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 April 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 [X]

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

XORTX Therapeutics Inc. (Registrant)

Date: April 8, 2024 By:

<u>/s/ Allen Davidoff</u> Allen Davidoff Chief Executive Officer Name: Title:

EXHIBIT INDEX

99.1 News release dated April 8, 2024

XORTX Announces Participation in Spring 2024 Investor Conferences

CALGARY, Alberta, April 08, 2024 (GLOBE NEWSWIRE) -- XORTX Therapeutics Inc. ("XORTX" or the "Company") (NASDAQ: XRTX | TSXV: XRTX | Frankfurt: ANUA WKN: A3UNZ), a late-stage clinical pharmaceutical company focused on developing innovative therapies to treat progressive kidney disease, announces that Dr. Allen Davidoff, CEO, is scheduled to participate in the following Spring 2024 investor and life sciences investment conferences:

• LD Micro Invitational XIV in New York, April 8-9

Management will deliver a corporate update on April 9th at 2:00 p.m. ET and will be available for one-on-one meetings. *Registration link*:

• Noble Capital Markets Emerging Growth Virtual Healthcare Equity Conference, April 17-18

Management will deliver a virtual presentation and will be available for virtual one-on-one meetings. *Registration Link:*

• CEM Scottsdale Capital Event in Scottsdale, April 19-21

Management will deliver a corporate update and be available for one-on-one meetings. *Registration Link:*

• BIO International Convention in San Diego, June 3-6

Management will make presentations to prospective investors and partners during one-on-one meetings.

Additional information on how to listen to webcast presentations, where available, will be announced at a later date.

The Company also announces it has engaged LHA Investor Relations for investor relations services for a fee of US\$15,000 per month. The LHA Investor Relations agreement is for a term of six months, renewable by mutual consent and can be terminated by XORTX on 30 days' notice.

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 Rigopulos, 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.