

September 1, 2022



XORTX Sponsored Study Selected for Presentation at the American Society of Nephrology – Kidney Week 2022

Hyperuricemia is Associated with Accelerated Polycystic Kidney Disease (“PKD”) Injury

CALGARY, Alberta, Sept. 01, 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 acceptance of a study abstract for presentation at the American Society of Nephrology ("ASN") Kidney Week 2022 meeting to be held the week of November 4, 2022. The title of the poster presentation selected by the Kidney Week Education Committee and following peer review is **“Raising Serum Uric Acid with a Uricase Inhibitor Worsens PKD in Rat and Mouse Models”** which will be presented during the ASN Session Title: Genetic Diseases of the Kidneys, by Dr. Charles Edelstein of the University of Colorado.

About this Study

Humans are predisposed to chronically high uric acid and gout because they lack uricase that converts uric acid to allantoin. In rodents uricase converts uric acid to allantoin and uricase inhibition raises serum uric acid. The aim of the study was to determine whether raising serum uric acid with the uricase inhibitor oxonic acid (OXO) was associated with worse PKD.

Dr. Allen Davidoff, CEO of XORTX, stated, “We are pleased to participating in the ASN annual meeting during Kidney Week 2022 with this poster presentation. Most importantly, results of this study show that increased serum uric acid can accelerate injury in two separate models of PKD in different species – a fundamental finding that we believe supports the XRx-008 program. These results and additional novel key discoveries from the study also provide XORTX with the opportunity to potentially further expand our patent portfolio, through a recent continuation of our formulation patent and a new provisional patent application. We anticipate further updated information near the time that the abstract for the ASN becomes public.”

About the American Society of Nephrology – Kidney Week

ASN represents more than 21,000 kidney health professionals working to help people with kidney diseases and their families. Source: <https://www.asn-online.org/>

The Kidney Week Conference, being held in Orlando, Florida, is attended by approximately

10,000 kidney professionals from across the globe. The world's premier nephrology meeting, Kidney Week provides participants exciting and challenging opportunities to exchange knowledge, learn the latest scientific and medical advances, and listen to engaging and provocative discussions with leading experts in the field. Source: <https://www.asn-online.org/education/kidneyweek/>

American Society of Nephrology - Program and Abstracts

The Kidney Week program is available on the [ASN website](#). Abstracts will be available on the ASN website by October 14, 2022.

About ADPKD

ADPKD is a rare disease that affects more than 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 Health consequences of high uric acid have been reported to be increased in ADPKD individuals, including increased incidence of kidney stones⁵ and gout.^{6,7} 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 ADPKD are needed.

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.

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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:

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3. <https://pkdcure.org/living-with-pkd/chronic-pain-management>
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6. Newcombe, DS. Letter Gouty Arthritis and polycystic kidney disease, *Ann Intern Med*, 1973 vol 79, pg 605
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Forward Looking Statements

This press release may contain express or implied forward-looking statements pursuant to applicable 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. The forward-looking statements in this press release include, but are not limited to, the results from the study supporting (i) the XRx-008 program and (ii) the potential expansion of XORTX's patent portfolio. 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. The risks and uncertainties that could impact these forward-looking statements of XORTX generally are 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 annual report on Form F-20F filed with the United States Securities and Exchange Commission ("SEC") available on the SEC's website, www.sec.gov.



Source: XORTX Therapeutics Inc.