

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

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