

Prospectus Supplement dated October 17, 2024  
(To Prospectus dated November 29, 2023)



**XORTX THERAPEUTICS INC.**

This prospectus supplement (this “**Supplement**”) supplements and amends certain information contained in the prospectus dated November 29, 2023 (the “**ATM Prospectus**”), relating to the offer and sale of our common shares through H.C. Wainwright & Co., LLC (“**Wainwright**”), as sales agent, in “at the market offerings” as defined in Rule 415 promulgated under the Securities Act of 1933, as amended, pursuant to the At the Market Offering Agreement with Wainwright dated as of November 29, 2023 (the “**Sales Agreement**”).

Our common shares are traded on The Nasdaq Capital Market under the symbol “XRTX”. The last sale price of our common shares on October 16, 2024 was \$2.17 per share on The Nasdaq Capital Market. Under the ATM Prospectus, we initially registered up to \$3,701,931 of our common shares for offer and sale pursuant to the Sales Agreement. From November 29, 2023 through the date of this prospectus supplement, we have not sold any common shares under the ATM Prospectus.

The purpose of this Supplement is to suspend the Sales Agreement and to terminate the continuous offering by us under the ATM Prospectus effective on October 17, 2024. We will not make any sales of our common shares pursuant to the Sales Agreement unless and until a new prospectus supplement is filed with the Securities and Exchange Commission; however, the Sales Agreement remains in full force and effect.

In the event that we resume sales under the Sales Agreement and we file a new prospectus supplement with the Securities and Exchange Commission in connection therewith, pursuant to General Instruction I.B.5 of Form F-3, we will not sell our common shares in a primary public offering with a value exceeding more than one-third of the aggregate market value of our voting and non-voting common equity held by non-affiliates in any 12-month period as long as the aggregate market value of our outstanding voting and non-voting common equity held by non-affiliates is less than \$75,000,000.

**The date of this Supplement is October 17, 2024.**

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