

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

January 31, 2023

Allen Davidoff
Chief Executive Officer
XORTX Therapeutics Inc.
3710 — 33rd Street NW
Calgary, Alberta, Canada

Re: XORTX Therapeutics Inc. Registration Statement on Form F-3 Filed January 27, 2023 File No. 333-269429

Dear Allen Davidoff:

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 Lauren Hamill at 303-844-1008 with any questions.

Sincerely,

Division of Corporation Finance Office of Life Sciences

cc: Thomas Rose