June 6, 2023

XORTX Announces PKD Presentation

XORTX ADPKD Data Presented at PKD Foundation Meeting

CALGARY, Alberta, June 06, 2023 (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 presentation of scientific data underpinning the recent Orphan Drug Designation ("**ODD**") at the PKD Foundation – "PKD Connect" meeting being held June 22-24, 2023 in Denver, Colorado. The studies to be presented were conducted by Dr. Charles Edelstein of the University of Colorado and represent the seminal research leading to the US Food and Drug Administration ODD grant that was announced by the Company on April 21, 2023. This annual meeting of the US PKD Foundation (https://pkdcure.org/conference/) is attended by leading thought leaders, PKD foundation members, patient advocacy groups and medical researchers interested in autosomal dominant polycystic kidney disease ("**ADPKD**").

Dr. Allen Davidoff stated: "This presentation will review the discoveries made by Dr. Charles Edelstein, with XORTX sponsorship. The discoveries show that aberrant purine metabolism in polycystic kidneys tissue may play a role in disease progression, that chronic high uric acid can promote kidney expansion and declining filtering capacity, most importantly that XORLO™ can attenuate polycystic kidney disease progression. The PKD annual meeting provides an opportunity to interact with patient groups, knowledge leaders in ADPKD research in the US and is an important step towards advancing the XRx-008 program. We believe xanthine oxidase inhibition represents an important approach to slowing the progression of kidney disease and improved quality of life for those individuals ADPKD and few therapeutic options."

XORTX Annual and Special Meeting of Shareholders

In connection with the Company's annual and special meeting of shareholders (the "**Meeting**") that has been scheduled for Wednesday, June 28, 2023 at 10:00 am (Calgary time), the Company has retained Laurel Hill Advisory Group ("**Laurel Hill**") as proxy solicitation agent and shareholder communications advisor to, among other things, assist in the solicitation of proxies. The Company may use Broadridge Financial Solutions Inc.'s QuickVote™ service to assist beneficial shareholders with voting. Laurel Hill may contact certain beneficial shareholders who have not objected to the Company knowing who they are (non-objecting beneficial owners, or NOBOs) to conveniently obtain a vote directly over the telephone.

At the Meeting, XORTX shareholders will vote on the following resolutions:

1. To elect directors of the Company;
2. To appoint the auditor of the Company for the ensuing year and to authorize the

directors of the Company to fix the remuneration of the auditor; and
3. To confirm and approve the Company's stock option plan.

The notice and management information circular are available on XORTX's profile on SEDAR (www.sedar.com).

Shareholders are encouraged to read the Circular and vote your shares as soon as possible. The deadline for voting your shares is at 10:00 a.m. (Calgary time) on Monday, June 26, 2023.

Shareholders who have any questions or require assistance with voting may contact the Company's proxy solicitation agent and shareholder communications advisor:

Laurel Hill Advisory Group

Toll Free: 1-877-452-7184 (for shareholders in North America)
International: +1 416-304-0211 (for shareholders outside Canada and the US)
By Email: assistance@laurelhill.com

About Orphan Drug Designation

Drugs intended to treat orphan diseases (rare diseases that affect less than 200,000 people in the US) are eligible to apply for ODD, which provides multiple benefits to the sponsor during development and after approval. XORTX intends to pursue these benefits as part of the drug development for XRx-008 for treatment of ADPKD.

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 ADPKD are needed.

About the XRx-008 Program

Oxypurinol is a xanthine oxidase inhibitor ("**XOI**") with important pharmacologic characteristics ideal for administration to individuals with ADPKD. Key pharmacologic attributes include:

1/ The ability to act in the circulation, kidney and cardiovascular tissue and inhibit the production of uric acid and so attenuate the mechanism of injury and accelerating effect of xanthine oxidase on progressing diseases.

2/ XORLO™ provides substantially increased absorption of oxypurinol. This approach provides an effective, well tolerated drug with an extensive clinical safety experience suggesting the Company's XRx-008 program has the capacity to provide superior XOI to slow the accelerating decline in kidney function during ADPKD progression.

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

Media Inquiries, David Melamed, Ph.D.
david.melamed@russopartnersllc.com or +1 212 845 4225

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., Bermann 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 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.sedar.com.

Source: XORTX Therapeutics Inc.