
**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 August 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 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: August 23, 2024

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

EXHIBIT INDEX

99.1 News release dated August 23,
2024

XORTX Announces Filing and Mailing of the Meeting Documents in Connection with the Annual and Special Meeting of Shareholders

CALGARY, Alberta, Aug. 23, 2024 (GLOBE NEWSWIRE) -- XORTX Therapeutics Inc. ("**XORTX**" or the "**Company**") (NASDAQ: XRTX | TSXV: XRTX | Frankfurt: ANU), a late-stage clinical pharmaceutical company focused on developing innovative therapies to treat progressive kidney disease, is pleased to announce the management information circular (the "Circular") for the annual and special meeting (the "Meeting") of shareholders is now available on the Company's website at <https://www.xortx.com/investors/news-events/ir-calendar/detail/7671/annual-and-special-meeting-of-shareholders> as well as on the Company's SEDAR+ profile (www.sedarplus.ca) and the SEC's website (www.sec.gov). The mailing of the Circular and related Meeting materials occurred on August 21, 2024.

XORTX will hold the Meeting on September 12, 2024, at 10:00 am (Calgary Time) at the offices of the Company at 3710 – 33rd Street NW, Calgary.

Your vote is important no matter how many shares you hold. Vote today.

Shareholders who have questions or need assistance with voting their shares should contact XORTX's strategic advisor and proxy solicitation agent Laurel Hill Advisory Group by telephone at 1-877-452-7184 or by email at assistance@laurelhill.com.

The Board of Directors of XORTX recommends that Shareholders vote FOR ALL proposed items

Shareholders are encouraged to read the Circular and vote your shares as soon as possible. The deadline for voting your shares is at 10:00 am (Calgary Time) on Tuesday, September 10, 2024.

Within the Circular, XORTX provides clarification of a misreported statement - disclosure of Patrick Treanor's board attendance in the Circular under the section *Participation of Directors in Board Meetings was incorrectly reported*. Patrick Treanor was not a member of the board at the time any of the seven meetings for the year 2023 took place. Therefore, his "Attendance / Number of Board Meetings" record would more accurately be disclosed as 0/0 as opposed to 0/7.

About XORTX Therapeutics Inc.

XORTX is a pharmaceutical company with two clinically advanced products in development: 1) our lead, XRx-008 program for ADPKD; and 2) our secondary program in XRx-101 for acute kidney and other acute organ injury associated with Coronavirus / COVID-19 infection. In addition, XRx-225 is a pre-clinical stage program for Type 2 Diabetic Nephropathy. XORTX is working to advance its clinical development stage products that target aberrant purine metabolism and xanthine oxidase to decrease or inhibit production of uric acid. At XORTX, we are dedicated to developing medications to improve the quality of life and future health of patients. Additional information on XORTX is available at www.xortx.com.

For more information, please contact:

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Neither the TSX Venture Exchange nor Nasdaq has approved or disapproved the contents of this news release. No stock exchange, securities commission or other regulatory authority has approved or disapproved the information contained herein.

Forward Looking Statements

This press release contains express or implied forward-looking statements pursuant to applicable securities laws. These forward-looking statements include, but are not limited to, the Company's beliefs, plans, goals, objectives, expectations, assumptions, estimates, intentions, future performance, other statements that are not historical facts and statements identified by words such as "expects", "anticipates", "intends", "plans", "believes", "seeks", "estimates" or words of similar meaning. These forward-looking statements and their implications are based on the current expectations of the management of XORTX only, and are subject to a number of factors and uncertainties that could cause actual results to differ materially from those described in the forward-looking statements. Such risks, uncertainties, and other factors include, but are not limited to, our ability to obtain additional financing; the accuracy of our estimates regarding expenses, future revenues and capital requirements; the success and timing of our preclinical studies and clinical trials; the performance of third-party manufacturers and contract research organizations; our plans to develop and commercialize our product candidates; our plans to advance research in other kidney disease applications; and, our ability to obtain and maintain intellectual property protection for our product candidates. Except as otherwise required by applicable law and stock exchange rules, XORTX undertakes no obligation to publicly release any revisions to these forward-looking statements to reflect events or circumstances after the date hereof or to reflect the occurrence of unanticipated events. More detailed

information about the risks and uncertainties affecting XORTX is contained under the heading “Risk Factors” in XORTX’s Annual Report on Form 20-F filed with the SEC, which is available on the SEC’s website, www.sec.gov (including any documents forming a part thereof or incorporated by reference therein), as well as in our reports, public disclosure documents and other filings with the securities commissions and other regulatory bodies in Canada, which are available on www.sedarplus.ca.