March 29, 2024

Lonnel Coats Chief Executive Officer Lexicon Pharmaceuticals, Inc. 2445 Technology Forest Blvd., 11th Floor The Woodlands, TX 77381

Pharmaceuticals, Inc.

Statement on Form S-3

Registration

Re: Lexicon

Filed March 25,

2024

File No. 333-278210

Dear Lonnel Coats:

We have conducted a limited review of your registration statement and have the

following comment.

Please respond to this letter by amending your registration statement and providing the

requested information. If you do not believe a comment applies to your facts and circumstances

or do not believe an amendment is appropriate, please tell us why in your response.

After reviewing any amendment to your registration statement and the information you

provide in response to this letter, we may have additional comments.

Registration Statement on Form S-3

General

We note that you are registering the resale of up to 57,661,250 shares of common stock. However, we note from your disclosure on page 12 that you currently have 300,000,000 shares of common stock authorized at this time. Please either revise the resale offering so that the volume of common stock registered in the resale offering does not exceed the number of shares of common stock that remain available for issuance at the time you anticipate having the registration statement declared effective or revise to update your disclosure and opinion of counsel once the amendment to your charter referenced on page 5 has been approved by your stockholders. For guidance, refer to Section II.B.1.a of Staff Legal Bulletin No. 19.

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

Lonnel Coats

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action by the staff.

Refer to Rules 460 and 461 regarding requests for acceleration. Please allow adequate

time for us to review any amendment prior to the requested effective date of the registration

Please contact Tyler Howes at 202-551-3370 or Tim Buchmiller at 202-551-3635 with

any other questions.

FirstName LastNameLonnel Coats

Corporation Finance Comapany NameLexicon Pharmaceuticals, Inc.

Sciences
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cc: Jackson A. O'Maley, Esq.

FirstName LastName

Sincerely,

Division of

Office of Life