



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

DIVISION OF
CORPORATION FINANCE

Mail Stop 4546

February 7, 2017

Via E-mail

Mr. Lonnel Coats
President and Chief Executive Officer
Lexicon Pharmaceuticals, Inc.
8800 Technology Forest Place
The Woodlands, Texas 77381

Re: Lexicon Pharmaceuticals, Inc.
Form 10-K for the Year Ended December 31, 2015
Filed March 11, 2016
File No. 000-30111

Dear Mr. Coats:

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