

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

DIVISION OF CORPORATION FINANCE

December 28, 2010

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

> Re: Rigel Pharmaceuticals, Inc. Form 10-K for the Fiscal Year Ended December 31, 2009 Filed March 2, 2010 Form 10-Q for the Quarterly Period Ended September 30, 2010 File Number: 000-29889

Dear Mr. Maynard:

We have completed our review of your Forms 10-K and 10-Q and have no further comments at this time.

Sincerely,

Joel Parker Accounting Branch Chief