
**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 March 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: March 27, 2024

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

EXHIBIT INDEX

99.1 News release dated March 27,
2024

XORTX Announces New Clinical Advisory Board Member

CALGARY, Alberta, March 27, 2024 (GLOBE NEWSWIRE) -- **XORTX Therapeutics Inc. ("XORTX" or the "Company")** (NASDAQ: **XRTX** | TSXV: **XRTX** | Frankfurt: **ANUA WKN: A3UNZ**), a biopharmaceutical company focused on developing innovative therapies to treat autosomal dominant polycystic kidney disease ("ADPKD"), is pleased to announce that Dr. Ronald Perrone has joined the Company's Clinical Advisory Board.

Dr. Allen Davidoff stated, "We are excited that Dr. Ron Perrone has agreed to join XORTX's Clinical Advisory Board. Dr. Perrone brings substantial medical and professional experience as a thought leader, combined with clinical experience treating patients with ADPKD and kidney disease. We are privileged to have Dr. Perrone join our esteemed Clinical Advisory Board alongside current members, Dr. Petter Bjornstad, Dr. Richard Johnson, Dr. Federico Maese, Dr. Anjay Rostogi and Dr. Charles Edelstein. We look forward to the valuable contributions that he can bring to our advanced clinical program and specifically the XRX-OXY-201 registration trial designed to slow progression of ADPKD."

Dr. Ronald Perrone, MD is Professor of Medicine at Tufts University School of Medicine in Boston, Massachusetts. Dr. Perrone is board certified in Nephrology. He did his Internal Medicine residency at Grady Memorial Hospital in Atlanta and Nephrology fellowship at Boston University Medical Center. Ron's research involves clinical investigations focused on kidney disease with a special emphasis on polycystic kidney disease ("PKD"). He is heavily involved in clinical research in ADPKD clinical trials and works with regulatory agencies such as the US Food and Drug Administration ("FDA") to contribute to the development of database assessment tools to validate total kidney volume as a biomarker for PKD progression. Dr. Perrone's focus on translational clinical trial interventions in ADPKD includes trials for Sanofi, Reata, Palladio Biosciences, HALT-PKD, the TAME PKD Metformin trial, TEMPO and REPRISE trials for Tolvaptan. Ron also initiated a PKD Database Consortium in 2007 which led to the creation of the PKD Outcomes Consortium in 2009. The PKD Outcomes Consortium, comprising contributors from academia, the pharmaceutical industry, National Institute of Health ("NIH"), FDA, the Clinical Data Interchange Standards Consortium ("CDISC"), and the Critical Path Institute (C-Path), is creating the groundwork for validation of biomarkers and clinical trial and regulatory endpoints in ADPKD. This work is ongoing and involves frequent interactions with the FDA and the European Medicines Agency.

A full list of Dr. Perrone's publications can be found at: <https://pubmed.ncbi.nlm.nih.gov/?term=perrone+rd>.

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:

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

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

Kim Golodetz, LHA Investor Relations
kgolodetz@lhai.com or 1 212 838 3777

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 U.S. Federal securities laws. 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. Except as otherwise required by law, 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 Registration Statement on Form F-1 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.