

November 1, 2023

R. Nolan Townsend
Chief Executive Officer
Lexeo Therapeutics, Inc.
345 Park Avenue South, Floor 6
New York, NY 10010

Inc.

Registration Statement on Form S-1
2023

Re: Lexeo Therapeutics,
Amendment No. 1 to
Filed October 30,
File No. 333-274777

Dear R. Nolan Townsend:

We have reviewed your amended registration statement and have the following comments.

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-1 filed October 30, 2023

Prospectus summary
Risks associated with our business, page 8

1. Please revise the summary risk factor that states you "are currently, and may in the future be, subject to claims..." to identify the complaint filed by your competitor, Rocket Pharmaceuticals Inc. and disclose the nature of the consequences of an adverse resolution consistent with your disclosure on page 60. In addition, please consider including a cross-reference to your more detailed Legal proceedings disclosure on page 183. Capitalization, page 96

2. Please revise to provide a calculation of the 486,987 additional shares of common stock issuable upon conversion of your Series B convertible preferred stock due to anti-dilution adjustments.

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Legal proceedings, page 193

3. Please revise to provide the information required by Item 103 of Regulation S-K for your ongoing litigation with Rocket Pharmaceuticals, Inc. Please include disclosure identifying the name of the court in which the proceedings are pending and the principal parties thereto.

Please contact Eric Atallah at 202-551-3663 or Lynn Dicker at 202-551-3616 if you have questions regarding comments on the financial statements and related matters. Please contact Jason Drory at 202-551-8342 or Tim Buchmiller at 202-551-3635 with any other questions.

FirstName LastNameR. Nolan Townsend
Corporation Finance
Comapany NameLexeo Therapeutics, Inc.
Sciences
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cc: Dayne Brown, Esq.
FirstName LastName

Sincerely,
Division of
Office of Life