

Prospectus Supplement No. 11
(to Prospectus dated August 7, 2023)



**555,555 Common Shares Issuable Upon
Exercise of Warrants**

XORTX THERAPEUTICS INC.

This Prospectus Supplement No. 11 (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. 333-267328). 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 555,555 common shares issuable upon exercise of 555,555 common share purchase warrants (the "**Warrants**"). The Warrants have an exercise price of \$5.00 and expire five years from the original date of issuance (October 7, 2027).

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 September 20, 2024, the last reported sale price of our common shares on the TSXV was CAD\$2.47 per common share and on the Nasdaq was \$1.75 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 September 23, 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 September 2024

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 [X] 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: September 13, 2024

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 Annual General and Special Meeting of Shareholders of XORTX Therapeutics Inc. (the “**Company**”) held on September 12, 2024 at the offices of the Company (the “**Meeting**”).

1. Setting the Number of Directors at Seven

A resolution setting the number of directors of the board to seven was approved. Proxies were received as follows:

For the Motion:	608,344 (68.430%)
Against:	280,652 (31.570%)

2. Election of Directors

The shareholders voted by way of proxy and the following nominees were elected as directors to serve until the next annual meeting of shareholders of the Company or until their successors are duly elected or appointed:

Director	Votes For		Votes Withheld	
Allen Davidoff	572,504	79.124%	151,052	20.876%
William Farley	533,046	73.670%	190,510	26.330%
Anthony J. Giovinazzo	487,453	67.369%	236,103	32.631%
Abigail Jenkins	544,124	75.201%	179,432	24.799%
Raymond Pratt	543,446	75.108%	180,110	24.892%
Patrick Treanor	529,118	73.127%	194,438	26.873%
Paul Van Damme	546,083	75.472%	177,473	24.538%

3. Appointment of Auditors

A resolution appointing Smythe LLP Chartered Professional Accountants, as auditor of the Company until the next annual meeting of shareholders and authorizing the directors of the Company to fix the auditor's remuneration was approved. Proxies were received as follows:

For the Motion:	739,390 (83.171%)
Withheld:	149,606 (16.829%)

4. Re-Approval of Stock Option Plan

A resolution re-approving and confirming the Company's stock option plan as described in the management information circular dated August 9, 2024, including that the maximum number of common shares reserved for issuance under the stock option plan at any given time is equal to ten percent (10%) of the issued and outstanding common shares as at the date of grant of an option under the stock option plan, was approved. Proxies were received as follows:

For the Motion:	457,824 (63.274%)
Against:	265,732 (36.726%)

For additional information, please see the Company's notice of meeting and information circular dated August 9, 2024 filed on SEDAR in connection with the Meeting.

DATED at Calgary, AB, September 13, 2024.

XORTX THERAPEUTICS INC.

/s/ Charlotte May

Charlotte May
Corporate Secretary