
**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 January 2025

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: January 29, 2025

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

EXHIBIT INDEX

99.1 News release dated January 29,
2025

XORTX to Present at Microcap Conference

CALGARY, Alberta, Jan. 29, 2025 (GLOBE NEWSWIRE) -- XORTX Therapeutics Inc. ("XORTX" or the "Company") (NASDAQ: XRTX | TSXV: XRTX | Frankfurt: ANUA), a late stage clinical pharmaceutical company focused on developing innovative therapies to treat progressive kidney disease and gout, announces attendance and presentation at the Microcap Conference hosted by DealFlow Events on January 28 through 30, 2025 in Atlantic City, NJ. Attendance at this conference continues outreach to the investment community and provides XORTX with an opportunity to update investors on our newly announced gout program. The presentation on January 29, 2025 will review the Company's plans to advance the XRx-026 program for gout through a New Drug Application ("NDA") filing, and activities associated with the XRx-008 program for autosomal dominant polycystic kidney disease ("ADPKD"), including registration clinical trial preparations.

Dr. Allen Davidoff, XORTX CEO stated, "This conference is designed to give participants one-on-one meetings with new investors as well as the opportunity to present a Company overview to all of the conference attendees. We are excited to be able to reach out to the quality investors who will attend this conference and to elaborate on our exciting plans for bringing our gout program in the near term, and ADPKD programs in the longer term, through to FDA marketing approval."

XORTX's presentation will be recorded and available after the conference on the Company's website.

About XORTX Therapeutics Inc.

XORTX is a pharmaceutical company with three clinically advanced products in development: 1) our lead, XRx-008 program for ADPKD; 2) our XRx-026 program for the treatment of allopurinol intolerant gout; and 3) 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 health of kidney disease patients and individuals with gout. Additional information on XORTX is available at www.xortx.com.

For more information, please contact:

Allen Davidoff, CEO
adavidoff@xortx.com or +1 403 455 7727

Nick Rigopulos, Director of Communications
nick@alpineequityadv.com or +1 617 901 0785

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 may contain express or implied forward-looking statements pursuant to Canadian and U.S. Federal securities laws. These forward-looking statements and their implications are based on the current reasonable 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 such forward-looking statements. Except as otherwise required by law, XORTX undertakes no obligation to publicly release any revisions or updates 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 in the Company's most recently filed Annual Information Form and the Management Discussion and Analysis for its most recent financial reporting period filed on the Company's SEDAR profile (www.sedar.com) and under the heading "Risk Factors" in XORTX's Registration Statement on Form F-1 filed with the Securities and Exchange Commission ("SEC") available on the SEC's website, www.sec.gov.