

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

January 26, 2011

Sudhir Agrawal President and Chief Executive Officer Idera Pharmaceuticals, Inc. 167 Sidney Street Cambridge, Massachusetts 02139

Re: Idera Pharmaceuticals, Inc.

Form 10-K for the Fiscal Year Ended December 31, 2009

Filed March 10, 2010

Proxy Statement on Schedule 14A

Filed April 29, 2010 File Number: 001-31918

Dear Mr. Agrawal:

We have completed our review of your filings and do not have any further comments at this time.

Sincerely,

Jeffrey P. Riedler Assistant Director