



DIVISION OF  
CORPORATION FINANCE

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

May 8, 2024

Daniel Schmitt  
President and Chief Executive Officer  
Actuate Therapeutics, Inc.  
1751 River Run, Suite 400  
Fort Worth, TX 76107

**Re: Actuate Therapeutics, Inc.  
Amendment No. 2 to Draft Registration Statement on Form S-1  
Submitted April 30, 2024  
CIK No. 0001652935**

Dear Daniel Schmitt:

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

Please respond to this letter by providing the requested information and either submitting an amended draft registration statement or publicly filing your registration statement on EDGAR. 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 the information you provide in response to this letter and your amended draft registration statement or filed registration statement, we may have additional comments. Unless we note otherwise, any references to prior comments are to comments in our April 19, 2024 letter.

Amendment No. 2 to Draft Registration Statement on Form S-1, Submitted April 30, 2024

Prospectus Summary

Pipeline and Development Timeline, page 2

1. We note your response to prior comment 4, and we reissue the comment. Given your disclosure that the Actuate-1902 study is only accruing patients with refractory Ewing sarcoma into the Phase 1 portion of the study and that you plan to amend the Phase 2 portion of the Actuate-1902 protocol to focus only on those patients with Ewing sarcoma, please revise the pipeline table to shorten the arrow related to this study to avoid indicating that the Phase 2 portion of the study has already commenced and is ongoing. Please also disclose in an appropriate location if amending the Actuate-1902 protocol would require regulatory approval, and, if so, the status and timing of such approval.

Daniel Schmitt  
Actuate Therapeutics, Inc.  
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Business

License Agreements

Collaboration Agreement, page 117

2. We note the added disclosure regarding your Collaboration Agreement with Lantern Pharma. Please tell us what consideration you gave to discussing your entry into the Collaboration Agreement under "Certain Relationships and Related Party Transactions" and filing a copy of the agreement as an exhibit to the registration statement. Refer to Items 404 and 601(b)(10) of Regulation S-K.

Please contact Eric Atallah at 202-551-3663 or Kevin Kuhar at 202-551-3662 if you have questions regarding comments on the financial statements and related matters. Please contact Jessica Dickerson at 202-551-8013 or Tim Buchmiller at 202-551-3635 with any other questions.

Sincerely,

Division of Corporation Finance  
Office of Life Sciences

cc: Janet Spreen, Esq.