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 September, 2026.

Commission File Number: 001-40858

XORTX Therapeutics Inc.
(Translation of registrant's name into English)

3710 – 33rd Street NW, Calgary, Alberta, Canada T2L 2M1
(Address of principal executive office)

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 ☐

EXHIBIT INDEX

Exhibit	Description
99.1	News Release of XORTX Therapeutics Inc., dated September 8, 2026.
99.2	Material Change Report of XORTX Therapeutics Inc., dated September 8, 2026.

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.

Date: September 9, 2026	**XORTX Therapeutics Inc.**
	By: /s/ Mika Grasso
	Name: Mika Grasso
	Title: Co-Chief Executive Officer

Exhibit 99.1

September 8, 2026

XORTX Re-Engages Investor Relations Program

CALGARY, Alberta, Sept. 08, 2026 (GLOBE NEWSWIRE) -- XORTX Therapeutics Inc. ("**XORTX**" or the "**Company**") announces that, following completion of its previously announced voluntary delisting from the TSX Venture Exchange, XORTX has re-engaged IR Agency LLC pursuant to a consulting agreement providing for investor relations and marketing services on substantially the same terms previously disclosed by the Company in its news releases dated May 19, 2026 and August 28, 2026.

About XORTX Therapeutics Inc.

XORTX is a pharmaceutical company with three clinically advanced products in development: 1) our lead program XRx-026 program for the treatment of gout; 2) XRx-008 program for ADPKD; and 3) XRx-101 for acute kidney and other acute organ injury associated with respiratory virus infections. In addition, the Company is developing XRx-225, a pre-clinical stage program for Type 2 diabetic nephropathy and recently acquired VB4-P5 program, which is currently at the pre-IND stage of development and targets both rare and prevalent forms of kidney disease. XORTX is working to advance 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 that improve the quality of life and health of individuals with gout and other important diseases.

For more information, please contact:

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Neither 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 applicable securities laws. These forward-looking statements include, but are not limited to, statements regarding the investor relations and marketing agreement with IR Agency LLC, the services to be provided thereunder, the anticipated duration of the engagement, the news distribution campaigns contemplated by the agreement, and the Company's investor relations and marketing activities. These forward-looking statements and their implications are based on the current expectations of management 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. Such risks, uncertainties and other factors include, but are not limited tothe effectiveness and results of the investor relations and marketing program, the Company's ongoing compliance with Nasdaq listing standards, and the risks described in the Company's filings with the U.S. Securities and Exchange Commission and Canadian securities regulators. Except as otherwise required by applicable law and stock exchange rules, XORTX undertakes no obligation to publicly update any forward-looking statements. More detailed information about the risks and uncertainties affecting XORTX is contained in the Company's public filings available on the SEC's website and on SEDAR+.

Source: XORTX Therapeutics Inc.

Exhibit 99.2

FORM 51-102F3
MATERIAL CHANGE REPORT

Item 1: Name and Address of Company

XORTX Therapeutics Inc. ("**XORTX**" or the "**Company**")
3710 – 33rd Street NW
Calgary, Alberta T2L 2M1

Item 2: Date of Material Change

September 2, 2026

Item 3: News Release

The news release was disseminated on September 8, 2026, through GlobeNewswire and filed on SEDAR+.

Item 4: Summary of Material Change

On September 2, 2026, following completion of its previously announced voluntary delisting from the TSX Venture Exchange, the Company entered into a consulting agreement with IR Agency LLC pursuant to which IR Agency LLC will provide investor relations and marketing services to the Company. The agreement has a three-month term commencing September 3, 2026 and provides for up to ten news distribution campaigns. In consideration for the services, the Company agreed to pay a fee of US$2,500,000.

Item 5: Full Description of Material Change

As previously disclosed, the Company entered into an investor relations and marketing agreement with IR Agency LLC in May 2026 in connection with its US$5.0 million public offering. In August 2026, the parties mutually agreed to terminate and rescind that arrangement, all services were discontinued and the amounts previously paid to IR Agency LLC were returned to the Company. The Company deferred its investor relations and marketing activities while it completed its voluntary delisting from the TSX Venture Exchange.

Following completion of the delisting process, on September 2, 2026, the Company entered into a revised consulting agreement with IR Agency LLC pursuant to which IR Agency LLC will provide investor relations and marketing services to communicate information about the Company to the financial community, including the creation of company profiles and the distribution of Company news.

The agreement has a term of three months commencing September 3, 2026 and provides for up to ten news distribution campaigns. In consideration for the services, the Company agreed to pay IR Agency LLC a fee of US$2.5 million. The fee is being funded from amounts previously returned to the Company by IR Agency LLC and reserved by the Company for investor relations expenditures.

Item 6: Reliance on subsection 7.1(2) of National Instrument 51-102

N/A.

Item 7: Omitted Information

N/A.

Item 8: Executive Officer

The following executive officer of the Company is knowledgeable about the material change disclosed in this report and may be contacted as follows:

Co-Chief Executive Officer
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Item 9: Date of Report

September 8, 2026.