

Prospectus Supplement No. 3
(to Prospectus dated August 7, 2023)



**371,322 Common Shares Issuable Upon
Exercise of Warrants**

XORTX THERAPEUTICS INC.

This Prospectus Supplement No. 3 (this “**Prospectus Supplement**”) amends and supplements the Prospectus dated August 7, 2023 (the “**Prospectus**”) of XORTX Therapeutics Inc. (the “**Company**”), which forms a part of our Registration Statement on Form F-1 (Registration No. 333-258741). This Prospectus Supplement is being filed to amend and supplement the information included or incorporated by reference in the Prospectus with the information contained in this Prospectus Supplement. The Prospectus and this Prospectus Supplement relate to the offer by us of 371,322 common shares issuable upon exercise of 371,322 common share purchase warrants (the “**Warrants**”). All Warrants have an exercise price of \$5.00 and expire five years from the original date of issuance (October 15, 2026).

This Prospectus Supplement should be read in conjunction with the Prospectus, as it has been further supplemented, which is to be delivered with this Prospectus Supplement. This Prospectus Supplement updates and supplements the information in the Prospectus. If there is any inconsistency between the information in the Prospectus and this Prospectus Supplement, you should rely on the information in this Prospectus Supplement.

Our common shares are currently traded under the symbol “XRTX” on the TSX Venture Exchange (the “**TSXV**”) and on the Nasdaq Capital Market (“**Nasdaq**”). On June 12, 2024, the last reported sale price of our common shares on the TSXV was CAD\$2.99 per common share and on the Nasdaq was \$2.12 per common share.

Investing in our securities involves a high degree of risk. You should review carefully the risks and uncertainties described under the heading “Risk Factors” beginning on page 10 of the Prospectus and under similar headings in any further amendments or supplements to the Prospectus before you decide whether to invest in our securities.

Neither the Securities and Exchange Commission, Canadian securities commission nor any domestic or international securities body has approved or disapproved of these securities or passed upon the adequacy or accuracy of this prospectus. Any representation to the contrary is a criminal offense.

The date of this prospectus supplement is June 13, 2024.

**UNITED STATES
SECURITIES AND EXCHANGE COMMISSION
Washington, D.C. 20549**

Form 6-K

**REPORT OF FOREIGN PRIVATE ISSUER PURSUANT TO RULE 13a-16 OR 15d-16
UNDER THE SECURITIES EXCHANGE ACT OF 1934**

For the month of October 2023

Commission File Number: 001-40858

XORTX Therapeutics Inc.

3710 – 33rd Street NW, Calgary, Alberta, T2L 2M1

Indicate by check mark whether the registrant files or will file annual reports under cover Form 20-F or Form 40-F.
Form 20-F Form 40-F

SIGNATURE

Pursuant to the requirements of the Securities Exchange Act of 1934, the registrant has duly caused this report to be signed on its behalf by the undersigned, thereunto duly authorized.

XORTX THERAPEUTICS INC.
(Registrant)

Date: October 27, 2023

By: /s/ Allen Davidoff
Name: Allen Davidoff
Title: Chief Executive Officer

EXHIBIT INDEX

[99.1](#) [Report of Voting Results](#)

Exhibit 99.1

XORTX THERAPEUTICS INC.

Report of Voting Results

(Section 11.3 of National Instrument 51-102)

In accordance with section 11.3 of National Instrument 51-102 -*Continuous Disclosure Obligations*, this report briefly describes the matters voted upon and the outcome of the votes at the Special Meeting of Shareholders of XORTX Therapeutics Inc. (the “**Company**”) held on October 27, 2023 at the offices of the Company (the “**Meeting**”).

1. Share Consolidation

A resolution authorizing the Company to file Articles of Amendment under the British Columbia Business Corporations Act to change the number of issued and outstanding common shares of the Company by consolidating the issued and outstanding common shares on the basis of up to nine (9) pre-consolidation common shares for every one (1) post-consolidated common share in order to the Company to regain compliance with the continued listing requirements for the NASDAQ Capital Market. Proxies were received as follows:

For the Motion:	4,252,262 (50.303%)
Against:	4,200,967 (49.697%)

For additional information, please see the Company’s notice of meeting and information circular dated September 20, 2023 filed on SEDAR in connection with the Meeting.

DATED at Calgary, AB, October 27, 2023.

XORTX THERAPEUTICS INC.

/s/ Charlotte May
Charlotte May
Corporate Secretary
