UNITED STATES SECURITIES AND EXCHANGE COMMISSION

Washington, D.C. 20549

Amendment No. 4

Form S-4 REGISTRATION STATEMENT

THE SECURITIES ACT OF 1933

KINTARA THERAPEUTICS, INC.

(Exact Name of Registrant as Specified in Its Charter)

Nevada (Jurisdiction of Incorporation or Organization)

2834 (Primary Standard Industrial Classification Code Number)

99-0360497 (I.R.S. Employer Identification Number)

9920 Pacific Heights Blvd, Suite 150 San Diego, CA 92130 (858) 350-4364

(Address, including zip code, and telephone number, including area code, of Registrant's principal executive offices)

Kintara Therapeutics, Inc. 9920 Pacific Heights Blvd, Suite 150 San Diego, CA 92121 Attention: Robert E. Hoffman Chief Executive Officer (858) 350-4364

(Name, address, including zip code, and telephone number, including area code, of agent for service)

Copies to:

Steven M. Skolnick, Esq. Michael J. Lerner, Esq. Lowenstein Sandler LLP 1251 Avenue of the Americas New York, New York 10020 (212) 262-6700

Curt P. Creely, Esq. Garrett F. Bishop, Esq. Foley & Lardner LLP 100 North Tampa Street, Suite 2700 Tampa, Florida 33602 (813) 229-2300

Approximate date of commencement of proposed sale to the public: As soon as practicable after this Registration Statement becomes effective and on completion of the business combination described in the enclosed proxy statement/prospectus.

If the securities being registered on this Form are to be offered in connection with the formation of a holding company and there is compliance with General Instruction G, check the following box. □

If this Form is filed to register additional securities for an offering pursuant to Rule 462(b) under the Securities Act, check the following box and list the Securities Act registration statement number of the earlier effective registration statement for the same offering. \Box

If this Form is a post-effective amendment filed pursuant to Rule 462(d) under the Securities Act, check the following box and list the Securities Act registration statement number of the earlier effective registration statement for the same offering. \square

Indicate by check mark whether the registrant is a large accelerated filer, an accelerated filer, a non-accelerated filer, a smaller reporting company or an emerging

growth company. See the the Exchange Act.	definitions of "large accelerated filer," "accelerated filer," "smaller reporting company" and "	emerging growth company" in Rule 12b-2 of	i
Large accelerated filer		Accelerated filer	
Non-accelerated filer		Smaller reporting company	X
		Emerging growth company	
0 00	wth company, indicate by check mark if the registrant has elected not to use the extended transing standards provided to Section $7(a)(2)(B)$ of the Securities Act. \Box	sition period for complying with any new or	
If applicable, place	an X in the box to designate the appropriate rule provision relied upon in conducting this trans	saction:	
	Exchange Act Rule 13e-4(i) (Cross-Border Issuer Tender Offer)		
	Exchange Act Rule 14d-1(d) (Cross-Border Third-Party Tender Offer)		

The Registrant hereby amends this Registration Statement on such date or dates as may be necessary to delay its effective date until the Registrant shall file a further amendment which specifically states that this Registration Statement shall thereafter become effective in accordance with Section 8(a) of the Securities Act of 1933, as amended, or until the Registration Statement shall become effective on such date as the Securities and Exchange Commission, acting pursuant to said Section 8(a), may determine.

EXPLANATORY NOTE

Kintara Therapeutics, Inc. is filing this Amendment No. 4 to the Registration Statement on FormS-4 (File No. 333-279368), originally filed on May 13, 2024, as amended by Amendment No. 1 to the Registration Statement on Form S-4A filed with the Commission on June 27, 2024, as further amended by Amendment No. 2 to the Registration Statement on Form S-4A filed with the Commission on July 19, 2024, and as further amended by Amendment No. 3 to the Registration Statement on Form S-4A filed with the Commission on August 8, 2024 (the "Registration Statement") as an exhibit-only filing. Accordingly, this Amendment No. 4 consists only of the facing page, this explanatory note, Part II of the Registration Statement, including the signature page to the Registration Statement, the exhibit index, and the exhibits filed hereto. The remainder of the Registration Statement, including the prospectus, is unchanged and has therefore been omitted.

PART II

INFORMATION NOT REQUIRED IN PROSPECTUS

Item 20. Indemnification of Directors and Officers

Neither Kintara's Articles of Incorporation or Kintara's Bylaws prevent Kintara from indemnifying Kintara's officers, directors and agents to the extent permitted under the Nevada Revised Statute ("NRS"). NRS Section 78.751 provides that a corporation shall indemnify any director, officer, employee or agent of a corporation against expenses, including attorneys' fees, actually and reasonably incurred by him in connection with any the defense of an action to the extent that a director, officer, employee or agent of a corporation has been successful on the merits or otherwise in defense of any action, suit or proceeding referred to Section 78.751(a) or 78.751(b), or in defense of any claim, issue or matter therein.

NRS Section 78.7502(1) provides that a corporation may indemnify any person who was or is a party or is threatened to be made a party to any threatened, pending or completed action, suit or proceeding, whether civil, criminal, administrative or investigative, except an action by or in the right of the corporation, by reason of the fact that he is or was a director, officer, employee or agent of the corporation, or is or was serving at the request of the corporation as a director, officer, employee or agent of another corporation, partnership, joint venture, trust or other enterprise, against expenses, including attorneys' fees, judgments, fines and amounts paid in settlement actually and reasonably incurred by him in connection with the action, suit or proceeding if he: (a) is not liable pursuant to NRS Section 78.138; or (b) acted in good faith and in a manner which he reasonably believed to be in or not opposed to the best interests of the corporation, and, with respect to any criminal action or proceeding, had no reasonable cause to believe his conduct was unlawful.

NRS Section 78.7502(2) provides that a corporation may indemnify any person who was or is a party or is threatened to be made a party to any threatened, pending or completed action or suit by or in the right of the corporation to procure a judgment in its favor, by reason of the fact that he is or was a director, officer, employee or agent of the corporation, or is or was serving at the request of the corporation as a director, officer, employee or agent of another corporation, partnership, joint venture, trust or other enterprise against expenses, including amounts paid in settlement and attorneys' fees actually and reasonably incurred by him in connection with the defense or settlement of the action or suit if he: (a) is not liable pursuant to NRS Section 78.138; or (b) acted in good faith and in a manner which he reasonably believed to be in or not opposed to the best interests of the corporation. Indemnification may not be made for any claim, issue or matter as to which such a person has been adjudged by a court of competent jurisdiction, after exhaustion of all appeals therefrom, to be liable to the corporation or for amounts paid in settlement to the corporation, unless and only to the extent that the court in which the action or suit was brought or other court of competent jurisdiction determines upon application that in view of all the circumstances of the case, the person is fairly and reasonably entitled to indemnity for such expenses as the court deems proper.

NRS Section 78.747 provides that except as otherwise provided by specific statute or agreement, no stockholder, director or officer of a corporation is individually liable for a debt or liability of the corporation, unless the director or officer acts as the alter ego of the corporation. The court as a matter of law must determine the question of whether a director or officer acts as the alter ego of a corporation.

Insofar as indemnification for liabilities arising under the Securities Act of 1933, as amended (the 'Securities Act'), may be permitted to directors, officers or controlling persons of Kintara, pursuant to the foregoing provisions, or otherwise, we have been informed that, in the opinion of the SEC, such indemnification is against public policy as expressed in the Securities Act and is therefore unenforceable. In the event that a claim for indemnification against such liabilities (other than the payment by the registrant of expenses incurred or paid by a director, officer or controlling person of the registrant in the successful defense of any action, suit or proceeding) is asserted by such a director, officer or controlling person in connection with the securities being

registered, we will, unless in the opinion of our counsel the matter has been settled by controlling precedent, submit to a court of appropriate jurisdiction the question whether such indemnification by us is against public policy as expressed hereby in the Securities Act and we will be governed by the final adjudication of such issue.

Kintara has entered agreements to indemnify Kintara's directors and officers to the maximum extent allowed under Nevada law. These agreements, among other things, indemnify our directors and officers for certain expenses (including attorneys' fees), judgments, fines and settlement amounts reasonably incurred by such person in any action or proceeding, including any action by or in Kintara's right, on account of any services undertaken by such person on behalf of Kintara or that person's status as a member of Kintara's board of directors.

See also the undertakings set out in response to Item 22 of this Registration Statement.

Item 21. Exhibits and Financial Statement Schedules

Exhibit Index

Exhibit Number	Description
2.1††	Agreement and Plan of Merger, dated as of April 2, 2024, by and among Kintara Therapeutics, Inc., Kayak Mergeco, Inc., and TuHURA Biosciences, Inc. (incorporated by reference to Exhibit 2.1 of Kintara's Current Report on Form 8-K filed with the SEC on April 3, 2024)
2.2	Exchange Agreement, dated January 25, 2013, among Kintara, Exchangeco, Callco, Del Mar (BC) and securityholders of Del Mar (BC) (incorporated by reference to Exhibit 2.1 of Kintara's Current Report on Form 8-K filed with the SEC on January 31, 2013)
2.3††	Agreement and Plan of Merger and Reorganization, dated June 9, 2020, by and among DelMar Pharmaceuticals, Inc., Adgero Acquisition Corp. and Adgero Biopharmaceuticals Holdings, Inc. (incorporated by reference to Exhibit 2.1 to Kintara's Current Report on Form 8-K filed with the SEC on June 10, 2020).
3.1	Articles of Incorporation of Kintara (incorporated by reference to Exhibit 3.1 of Kintara's Registration Statement on FormS-1 filed with the SEC on August 17, 2010)
3.2	Articles of Merger of Kintara (incorporated by reference to Exhibit 3.1(b) of Kintara's Current Report on Form8-K filed with the SEC on January 23, 2013)
3.3	Amended and Restated Bylaws of Kintara (incorporated by reference to Exhibit 3.1 of Kintara's Quarterly Report on Form10-Q filed with the SEC on November 9, 2022)
3.4	Certificate of Designation of Series A Preferred Stock (incorporated by reference to Exhibit 3.1 of Kintara's Current Report on Form8-K filed with the SEC on October 3, 2014)
3.5	Certificate of Amendment to Articles of Incorporation (incorporated by reference to Exhibit 3.1 of Kintara's Current Report on Form8-K filed with the SEC on January 7, 2013)
3.6	Certificate of Change (incorporated by reference to Exhibit 3.1 of Kintara's Current Report onForm 8-K filed with the SEC on May 20, 2016)
3.7	Certificate of Designation of Series B Preferred Stock (incorporated by reference to Exhibit 3.1 of Kintara's Current Report on Form 8-K filed with the SEC on May 5, 2016)
3.8	Certificate of Amendment to the Articles of Incorporation, as amended, of DelMar Pharmaceuticals Inc., dated April 11, 2018 (incorporated by reference to Exhibit 3.1 of Kintara's Current Report on Form 8-K filed with the SEC on April 13, 2018)

Exhibit Number	Description
3.9	Certificate of Correction to Kintara's Articles of Incorporation, filed with the Secretary of State of the State of Nevada on April 17, 2019 (incorporated by reference to Exhibit 3.1 of Kintara's Current Report on Form 8-K filed with the SEC on April 17, 2019)
3.10	Certificate of Change of DelMar Pharmaceuticals, Inc., dated May 7, 2019 and effective May 8, 2019 (incorporated by reference to Exhibit 3.1 of Kintara's Current Report on Form 8-K filed with the SEC on May 8, 2019)
3.11	Certificate of Amendment to the Articles of Incorporation, as amended, of DelMar Pharmaceuticals Inc., dated June 26, 2019 (incorporated by reference to Exhibit 3.1 of Kintara's Current Report on Form 8-K filed with the SEC on June 28, 2019)
3.12	Certificate of Amendment to the Articles of Incorporation of Kintara, dated August 19, 2020 (incorporated by reference to Exhibit 3.1 of Kintara's Current Report on Form 8-K filed with the SEC on August 21, 2020)
3.13	Certificate of Designation of Preferences, Rights and Limitations of Series C-1 Preferred Stock (incorporated by reference to Exhibit 3.2 of Kintara's Current Report on Form 8-K filed with the SEC on August 21, 2020)
3.14	Certificate of Designation of Preferences, Rights and Limitations of Series C-2 Preferred Stock (incorporated by reference to Exhibit 3.1 of Kintara's Current Report on Form 8-K filed with the SEC on August 25, 2020)
3.15	Certificate of Designation of Preferences, Rights and Limitations of Series C-3 Preferred Stock (incorporated by reference to Exhibit 3.1 of Kintara's Current Report on Form 8-K filed with the SEC on September 1, 2020)
3.16	Certificate of Amendment to the Articles of Incorporation, as amended, of Kintara Therapeutics, Inc., dated June 25, 2021 (incorporated by reference to Exhibit 3.1 of Kintara's Current Report on Form 8- K filed with the SEC on June 28, 2021)
3.17	Certificate of Amendment to the Articles of Incorporation, as amended, of Kintara Therapeutics, Inc., dated June 21, 2022 (incorporated by reference to Exhibit 3.1 of Kintara's Current Report on Form 8- K filed with the SEC on June 22, 2022)
3.18	Certificate of Change to the Articles of Incorporation, as amended, of Kintara Therapeutics, Inc., dated November 10, 2022 (incorporated by reference to Exhibit 3.1 of Kintara's Current Report on Form 8-K filed with the SEC on November 14, 2022)
3.19	Certificate of Change to the Articles of Incorporation, as amended, of Kintara Therapeutics, Inc., dated June 30, 2023 (incorporated by reference to Exhibit 3.1 of Kintara's Current Report on Form 8- K filed with the SEC on June 30, 2023)
3.20*	Certificate, Amendment or Withdrawal of Designation of Kintara Therapeutics, Inc., relating to the Special Voting Preferred Stock, filed with the Secretary of State of Nevada on July 12, 2024 (as incorporated by reference to Exhibit 3.1 of Kintara's Current Report on Form 8-K filed with the SEC on June 12, 2024)
3.21*	Certificate, Amendment or Withdrawal of Designation of Kintara Therapeutics, Inc., relating to the Series B Preferred Stock, filed with the Secretary of State of Nevada on July 12, 2024 (as incorporated by reference to Exhibit 3.2 of Kintara's Current Report on Form 8-K filed with the SEC on June 12, 2024)
3.22*	Certificate of Incorporation of TuHURA Biosciences, Inc. (f/k/a Morphogenesis, Inc.), as currently in effect.
3.23*	Amendment to Certificate of Incorporation of TuHURA Biosciences, Inc. (f/k/a Morphogenesis, Inc.), as currently in effect.
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Exhibit Number	Description
3.24*	Bylaws of TuHURA Biosciences, Inc. (f/k/a Morphogenesis, Inc.), as currently in effect.
4.1	Form of Warrant Certificate (incorporated by reference to Exhibit 4.1 of Amendment No. 1 to Kintara's Current Report on Form8-K/A filed with the SEC on August 15, 2019)
4.2	Form of Pre-Funded Warrant Certificate (incorporated by reference to Exhibit 4.2 of Amendment No. 1 to Kintara's Current Report on Form 8-K/A filed with the SEC on August 15, 2019)
4.3	Form of Underwriter's Warrant (incorporated by reference to Exhibit 4.3 of Amendment No. 1 to Kintara's Current Report on Form8-K/A filed with the SEC on August 15, 2019)
4.4	Form of Warrant Agency Agreement (incorporated by reference to Exhibit 4.4 of Amendment No. 1 to Kintara's Current Report on Form 8-K/A filed with the SEC on August 15, 2019)
4.5	Form of Placement Agent Warrant (incorporated by reference to Exhibit 4.1 to Kintara's Current Report on Form8-K filed with the SEC on September 1, 2020)
4.6	Description of Securities (incorporated by reference to Exhibit 4.16 to Kintara's Annual Report on Form10-K filed with the SEC on September 18, 2020)
4.7	Form of Warrant Certificate (incorporated by reference to Exhibit 4.1 to Kintara's Current Report on Form8-K filed with the SEC on September 27, 2021)
4.8	Form of Pre-Funded Warrant Certificate (incorporated by reference to Exhibit 4.2 to Kintara's Current Report on Form 8-K filed with the SEC on September 27, 2021)
4.9	Form of Placement Agent Warrant Certificate (incorporated by reference to Exhibit 4.3 to Kintara's Current Report on Form8-K filed with the SEC on September 27, 2021)
4.10	Form of Investor Warrant (incorporated by reference to Exhibit 4.1 to Kintara's Current Report on Form8-K filed with the SEC on April 13, 2022)
4.11	Form of Placement Agent Warrant (incorporated by reference to Exhibit 4.2 to Kintara's Current Report on Form8-K filed with the SEC on April 13, 2022)
4.12*	Form of Morphogenesis, Inc. Common Stock Purchase Warrant issued in Series A Preferred Offering, as
4.13*	Form of Morphogenesis, Inc. Common Stock Purchase Warrant, dated June 1, 2019, issued for advisory services
4.14*	Form of Morphogenesis, Inc. Common Stock Purchase Warrant issued in Series A-1 Preferred Stock Offering
4.15*	Form of Morphogenesis, Inc. Common Stock Purchase Warrant issued in Note Conversion Transaction
4.16*	Form of Morphogenesis, Inc. Common Stock Purchase Warrant issued in Series B Preferred Stock Offering
4.17*	Form of TuHURA Biosciences, Inc. Common Stock Warrant issued in TuHURA Note Financing
4.18*	Form of Convertible Promissory Note issued in TuHURA Note Financing
4.19*	Form of TuHURA Biosciences, Inc. Series A Preferred Stock Warrant Amendment Agreement
5.1**	Opinion of Lowenstein Sandler, LLP
8.1*	Opinion of Lowenstein Sandler, LLP counsel of Kintara Therapeutics, Inc. regarding certain U.S. income tax aspects of the Merger
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Exhibit Number	Description
8.2*	Opinion of Foley & Lardner LLP, counsel of TuHURA Biosciences, Inc. regarding certain U.S. income tax aspects of the Merger
10.1	Asset Purchase Agreement, dated as of November 26, 2012, by and between Adgero Biopharmaceuticals Holdings, Inc. and St. Cloud Investments, LLC (incorporated by reference to Exhibit 10.41 to Amendment No. 1 to Kintara's Registration Statement on Form S-4 filed with the SEC on July 2, 2020)
10.2	Amendment to Asset Purchase Agreement, dated as of May 12, 2014, by and between Adgero Biopharmaceuticals, Inc. and St. Cloud Investments, LLC (incorporated by reference to Exhibit 10.42 to Amendment No. 1 to Kintara's Registration Statement on Form S-4 filed with the SEC on July 2, 2020)
10.3	Intercompany Funding Agreement, dated January 25, 2013, between Kintara and Exchangeco (incorporated by reference to Exhibit 10.1 of Kintara's Current Report on Form 8-K filed with the SEC on January 31, 2013)
10.4	Support Agreement, dated January 25, 2013, among Kintara, Exchangeco and Callco (incorporated by reference to Exhibit 10.2 of Kintara's Current Report on Form 8-K filed with the SEC on January 31, 2013)
10.5	Voting and Exchange Trust Agreement, dated January 25, 2013, among Kintara, Callco, Exchangeco, and the Trustee (incorporated by reference to Exhibit 10.3 of Kintara's Current Report on Form 8-K filed with the SEC on January 31, 2013)
10.6†	Memorandum of Understanding and Collaboration Agreement between Guangxi Wuzhou Pharmaceutical (Group) Co. Ltd. and Del Mar (BC) (incorporated by reference to Exhibit 10.8 of Kintara's Current Report on Form 8-K filed with the SEC on January 31, 2013)
10.7†	Patent Assignment Agreement, dated September 12, 2010, between Del Mar (BC) and Valent (incorporated by reference to Exhibit 10.9 of Kintara's Current Report on Form 8-K/A filed with the SEC on March 14, 2013)
10.8	Amendment, dated January 21, 2013, to Patent Assignment Agreement, dated September 12, 2010, between Del Mar (BC) and Valent (incorporated by reference to Exhibit 10.10 of Kintara's Current Report on Form 8-K/A filed with the SEC on March 14, 2013)
10.9	Consulting Agreement, effective January 1, 2015 between Del Mar (BC) and Dennis Brown (incorporated by reference to Exhibit 10.17 of Kintara's Registration Statement on Form S-1 filed with the SEC on April 10, 2015)
10.10	Form of Royalty Agreement (incorporated by reference to Exhibit 10.2 of Kintara's Current Report on Form8-K filed with the SEC on May 5, 2016)
10.11	Employment Agreement among Delmar Pharmaceuticals Inc., Delmar Pharmaceuticals (BC) Ltd. and Scott Praill (incorporated by reference to Exhibit 10.2 of Kintara's Quarterly Report on Form 10- Q filed with the SEC on February 10, 2017)
10.12	Amendment to Consulting Agreement between Delmar Pharmaceuticals (BC) Ltd. and Dennis Brown (incorporated by reference to Exhibit 10.3 of Kintara's Quarterly Report on Form 10-Q filed with the SEC on February 10, 2017)
10.13	2017 Omnibus Equity Incentive Plan (As Amended and Restated Effective as of February 1, 2018) (incorporated by reference to Exhibit 10.4 of Kintara's Quarterly Report on Form 10-Q filed with the SEC on February 14, 2018)
10.14	Form of Performance Share Unit Award Agreement (incorporated by reference to Exhibit 99.2 of Kintara's Current Report on Form 8-K filed with the SEC on July 12, 2017)

Exhibit Number	Description
10.15	Form of Indemnity Agreement (incorporated by reference to Exhibit 10.1 of Kintara's Current Report on Form8-K filed with the SEC on Jun 25, 2018)
10.16	Form of Registration Rights Agreement (incorporated by reference to Exhibit 10.43 to Amendment No. 1 to Kintara's Registration Statement on Form S-4 filed with the SEC on July 2, 2020)
10.17	Form of Subscription Agreement (incorporated by reference to Exhibit 10.5 to Kintara's Current Report on Form8-K filed with the SEC on August 21, 2020)
10.18	Placement Agency Agreement, dated June 24, 2020, by and among DelMar Pharmaceuticals, Inc. and Aegis Capital Corp. (incorporated by reference to Exhibit 10.4 to Kintara's Current Report on Form 8-K filed with the SEC on August 21, 2020)
10.19	Amendment to the 2017 Omnibus Equity Incentive Plan of Kintara Therapeutics, Inc. (incorporated by reference to Exhibit 10.26 to Kintara's Annual Report on Form 10-K filed with the SEC on September 18, 2020)
10.20	Amendment to the 2017 Omnibus Equity Incentive Plan of Kintara Therapeutics, Inc. (incorporated by reference to Exhibit 10.27 to Kintara's Annual Report on Form 10-K filed with the SEC on September 28, 2021)
10.21	Form of Securities Purchase Agreement, dated September 23, 2021 (incorporated by reference to Exhibit 10.1 to Kintara's Current Report on Form 8-K filed with the SEC on September 27, 2021)
10.22	Executive Employment Agreement, dated November 8, 2021, by and between Kintara and Robert E. Hoffman (incorporated by reference to Exhibit 10.1 to Kintara's Current Report on Form 8-K filed with the SEC on November 12, 2021)
10.23	Form of Securities Purchase Agreement, dated April 12, 2022, by and between Kintara Therapeutics, Inc. and the purchasers named therein (incorporated by reference to Exhibit 10.1 to Kintara's Current Report on Form 8-K filed with the SEC on April 13, 2022)
10.24	Placement Agency Agreement, dated April 12, 2022, by and between Kintara Therapeutics, Inc. and A.G.P./Alliance Global Partners (incorporated by reference to Exhibit 10.2 to Kintara's Current Report on Form 8-K filed with the SEC on April 13, 2022)
10.25	Purchase Agreement, dated as of August 2, 2022, by and between Kintara and Lincoln Park Capital Fund, LLC (incorporated by reference to Exhibit 10.1 to Kintara's Current Report on Form 8-K filed with the SEC on August 3, 2022)
10.26	Registration Rights Agreement, dated as of August 2, 2022, by and between Kintara and Lincoln Park Capital Fund, LLC (incorporated by reference to Exhibit 10.2 to Kintara's Current Report on Form 8-K filed with the SEC on August 3, 2022)
10.27	Sales Agreement, dated as of September 19, 2023, by and between Kintara and A.G.P./Alliance Global Partners (incorporated by reference to Exhibit 1.1 to Kintara's Current Report on Form 8-K filed with the SEC on September 19, 2023)
10.28	Form of Kintara Support Agreement (incorporated by reference to Exhibit 10.1 of Kintara's Current Report on Form8-K filed with the SEC on April 3, 2024)
10.29	Form of TuHURA Support Agreement (incorporated by reference to Exhibit 10.2 of Kintara's Current Report on Form8-K filed with the SEC on April 3, 2024)
10.30	Form of Lock-up Agreement (incorporated by reference to Exhibit 10.3 of Kintara's Current Report on Form 8-K filed with the SEC on April 3, 2024)

Exhibit Number	Description
10.31	Form of Contingent Value Rights Agreement (incorporated by reference to Exhibit 10.4 of Kintara's Current Report on Form8-K filed with the SEC on April 3, 2024)
10.32*	Amended and Restated Equity Plan of Morphogenesis, Inc.
10.33*	Form of Option Agreement under the Amended and Restated Equity Plan of Morphogenesis, Inc.
10.34*	Second Amended and Restated Employment Agreement, dated March 29, 2024, between TuHURA Biosciences, Inc. and Dan Dearborn.
10.35*	Second Amended and Restated Employment Agreement, dated March 29, 2024, between TuHURA Biosciences, Inc. and James Bianco, M.D.
10.36*	Employment Agreement, dated December 19, 2023, between TuHURA Biosciences, Inc. and Dennis Yamashita
10.37*†	Exclusive License Agreement, dated March 29, 2019, between Morphogenesis, Inc. and H. Lee Moffitt Cancer Center and Research Institute, Inc., as amended.
10.38*†	Exclusive License Agreement, dated April 23, 2021, between Morphogenesis, Inc. and H. Lee Moffitt Cancer Center and Research Institute, Inc., as amended.
10.39*†	Restated and Amended Exclusive License Agreement, effective September 7, 2022, between TuHURA Biopharma, Inc. and West Virginia Research Corporation.
10.40*†	Asset Purchase Agreement, dated January 26, 2023, between TuHURA Biopharma Inc. and Morphogenesis, Inc.
10.41*†	Exclusivity and Right of First Offer Agreement, dated July 3, 2024, between TuHURA Biosciences, Inc. and Kineta, Inc.
21.1	<u>List of Subsidiaries (incorporated by reference to Exhibit 21.1 to Kintara's Annual Report on Form10-K filed with the SEC on September 19, 2023)</u>
23.1*	Consent of Marcum, LLP, independent registered public accounting firm of Kintara Therapeutics, Inc.
23.2*	Consent of Cherry Bekaert, LLP, independent registered public accounting firm of TuHURA Biosciences, Inc.
23.3**	Consent of Lowenstein Sandler LLP (included in Exhibit 5.1)
24.1*	Power of Attorney (included on the signature page of the Registration Statement)
99.1*	Form of Proxy Card of Kintara Therapeutics, Inc.
99.2*	Consent of Lucid Capital Markets, LLC
99.3*	Consent of James Manuso, Ph.D, MBA to serve as a director of Kintara Therapeutics, Inc., to be renamed TuHURA Biosciences, Inc.
99.4*	Consent of James Bianco, M.D. to serve as a director of Kintara Therapeutics, Inc., to be renamed TuHURA Biosciences, Inc.
99.5*	Consent of Alan List, M.D. to serve as a director of Kintara Therapeutics, Inc., to be renamed TuHURA Biosciences, Inc.
99.6*	Consent of George Ng to serve as a director of Kintara Therapeutics, Inc., to be renamed TuHURA Biosciences, Inc.
EX-101.INS	Inline XBRL Instance Document – the instance document does not appear in the Interactive Data File because XBRL tags are embedded within the Inline XBRL document.
EX-101.SCH	Inline XBRL Taxonomy Extension Schema Document
EX-101.CAL	Inline XBRL Taxonomy Extension Calculation Linkbase Document

Exhibit Number	Description
EX-101.DEF	Inline XBRL Taxonomy Extension Definition Linkbase Document
EX-101.LAB	Inline XBRL Taxonomy Extension Label Linkbase Document
EX-101.PRE	Inline XBRL Taxonomy Extension Presentation Linkbase Document
104*	Cover Page Interactive Data File (embedded within the Inline XBRL document)
107*	Filing fee table

- † Confidential treatment is requested for certain confidential portions of this exhibit pursuant to Rule 24b-2 under the Exchange Act. In accordance with Rule 24b-2, these confidential portions have been omitted from this exhibit and filed separately with the Securities and Exchange Commission.
- †† Schedule has been omitted pursuant to Item 601(a)(5) of Regulation S-K. Kintara hereby undertakes to furnish copies of any of the omitted schedules upon request by the Securities and Exchange Commission.
 - Previously filed.
- ** Filed herewith.

Item 22. Undertakings

The undersigned registrant hereby undertakes:

- A. To file, during any period in which offers or sales are being made, a post-effective amendment to this registration statement:
 - (i) To include any prospectus required by Section 10(a)(3) of the Securities Act;
 - (ii) To reflect in the prospectus any facts or events arising after the effective date of the o reflect in the prospectus any facts or events arising after the effective date of the registration statement (or the most recent post-effective amendment thereof) which, individually or in the aggregate, represent a fundamental change in the information set forth in the registration statement. Notwithstanding the foregoing, any increase or decrease in volume of securities offered (if the total dollar value of securities offered would not exceed that which was registered) and any deviation from the low or high end of the estimated maximum offering range may be reflected in the form of prospectus filed with the Commission pursuant to Rule 424(b) if, in the aggregate, the changes in volume and price represent no more than 20% change in the maximum aggregate offering price set forth in the "Calculation of Registration Fee" table in the effective registration statement; and
 - (iii) To include any material information with respect to the plan of distribution not previously disclosed in the registration statement or any material change to such information in the registration statement;
- B. That, for the purpose of determining any liability under the Securities Act, each such post-effective amendment shall be deemed to be a new registration statement relating to the securities offered therein, and the offering of such securities at that time shall be deemed to be the initial bona fide offering thereof.
- C. To remove from registration by means of a post-effective amendment any of the securities being registered which remain unsold at the termination of the offering.
- D. That, for the purpose of determining liability under the Securities Act of 1933 to any purchaser, each prospectus filed pursuant to Rule 424(b) as part of a registration statement relating to an offering, other than registration statements relying on Rule 430B or other than prospectuses filed in reliance on Rule 430A, shall be deemed to be part of and included in the registration statement as of the date it is first used after effectiveness; provided, however, that no statement made in a registration statement or prospectus that is part of the registration statement or made in a document incorporated or deemed incorporated by reference into the registration statement or prospectus that is part of the registration statement will, as to a purchaser with a time of contract of sale prior to such first use, supersede or modify any statement that was made in the registration statement or prospectus that was part of the registration statement or made in any such document immediately prior to such date of first use.

- E. That, for the purpose of determining liability of the registrant under the Securities Act to any purchaser in the initial distribution of the securities, the undersigned registrant hereby undertakes that in a primary offering of securities of the undersigned registrant pursuant to this registration statement, regardless of the underwriting method used to sell the securities to the purchaser, if the securities are offered or sold to such purchaser by means of any of the following communications, the undersigned registrant will be a seller to the purchaser and will be considered to offer or sell such securities to such purchaser:
 - (i) Any preliminary prospectus or prospectus of the undersigned registrant relating to the offering required to be filed pursuant to Rule 424:
 - (ii) Any free writing prospectus relating to the offering prepared by or on behalf of the undersigned registrant or used or referred to by the undersigned registrant;
 - (iii) The portion of any other free writing prospectus relating to the offering containing material information about the undersigned registrant or its securities provided by or on behalf of the undersigned registrant; and
 - (iv) Any other communication that is an offer in the offering made by the undersigned registrant to the purchaser.
- F. The undersigned registrant hereby undertakes as follows: that prior to any public reoffering of the securities registered hereunder through use of a prospectus which is a part of this registration statement, by any person or party who is deemed to be an underwriter within the meaning of Rule 145(c), the issuer undertakes that such reoffering prospectus will contain the information called for by the applicable registration form with respect to reofferings by persons who may be deemed underwriters, in addition to the information called for by the other items of the applicable form.
- G. The registrant undertakes that every prospectus (i) that is filed pursuant to paragraph (F) immediately preceding, or (ii) that purports to meet the requirements of Section 10(a)(3) of the Act and is used in connection with an offering of securities subject to Rule 415, will be filed as a part of an amendment to the registration statement and will not be used until such amendment is effective, and that, for purposes of determining any liability under the Securities Act of 1933, each such post-effective amendment shall be deemed to be a new registration statement relating to the securities offered therein, and the offering of such securities at that time shall be deemed to be the initial bona fide offering thereof.
- H. Insofar as indemnification for liabilities arising under the Securities Act of 1933 may be permitted to directors, officers and controlling persons of the Registrant pursuant to the foregoing provisions, or otherwise, the Registrant has been advised that in the opinion of the SEC such indemnification is against public policy as expressed in the Act and is, therefore, unenforceable. In the event that a claim for indemnification against such liabilities (other than the payment by the Registrant of expenses incurred or paid by a director, officer or controlling person of the Registrant in the successful defense of any action, suit or proceeding) is asserted by such director, officer or controlling person in connection with the securities being registered, the Registrant will, unless in the opinion of its counsel the matter has been settled by controlling precedent, submit to a court of appropriate jurisdiction the question whether such indemnification by it is against public policy as expressed in the Act and will be governed by the final adjudication of such issue.
- I. The undersigned registrant hereby undertakes to respond to requests for information that is incorporated by reference into the prospectus pursuant to Items 4, 10(b), 11, or 13 of this form, within one business day of receipt of such request, and to send the incorporated documents by first class mail or other equally prompt means. This includes information contained in documents filed subsequent to the effective date of the registration statement through the date of responding to the request.
- J. The undersigned registrant hereby undertakes to supply by means of a post-effective amendment all information concerning a transaction, and the company being acquired involved therein, that was not the subject of and included in the registration statement when it became effective.

SIGNATURES

Pursuant to the requirements of the Securities Act of 1933, as amended, the Registrant has duly caused this Registration Statement on FornS-4 to be signed on its behalf by the undersigned, thereunto duly authorized, in San Diego, CA on August 12, 2024.

KINTARA THERAPEUTICS, INC.

By: /s/ Robert E. Hoffman

Name: Robert E. Hoffman

Title: Chief Executive Officer and Interim Chief Financial Officer (Principal Executive Officer and Principal Financial and Accounting Officer)

Pursuant to the requirements of the Securities Act of 1933, as amended, this Amendment No. 4 to the Registration Statement has been signed below by the following persons in the capacities indicated:

SIGNATURE	TITLE	DATE
/s/ Robert E. Hoffman Robert E. Hoffman	Chief Executive Officer, Interim Chief Financial Officer, Director (Principal Executive Officer and Principal Financial and Accounting Officer)	August 12, 2024
* Tamara A. Favorito	Director	August 12, 2024
* Robert J. Toth	Director	August 12, 2024
* Laura Johnson	Director	August 12, 2024
*By: /s/ Robert E. Hoffman Robert E. Hoffman Attorney-in-Fact		



August 12, 2024

Kintara Therapeutics, Inc. 9920 Pacific Heights Blvd., Suite 150 San Diego, CA 92121

Re: Registration Statement on Form S-4 (File No. 333-279368)

Ladies and Gentlemen:

We have acted as counsel to Kintara Therapeutics, Inc., a Nevada corporation (the "Company"), in connection with the transactions contemplated by the Agreement and Plan of Merger, dated April 2, 2024 (the "Merger Agreement"), by and among the Company, Kayak Mergeco, Inc., and TuHURA Biosciences, Inc. Such transactions include the Company's reincorporation from a Nevada corporation to a Delaware corporation prior to the completion of the merger contemplated by the Merger Agreement, pursuant to which the Company's jurisdiction of incorporation will be changed by way of continuation from the State of Nevada to the State of Delaware (the "Reincorporation").

This opinion is being rendered at the request of the Company in connection with the registration by the Company under the above-referenced Registration Statement (together with all amendments thereto as of the date hereof, the "Registration Statement") filed by the Company with the United States Securities and Exchange Commission (the "Commission") under the Securities Act of 1933, as amended (the "Securities Act") of up to 1,904,910,342 shares (the "Shares") of the Company's common stock, par value \$0.001 per share (the "Common Stock").

We have examined such documents and considered such legal matters as we have deemed necessary and relevant as the basis for the opinions hereinafter set forth below. With respect to such examination, we have assumed the genuineness of all signatures, the authenticity of all documents submitted to us as originals, the conformity to original documents of all documents submitted to us as reproduced or certified copies, and the authenticity of the originals of those latter documents. As to all questions of fact material to these opinions, we have, to the extent deemed appropriate, relied upon certain representations of certain officers and employees of the Company.

In addition to the foregoing, for the purpose of rendering our opinions as expressed herein, we have assumed that:

A. Prior to the issuance of any of the Shares by the Company pursuant to the Registration Statement: (i) the Registration Statement, as finally amended, will have become effective under the Securities Act and no stop order suspending the effectiveness of the Registration Statement will have been issued and no proceedings with respect thereto will have been commenced or threatened, (ii) the stockholders of the Company will have approved entry into the Merger Agreement and the other proposals set forth in the proxy statement/prospectus included in the Registration Statement, including the Reincorporation proposal and the proposal to approve the reverse stock split (the "Reverse Split") of the Company's issued and outstanding capital stock in a range between 1-for-20 and 1-for-40, which are to be presented and voted upon at the meeting as set forth in the proxy statement/prospectus included in the Registration Statement, (iii) all other necessary action will have been taken under the applicable laws of

NEW YORK PALO ALTO **NEW JERSEY** UTAH WASHINGTON, D.C. Lowenstein Sandler LLP the State of Nevada and the State of Delaware to authorize and permit the Reincorporation, and any and all consents, approvals and authorizations from applicable Nevada and Delaware governmental and regulatory authorities required to authorize and permit the Reincorporation will have been obtained and (iv) the merger and the transactions contemplated by the Merger Agreement, the Reincorporation and the Reverse Split, each as described in the Registration Statement, will have been consummated in accordance with the terms of the documents pertaining hereto, without any waiver or breach of any material terms or provisions thereof, and that such transactions will be effective under applicable law.

B. The Certificate of Incorporation of the Company to be adopted upon Reincorporation (the "Delaware Charter"), in the form thereof annexed to the Registration Statement, without alteration or amendment (other than the execution thereof and identification of the appropriate date), will be duly authorized and executed and thereafter be duly filed with the Secretary of State of the State of Delaware (the "DE Secretary of State"), in accordance with Section 103 of the Delaware General Corporation Law ("DGCL"), that no other certificate or document, other than the Certificate of Reincorporation as required under Section 388 of the DGCL, has been, or prior to the filing of the Delaware Charter will be, filed by or in respect of the Company with the DE Secretary of State and that the Company will pay all fees and other charges required to be paid in connection with the filing of the Delaware Charter.

Based on the foregoing, and subject to the qualifications stated herein, we are of the opinion that upon the effectiveness of the Reincorporation and the Reverse Split, and when issued in the manner and on the terms described in the Registration Statement and the Merger Agreement, the Shares will be validly issued, fully paid and non-assessable.

Our opinion herein is expressed solely with respect to the General Corporation Law of the State of Delaware. We express no opinion to the extent that any other laws the laws are applicable to the subject matter hereof and express no opinion and provide no assurance as to compliance with any federal or state securities law, rule or regulation.

Where our opinions expressed herein refer to events to occur at a future date, we have assumed that there will have been no changes in the relevant law or facts between the date hereof and such future date.

We hereby consent to the filing of this opinion as an exhibit to the Registration Statement, to the use of our name as your counsel and to all references made to us in the Registration Statement and in the proxy statement/prospectus forming a part thereof. In giving this consent, we do not hereby admit that we are in the category of persons whose consent is required under Section 7 of the Securities Act, or the rules and regulations of the Commission promulgated thereunder. This opinion speaks only as of its date, and we undertake no (and hereby disclaim any) obligation to update this opinion.

Very truly yours, Lowenstein

Lowenstein Sandler LLP

Sandler LLP