August 12, 2025

Alethia Young
Chief Financial Officer
Bicycle Therapeutics plc
Blocks A & B, Portway Building
Granta Park Great Abington, Cambridge CB21 6GS
United Kingdom

Re: Bicycle Therapeutics plc
Registration Statement on Form S-3
Filed August 8, 2025
File No. 333-289423

Dear Alethia Young:

This is to advise you that we have not reviewed and will not review your registration statement.

Please refer to Rules 460 and 461 regarding requests for acceleration. 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.

Please contact Jessica Dickerson at 202-551-8013 with any questions.

Sincerely,

Division of Corporation Finance

Office of Life Sciences

cc: Jaime L. Chase, Esq.