

Mail Stop 4720

December 14, 2009

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

**Re: Idera Pharmaceuticals, Inc.
Form 10-K for the year ended 12/31/2008
Filed March 11, 2009
File No. 001-31918**

Dear Dr. Agrawal:

We have completed our review of your Form 10-K and related filings and have no further comments at this time.

Sincerely,

Jeffrey P. Riedler
Assistant Director

cc: Louis J. Arcudi, III
Rosemary G. Reilly
Wilmer Cutler Pickering Hale and Dorr LLP
60 State Street
Boston, Massachusetts 02109
Fax: 617-526-5000