting.

In considering the extent of success in achieving the clinical development goal, the Compensation Committee considered the execution and results of the clinical trials for R788, including the rheumatoid arthritis (RA) and lymphoma trials, with a focus on the Phase 2 clinical trials for RA. In 2009, management was required to conserve spending on other programs or new endeavors in order to pursue R788 in Phase 2 clinical trials during 2009. In general, success with respect to our clinical development goal was measured by our completion of clinical trials as well as our ability to plan the next clinical trials and whether certain clinical trials showed statistically significant results. In 2009, we achieved very significant milestones with regard to clinical development. The Compensation Committee considered in particular the clinical trials completed in 2009 for R788 in RA, including the results of the Phase 2 clinical trials as well as the results of our end of Phase 2 meeting with the FDA, with a focus on our ability to advance R788 in a timely manner following the FDA meeting. In addition, the interim results for the clinical trials of R788 in certain oncology patients showed proof of concept.

In determining whether and to what extent to award any bonus, the Compensation Committee also considered efforts to expand our pipeline in 2009. In considering the extent of success in expanding our pipeline, the Compensation Committee considered whether we identified any novel compounds to take into pre-clinical development. Although details of the advancement of new product candidates are proprietary, in 2009, we achieved significant milestones with regard to our pipeline. We continue to pursue lead candidates in the areas of immunology and oncology, and we are continuing to explore programs in other areas as well.

The Compensation Committee also considered the extent of success in meeting our cash position goal. With respect to our year end cash position, we finished 2009 with a cash

position of approximately $, approximately $ [more][less] than our cash position as of December 31, 2008. The Compensation Committee also considered our progress in securing a partnership which would enable us to take R788 forward into Phase 3 clinical trials for RA.

In addition to the corporate goals noted above, in exercising its discretion, the Compensation Committee also considered current economic conditions when evaluating whether and to what extent to award any bonus. The Compensation Committee also considered whether the Company or an executive officer displayed exemplary or inadequate performance in 2009. The Compensation Committee assessed whether the Company's performance exceeded the established targets, as well as the extent to which each executive officer contributed to the Company's achievement of its corporate goals.

The Company confirms that our 2010 Proxy Statement will also include disclosure as to how the achievement of the 2009 corporate goals affected the incentive compensation awarded, and further detail as to the Compensation Committee's assessment of the extent of achievement of our 2009 corporate goals.

* * * *

In connection with the Company's response to the Staff's comments, the Company acknowledges the following:

- The Company is responsible for the adequacy and accuracy of the disclosure in the filing;
- Staff comments or changes to disclosure in response to Staff comments do not foreclose the Commission from taking any action with respect to the filing; and
- The Company may not assert Staff comments as a defense in any proceeding initiated by the Commission or any person under the federal securities laws of the United States.

Should you have additional questions or comments regarding the foregoing, please contact the undersigned at (650) 624-1284 or Dolly A. Vance, Senior Vice President, General Counsel and Corporate Secretary of the Company at (650) 624-1327.

Sincerely,

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

cc: Dolly A. Vance, Senior Vice President, General Counsel and Corporate Secretary
Suzanne Sawochka Hooper, Cooley Godward Kronish LLP

EXHIBIT A

Corporate Collaborations

We conduct research and development programs independently and in connection with our corporate collaborators. We currently have the following active collaborations with three major pharmaceutical/biotechnology companies: Pfizer, Inc., or Pfizer, (relating to intrapulmonary asthma and allergy therapeutics and associated with the clinical compound R343), Daiichi Pharmaceuticals Co., Ltd., or Daiichi, (relating to oncology), and Merck Serono (relating to our aurora kinase inhibitor program). None of these collaborations currently provide us with regular research reimbursement. In all of these collaborations, if certain conditions are met, we are entitled to receive future milestone payments and royalties. We cannot guarantee that these conditions will be met or that research and development efforts will be successful. As a result, we may not receive any further milestone payments or royalties under these agreements.

Pfizer

In January 2005, we entered into a research collaboration with Pfizer that has a license component. The collaboration is for the development of inhaled products for the treatment of allergic asthma and other respiratory diseases such as COPD. The collaboration was primarily focused on our preclinical small molecule compounds, which inhibit IgE receptor signaling in respiratory tract mast cells by blocking the signaling enzyme Syk kinase. A goal of the collaboration was for Pfizer to nominate a licensed compound to commence advanced preclinical development. Pfizer is responsible for the manufacture of all preclinical and clinical materials for each compound/product and all costs associated with development and commercialization. We did not have any further obligations to Pfizer after the research phase of the collaboration ended in February 2007.

In connection with this collaboration, Pfizer paid us $10.0 million upfront and purchased $5.0 million of our common stock at a premium in 2005. We have earned and will earn milestone payments in connection with certain clinical events, should they occur, as well as royalties from sales of the resulting products upon marketing approval. Under the terms of the collaboration agreement, the aggregate of potential milestone amounts payable to us is $175.0 million and mid-single-digit to low double-digit royalties on sales. In May 2006, we achieved the first milestone upon selection of the licensed compound and received a $5.0 million milestone payment when Pfizer nominated R343 to commence advanced preclinical development in allergic asthma. In December 2007, we earned the second milestone and received another milestone payment of $5.0 million when Pfizer initiated a Phase 1 clinical trial on R343. No milestone payments were received in either 2008 or 2009 as no further milestones were met.

Pfizer remains obligated to pay us various milestones and royalties in the future if certain conditions are met.

Daiichi

In August 2002, we signed an agreement for a collaboration with Daiichi to pursue research related to a specific target from a novel class of drug targets called ligases that control cancer cell proliferation through protein degradation. Daiichi paid us $0.9 million at the time we entered into the agreement. Under the terms of the collaboration agreement, the aggregate of potential milestone amounts payable to us is $33.6 million and low to mid-single-digit royalties on sales. We have earned to date three milestone payments totaling $4.6 million and may earn milestone payments in connection with certain clinical events. The research phase of this three-year collaboration expired in August 2005. In addition, we are entitled to receive royalties on any commercialized products to emerge from the collaboration at low to mid-single-digit royalties on sales. Under the terms of the agreement, we retain the rights to co-develop and co-promote certain products resulting from this collaboration in North America, while Daiichi retains co-development

and promotion rights in the remainder of the world. No other milestone payments were received since 2005 as no further milestones were met. Daiichi may become obligated to pay us certain other milestone payments, and we are also entitled to receive royalties on any commercialized products to emerge from the collaboration.

Merck Serono

In October 2005, we entered into a collaborative research and license agreement with Merck Serono granting them an exclusive license to develop and commercialize product candidates from our aurora kinase inhibitor program. Even though the agreement included a basket of compounds within the aurora kinase inhibitor program, the collaboration and our efforts under the agreement were focused on R763. We were responsible for all costs associated with the preparation and filing of an IND for R763 while Merck Serono is responsible for all development of R763 following regulatory acceptance of the IND and will bear all costs thereafter. In connection with this collaboration, Merck Serono paid us $10.0 million upfront and purchased $15.0 million of our common stock at a premium in 2005. We amortized the upfront amount into revenue over the nine months from the initiation of the collaboration in October 2005. As of June 2006, we had completely recognized the upfront amount into revenue as we had performed all our deliverables under the collaboration and did not have any further obligations to Merck Serono leading up to the initiation of the first clinical trial.

We are also eligible to receive milestone payments and royalties in the future. Under the terms of the collaboration agreement, the aggregate of potential milestone amounts payable to us is $125.0 million and high single-digit to mid-double-digit royalties on sales. During February 2006, we received a milestone payment of $5.0 million triggered by the regulatory acceptance of the R763 IND in January 2006. In September 2006, we received a $3.0 million milestone payment from Merck Serono in connection with the initiation of the Phase 1 study of R763. In October 2007, we received another $3.0 million milestone payment from Merck Serono upon their exercise of the option to obtain Japan rights for R763. No other milestone payments were received since 2007 as no further milestones were met. Merck Serono remains obligated to pay us various milestones and royalties in the future if certain conditions are met.