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 2022

Commission File Number: 001-40858

XORTX Therapeutics Inc.

Suite 2400 - 745 Thurlow Street, Vancouver, British Columbia, Canada, V6E 0C5

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]

Indicate by check mark if the registrant is submitting the Form 6-K in paper as permitted by Regulation S-T Rule 101(b)(1):____

Note: Regulation S-T Rule 101(b)(1) only permits the submission in paper of a Form 6-K if submitted solely to provide an attached annual report to security holders.

Indicate by check mark if the registrant is submitting the Form 6-K in paper as permitted by Regulation S-T Rule 101(b)(7):____

Note: Regulation S-T Rule 101(b)(7) only permits the submission in paper of a Form 6-K if submitted to furnish a report or other document that the registrant foreign private issuer must furnish and make public under the laws of the jurisdiction in which the registrant is incorporated, domiciled or legally organized (the registrant's "home country"), or under the rules of the home country exchange on which the registrant's securities are traded, as long as the report or other document is not a press release, is not required to be and has not been distributed to the registrant's security holders, and, if discussing a material event, has already been the subject of a Form 6-K submission or other Commission filing on EDGAR.

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: August 4, 2022 By:

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

EXHIBIT INDEX

99.1 Press Release dated August 4, 2022

XORTX Announces Pre-Phase 3 Meeting Date with US Food and Drug Administration

Pre-Phase 3 Meeting Briefing Package Filed

CALGARY, Alberta, Aug. 04, 2022 (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 that the pre-Phase 3 meeting request made to the US Food and Drug Administration ("FDA") has resulted in the grant of a virtual meeting scheduled on September 16, 2022. In advance of this meeting, XORTX has submitted a "Pre-Phase-3 Briefing Package" to the FDA on Thursday, July 28, 2022.

To date, the Company has successfully completed the research and development activities leading to this request and is advancing its XRx-008 program for the treatment of autosomal dominant polycystic kidney disease ("ADPKD"). R&D activities during the past year leading to this meeting request included manufacturing clinical quality GMP oxypurinol, finalizing formulation of drug product, and characterizing improved oral bio-availability of oxypurinol in animal models. The Company has achieved successful regulatory filings with the FDA and Health Canada and has commenced its OXY-XRX-101 bridging pharmacokinetics study. These important milestones have well positioned XORTX for this pre-Phase 3 meeting with the FDA.

The Pre-Phase 3 Briefing Package provides an up-to-date summary of the extensive work completed for the XRx-008 program and this type B meeting. In addition, the briefing package presents an agenda including topics and questions for discussion related to the critical developmental steps necessary to complete the planned clinical registration trial and for the marketing approval application.

Dr. Allen Davidoff stated, "We are pleased to advance the XRx-008 program with this filing and establish a meeting date with the FDA. We believe the discussions with the FDA will clarify the optimal, key clinical steps needed in advance of filing a US marketing application new drug approval (NDA) toward discussions with the FDA and to advance the XRx-008 program."

About Type B Meetings

Type B meetings are routine meetings that occur at pre-defined endpoints between the FDA and a sponsor. Meetings typically occur right after or right before the submission of clinical data or a new drug filing. Type B meetings can be for the following purposes:

- Pre-investigational new drug application (pre-IND) meetings (21 CFR 312.82)
- Certain end-of-phase 1 meetings (21 CFR 312.82)
- End-of-phase 2 and pre-phase 3 meetings (21 CFR 312.47)
- Pre-new drug application/biologics license application meetings (21 CFR 312.47)

About ADPKD

ADPKD is a rare disease that affects more that 10 million individuals worldwide.^{1,2} ADPKD is typically diagnosed based upon expansion of fluid-filled cysts in the kidneys. Over time, the increasing number and size of cysts can contribute to structural and functional changes to kidneys and is frequently accompanied by chronic pain which is a common problem for patients with ADPKD.³ Expansion of cysts is thought to compress healthy functioning tissue surrounding the cysts and contribute to further loss of kidney function, fibrosis, impaired nutrient exchange and impaired kidney function, accompanied later by end-stage renal disease.¹ For individuals with progressing ADPKD, treatment recommendations include anti-hypertensive treatment, dietary restrictions, and, for a limited percentage of suitable patients, pharmacotherapy.⁴ New, more broadly applicable therapies to effectively slow decline of kidney function in patients with progressive kidney disease including those with ADPKD are needed.

About XORTX Therapeutics Inc.

XORTX is a pharmaceutical company with two clinically advanced products in development – XRx-008 for ADPKD, XRx-101 for acute kidney and other acute organ injury associated with Coronavirus / COVID-19 infection and XRx-225 is a pre-clinical stage program for Type 2 Diabetic Nephropathy (T2DN). 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 2 medications to improve the quality of life and future health of patients. Additional information on XORTX is available at www.xortx.com.

For further information, please contact:

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

References:

- 1. Wiley C., Kamat S., Stelhorn R., Blais J., Analysis of nationwide date to determine the incidence and diagnosis of autosomal dominant polycystic kidney disease in the USA, Kidney Disease, 5(2): 107-117, 2019
- 2. Bergmann C., Guay-Woodford L.M., Harris P.C., Horie S., Peters D.J., Torres V.E., Polycystic Kidney Disease, Nat Rev Dis Primers. 4(1):

50, 2018

- 3. https://pkdcure.org/living-with-pkd/chronic-pain-management/
- 4. Gimpel C., Bergmann C., Bockenhauer D., et al., International consensus statement of the diagnosis and management of autosomal dominant polycystic kidney disease in children and young people, Nat Rev Nephrol 15(11):713-726, 2019

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.