PROSPECTUS SUPPLEMENT (To Prospectus dated April 1, 2021 and September 19, 2023)



Kintara Therapeutics, Inc.

Up to \$8,700,000 Shares of Common Stock

This prospectus supplement amends and supplements the information in the prospectus, dated April 1, 2021, filed as a part of our registration statement on Form S-3 (File No. 333-254662), as previously supplemented by our prospectus supplement dated September 19, 2023, or the Prior Prospectus. This prospectus supplement should be read in conjunction with the Prior Prospectus, and is qualified by reference thereto, except to the extent that the information herein amends or supersedes the information contained in the Prior Prospectus. This prospectus supplement is not complete without, and may only be delivered or utilized in connection with, the Prior Prospectus, and any future amendments or supplements thereto.

We filed the Prior Prospectus to register the offer and sale of shares of common stock, par value \$0.001 per share (the "Common Stock"), from time to time pursuant to the terms of that certain Sales Agreement, dated September 19, 2023 (the "Sales Agreement") with A.G.P. / Alliance Global Partners ("A.G.P.") acting as the agent, and us. Through the date hereof, we have sold an aggregate of 5,537,589 shares of Common Stock for an aggregate purchase price of \$2,227,322.89 through A.G.P. under the Sales Agreement pursuant to the Prior Prospectus.

We are filing this prospectus supplement to amend the Prior Prospectus to update the amount of shares of Common Stock we are eligible to sell under General Instruction I.B.6. As a result of these limitations and the current public float of our shares of Common Stock, and in accordance with the terms of the Sales Agreement, we may offer and sell shares of our Common Stock having an aggregate offering price of up to \$8,700,000 from time to time through A.G.P., which does not include shares of Common Stock having an aggregate sales price of \$2,227,322.89 that were sold pursuant to the Prior Prospectus to date.

The aggregate market value of our Common Stock held by non-affiliates pursuant to General Instruction I.B.6 of Form S-3 is \$32,921,868.99, which was calculated based on 7,603,203 shares of Common Stock held by non-affiliates at a price of \$4.33 per share, the closing price of our Common Stock on October 24, 2023. During the 12-calendar month period that ends on, and includes, the date of this prospectus supplement, we sold securities with an aggregate market value of \$2,227,322.89 pursuant to General Instruction I.B.6. of Form S-3.

Our Common Stock is listed on the Nasdaq Capital Market under the symbol "KTRA." On December 15, 2023, the last reported sale price of our Common Stock on the Nasdaq Capital Market was \$0.198 per share.

NEITHER THE SECURITIES AND EXCHANGE COMMISSION NOR ANY STATE SECURITIES COMMISSION HAS APPROVED OR DISAPPROVED OF THESE SECURITIES OR PASSED UPON THE ADEQUACY OR ACCURACY OF THIS PROSPECTUS SUPPLEMENT AND THE ACCOMPANYING PROSPECTUS. ANY REPRESENTATION TO THE CONTRARY IS A CRIMINAL OFFENSE.

A.G.P.

The date of this prospectus supplement is December 18, 2023