

September 17, 2020

Via EDGAR and Courier

U.S. Securities and Exchange Commission
Division of Corporation Finance
Office of Life Sciences
100 F Street, N.E.
Washington, D.C. 20549

Attention: Michael Fay
Daniel Gordon
Deanna Virginio
Ada D. Sarmiento

Re: Athira Pharma, Inc.
Registration Statement on Form S-1
Filed August 26, 2020
Amendment No. 2 to the Registration Statement on Form S-1
Filed on September 14, 2020
File No. 333-248428

Ladies and Gentlemen:

On behalf of our client, Athira Pharma, Inc. (the “**Company**”), we submit this letter in response to comments from the staff (the “**Staff**”) of the Securities and Exchange Commission (the “**Commission**”) contained in its letter dated September 16, 2020, relating to the above-referenced Registration Statement on Form S-1 (the “**Registration Statement**”). On behalf of the Company, we are concurrently publicly filing via EDGAR Amendment No. 3 to the Registration Statement (the “**Amended Registration Statement**”).

In this letter, we have recited the comments from the Staff in italicized, bold type and have followed each comment with the Company’s response. Except for page references appearing in the headings and Staff comments below (which are references to the Registration Statement), all page references herein correspond to the pages of the Amended Registration Statement.

Amendment No. 2 to Registration Statement on Form S-1
Overview, page 1

- We note your revisions in response to prior comment one and reissue in part. Your statements that "ATH-1017 significantly improved P300***

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latency" and "P300 latency is a functional measure that is highly correlated with cognition" appear to imply an expectation that the improvement in P300 latency will result in cognitive improvement. Please revise these statements and similar statements on pages 5, 90 and 108 to clarify that you have yet to establish a connection between the P300 latency results observed in your Phase 1 trials and improved cognition.

In response to the Staff's comment, the Company has revised its disclosures on pages 1, 4, 89, 107, 122, and 127 of the Amended Registration Statement.

Please direct any questions regarding the Company's responses or the Registration Statement to me at (206) 883 2524 or mnordtvedt@wsgr.com.

Sincerely,

WILSON SONSINI GOODRICH & ROSATI
Professional Corporation

/s/ Michael Nordtvedt

Michael Nordtvedt

cc: Leen Kawas, Athira Pharma, Inc.
Glenna Mileson, Athira Pharma, Inc.
Bryan D. King, Wilson Sonsini Goodrich & Rosati, P.C.
Charles S. Kim, Cooley LLP
Alan D. Hambelton, Cooley LLP
Oren Lang-Furr, Ernst & Young LLP