August 8, 2024

VIA EDGAR

Securities and Exchange Commission
Division of Corporation Finance
Office of Industrial Applications and Services
100 F Street, N.E.
Washington, D.C. 20549

Attention: Tara Harkins
Vanessa Robertson
Tyler Howes
Alan Campbell

Re: Kintara Therapeutics, Inc.
Amendment No. 2 to Registration Statement on Form S-4
Filed July 19, 2024
File No. 333-279368

Ladies and Gentlemen:

This letter is submitted on behalf of Kintara Therapeutics, Inc. (the "Company" or "Kintara") in response to comments from the staff (the "Staff") of the Securities and Exchange Commission (the "Commission") contained in the letter dated August 1, 2024 (the "Comment Letter") regarding the Company's Registration Statement on Form S-4 filed with the Commission 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, and as further amended by Amendment No. 2 to the Registration Statement on Form S-4A filed with the Commission on July 19, 2024 (the "Registration Statement"). In connection with this response to the Comment Letter, the Company is contemporaneously filing a third amendment to the Registration Statement ("Amendment No. 3"), to address the Staff's comments in the Comment Letter and updating the Registration Statement.

The following are the Company's responses to the Comment Letter. For your convenience, the Staff's comments contained in the Comment Letter have been restated below in their entirety in italic type, with the Company's corresponding responses set forth immediately under such comments, including, where applicable, a cross-reference to the location of changes made in Amendment No. 3 in response to the Staff's comment. All page references in the responses set forth below refer to page numbers in Amendment No. 3. Defined terms used but not otherwise defined herein have the meanings ascribed to such terms in Amendment No. 3.

Amendment No. 2 to Registration Statement on Form S-4

Opinion of Kintara's Financial Advisor

Discounted Cash Flow Analysis, page 151

1. *We note your response to prior comment 4 and revised disclosure. Please further revise to discuss why the projections utilized by Kintara assumed that commercialization for IFX- 2.0 would be able to begin in Q4 2026 and the milestones that will need to be satisfied in order for IFX-2.0 to achieve this timeline. Please also disclose the assumed market penetration for TuHURA's product candidates in all of the years included in the projections and disclose how much of TuHURA's projected revenue in 2028 to 2034 is attributed to IFX-2.0 and how much is attributed to TuHURA's other product candidates.*

RESPONSE: The Company acknowledges the Staff's comment and has revised the disclosure on page 153 and 155 of Amendment No. 3 to reflect the Staff's comment.

Special Protocol Assessment Agreement, page 295

2. *We note your disclosure here of partial clinical hold correspondence received from the FDA related toIFx-Hu2.0. Please revise to provide more detail about this partial hold including a discussion of any communications you have had with the FDA related to the hold. Please also revise your prospectus summary, the risk factor appearing on page 33 and the Information About TuHURA section to prominently disclose the partial hold, the reasons for the partial hold, current status and any related risks to investors.*

RESPONSE: In response to the Staff's comment, disclosure has been added to the Registration Statement to provide additional detail regarding the partial clinical hold and the related communications with the FDA. That additional disclosure has been added to pages 13, 244, 254-255, and 300 of the Registration Statement (with the most fulsome description of the partial clinical hold being on page 254-255), and the risk factor on pages 33-34 has been updated to make reference to the partial clinical hold.

Exhibits

3. *We note within Exhibit 23.2 that the auditor's consent does not refer to a specific report date and refers to April, 2024 while the report included on page F-2 is dated April 1, 2024. Please provide a revised auditor's consent that refers to the correct audit report date that is also currently dated and signed by your auditors. Refer to Item 601(B)(23)(i)of Regulation S-K..*

RESPONSE: The Company acknowledges the Staff's comment and has provided a revised auditor's consent as Exhibit 23.2 of Amendment No. 3 to reflect the Staff's comment.

General

4. *We note your response to comment 42 from our letter dated June 7, 2024 and your claim that you intend to retainREM-001. We continue to consider the response to comment 42. However, in order to clarify the treatment of this business combination, please provide us with your accounting analysis of all relevant factors supporting your conclusion that the merger should be accounted for as a reverse recapitalization. As part of your analysis, clearly identify the factors that are indicative that Kintara is a shell company versus the factors that are indicative that it meets the definition of a business at the time of the merger, specifically addressing your ongoing activities and your funding arrangement with NIH.*

RESPONSE: As previously disclosed and discussed with the Staff, Kintara believes that it has more than "nominal" operations and assets and should not be deemed to be a shell company as of March 31, 2024 or as of the current time. However, after review of the Comment Letter, Comment 42 to the Letter from the Staff dated June 7, 2024 and subsequent oral discussions with the Staff, Kintara acknowledges that its assets, other than cash and cash equivalents, are expected to have nominal value upon the closing of the Merger and that therefore Kintara will be deemed to be a shell company as defined in Rule 12b-2 of the Exchange Act upon the closing of the Merger.

As such and as stated in Amendment No. 3, for accounting purposes, the Merger is expected to be accounted for as a reverse recapitalization because Kintara will be a shell company upon the closing of the Merger and it will not upon the closing of the Merger meet the definition of a "business" in accordance with ASC 805 given it does not have a substantive process due to no substantive assembled workforce with the technical knowhow with the ability to develop the inputs into the ability to eventually produce outputs. Management determined there are currently no indicators that REM-001, which is in the early stages of the study process, would result in a significant asset based on the stage of development.

We believe that this letter fully responds to your questions and/or comments. However, if you have any further questions or comments regarding the foregoing, please feel free to contact outside counsel to the Company, Steven M. Skolnick, Esq. of Lowenstein Sandler, LLP, at (973) 597-2476.

Very truly yours,

/s/ Robert E. Hoffman
Robert E. Hoffman
Chief Executive Officer
Kintara Therapeutics, Inc.

cc: Steven M. Skolnick, Esq., Lowenstein Sandler, LLP
Sarah Cole, Esq., Lowenstein Sandler, LLP.