

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

Mail Stop 4546

November 15, 2016

Via E-mail
Mr. Louis J. Arcudi, III
Chief Financial Officer
Idera Pharmaceuticals, Inc.
167 Sidney Street
Cambridge, MA 02139

Re: Idera Pharmaceuticals, Inc.

Form 10-K for the Fiscal Year Ended December 31, 2015

Filed March 10, 2016 File No. 001-31918

Dear Mr. Arcudi:

We have completed our review of your filing. We remind you that the company and its management are responsible for the accuracy and adequacy of their disclosures, notwithstanding any review, comments, action or absence of action by the staff.

Sincerely,

/s/ Sharon M. Blume

Sharon M. Blume Accounting Branch Chief Office of Healthcare and Insurance