WILSON SONSINI

Wilson Sonsini Goodrich & Rosati
Professional Corporation
701 Fifth Avenue
Suite 5100
Seattle, Washington 98104-7036
O: 206.883.2500
F: 206.883.2699

August 26, 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. Sarmento

Re: Athira Pharma, Inc.
Draft Registration Statement on Form S-1
Submitted July 24, 2020
CIK No. 0001620463

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 August 20, 2020, relating to the above-referenced Draft Registration Statement on Form S-1 (the "**Draft Registration Statement**"). On behalf of the Company, we are concurrently publicly filing via EDGAR a revised draft of the Registration Statement (the "**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 Draft Registration Statement), all page references herein correspond to the pages of the Registration Statement.

Prospectus Summary
Overview, page 1

1. ***We note statements throughout the prospectus that imply efficacy, such as "[n]onclinical studies and Phase 1 clinical trials with ATH-1017 demonstrated improvements in brain network activity indicating positive effects on brain function," "multiple dosing of ATH-1017 significantly improved brain activity" in AD subjects, ATH-1017 "normalized the P300 latency of AD subjects in a Phase lb clinical trial," "data indicate ATH-1017 treatment has recovered disruptions to brain function and network connectivity, likely through several components of the mechanism, including NMDA receptor modulation, increased connectivity through recovery of synaptic density, and overall improvement in neuronal health and function," and a large magnitude improvement in P300 latency that was observed for ATH-1017 is "expected to produce a correlated cognitive improvement." These are just examples. Please revise your disclosure throughout your prospectus to revise these and similar statements to eliminate conclusions or predictions that your product candidates are or will be effective as determinations of efficacy are solely within the authority of the FDA. You may provide a summary of the***

objective data from your trials in the Business section where full and proper context can be provided without including conclusions related to efficacy.

In response to the Staff's comment, the Company has revised its disclosures on pages 1, 4, 88 and 128 of the Registration Statement. With respect to the other above referenced statements, the Company respectfully submits that they are not statements that imply efficacy, but are rather factual descriptions of qEEG and P300 latency results from the Phase 1 trial. For example, on page 1 of the Registration Statement, the Company states "Nonclinical studies and Phase 1 clinical trials with ATH-1017 demonstrated improvements in brain network activity indicating potentially positive effects on brain function. In the AD subjects, multiple dosing of ATH-1017 significantly improved brain activity as measured by P300 latency, a functional measure that is highly correlated with cognition." We respectfully submit that the second sentence of this disclosure, as revised, adequately clarifies that the improvements in brain network activity are based on the measurements of P300 latency, and not a conclusion as to the efficacy of ATH-1017.

P300 latency is a well-established objective measure that reflects the cognitive state, and is prolonged in patients with cognitive impairment such as AD. The P300 signal is generated by a neuronal network across several brain regions as cognitive processing occurs. Disruptions to neuronal health and synaptic function lead to disruptions in the network and result in prolonged (or worsening) P300 latencies and reduced cognitive processing in AD and other dementing conditions. Our data demonstrate an improvement in the prolonged P300 latencies in AD patients upon ATH-1017 treatment, suggesting that treatment improved brain function (cognitive processing) because the direction of change was towards historically established P300 latency values for healthy individuals. Similar to P300 latency, qEEG measures, which are generated by synchronous neuronal activity across networks, are also disrupted in AD patients due to impaired brain function and AD patients display reduced gamma power. Our data demonstrate an increase in gamma power, suggesting an improvement in the ability of the neuronal networks to generate gamma waves in patients with reduced gamma activity.

2. ***We note your disclosure in this section and in the Business section that you plan to initiate a "pivotal" Phase 2/3 clinical trial for ATH-1017, LIFT-AD. We also note your statement on page 129 that LIFT-AD will need to achieve a statistically significant improvement separately on both the ADAS-Cog-11 and ADCS-CGIC in order to be considered a pivotal trial supportive of FDA approval for mild to moderate AD. Please revise the disclosure in these sections to make it clear that even if you receive positive data from LIFT-AD, you cannot be certain that the FDA or other regulators will find such data sufficient for approval of ATH-1017 or will not require you to conduct additional trials. Please also expand your disclosure to briefly explain what ADAS-cog, ADAS-cog-11 and ADCS-CGIC stand for the first time that each term is used in the prospectus.***

In response to the Staff's comment, the Company has revised its disclosures on pages 5 and 131 of the Registration Statement, as well as on pages 8, 120, 131 and elsewhere.

Our Pipeline and ATH Platform, page 3

3. ***We note that you have included in your pipeline table ATH-1019, ATH-1018 and ATH-Discovery, all of which are in the discovery phase. Given the early-stage development of these programs, please explain why each program is sufficiently material to your business to warrant inclusion in your pipeline table. Please also remove the shaded portions of the lines in your pipeline table so that your pipeline table accurately reflects the current stage of development for each indication for ATH-1017 and remove the second line for the AD indication. Please clarify in footnote 3 whether you have already filed an IND for ATH-1017 for the treatment of PDD. Given that you have not yet initiated Phase 3 clinical trials for any of your product candidates, please also revise your statement that you are a "late" clinical-stage biopharmaceutical company throughout the prospectus.***

In response to the Staff's comment, the Company has revised its pipeline table and related disclosures on pages 3, 89, and 108 of the Registration Statement to remove the reference to ATH-Discovery, the shaded portions of the lines in the table, and the second line for the AD indication and to add clarifying disclosure regarding ATH-1017 for the treatment of PDD. We respectfully advise the Staff that ATH-1018 and ATH-1019 have progressed beyond discovery phase. ATH-1018 and ATH-1019 are lead compounds that have been identified through rigorous screening efforts in which they have demonstrated the ability to significantly activate the target HGF/MET system, and have displayed desired drug-like characteristics including oral bioavailability, stability, and optimized pharmacokinetics. They have shown positive effects in relevant preclinical models, indicating *in vivo* activity. ATH-1018 and ATH-1019 are advancing to additional *in vivo* testing towards INDs. In addition, we would draw the Staff's attention to page 78 of the Registration Statement where the Company intends to disclose that a significant portion of the use of proceeds from the offering contemplated by the Registration Statement will be dedicated to development activities related to ATH-1018 and ATH-1019. We respectfully submit that each program is material to the Company's business and an investor's understanding of the Company's prospects and therefore warrants inclusion in the pipeline table. In addition, we respectfully submit that the description of the Company as a "late" clinical stage biopharmaceutical company is appropriate. It is common practice for a biopharmaceutical company that has initiated a clinical trial that may be sufficient to support approval to be referred to as "late" clinical stage. Based on its discussions with the U.S. Food and Drug Administration, the results of the LIFT-AD trial could potentially support the approval of ATH-1017, if the trial results provide evidence that ATH-1017 is both effective and safe for the proposed indication. The Company expects to initiate the Phase 2/3 LIFT-AD clinical trial in early September and anticipates including disclosure to that effect in a future amendment to the Registration Statement.

Our Strategy, page 5

4. ***We note your disclosure here and in the Business section that your strategy is to "rapidly advance" ATH-1017 through clinical development for AD and to initiate two clinical trials for AD by the end of 2020 in order to "accelerate [y]our development timelines." Please revise this disclosure to remove any implication that you will be successful in commercializing your product candidates in a rapid or accelerated manner as such statements are speculative. In this regard, we note your disclosure that your product candidates are based on new approaches and novel technology, which makes it difficult to predict the time and cost of product candidate development and the regulatory approval process.***

In response to the Staff's comment, the Company has revised its disclosures on pages 5 and 108 of the Registration Statement.

Implications of being an emerging growth company, page 10

5. ***Please supplementally provide us with copies of all written communications, as defined in Rule 405 under the Securities Act, that you, or anyone authorized to do so on your behalf, present to potential investors in reliance on Section 5(d) of the Securities Act, whether or not they retain copies of the communications.***

In response to the Staff's comment, we have provided the Staff with all written communications presented to potential investors in reliance on Section 5(d) of the Securities Act on a supplemental basis by letter of even date herewith. These materials are only being made available for viewing by potential investors during the Company's presentations, and no copies are being retained by any potential investor.

To the extent the Company conducts additional meetings, it expects to use the same or similar materials, and the Company undertakes to provide the Staff with copies of any additional written communications that are presented to potential investors in the future by it or anyone authorized to do so on its behalf in reliance on Section 5(d) of the Securities Act of 1933, as amended, whether or not such potential investors retain copies of such communications.

Risk Factors
Our development of ATH-1017 may never lead to a marketable product, page 21

6. ***We note your disclosure that you are developing ATH-1017 as a "first-in-class" small molecule aimed at restoring neuronal health. This term suggests that the product candidate is effective and likely to be approved. Accordingly, please delete this reference.***

In response to the Staff's comment, the Company has revised its disclosure on page 20 of the Registration Statement.

Our approach to targeting brain growth factors through the use of small molecules is based on a novel therapeutic approach, page 22

7. ***We note your disclosure here that data from certain subjects in your Phase la and lb clinical trials were not obtained due to problems encountered with the placement of the EEG electrodes. Please revise your discussion of these trials throughout the prospectus to disclose this and to state, if true, that your trial descriptions are not representative of all trial participants. Please also disclose how many subjects were impacted and in which patient populations.***

In response to the Staff's comment, the Company has revised its disclosures on pages 21 and 126 of the Registration Statement.

Market, Industry and Other Data, page 77

8. ***Your statements cautioning investors not to give "undue weight" to estimates, projections and other information concerning market, industry and other data as well as your statements that such information is "inherently imprecise" implies a disclaimer of responsibility with respect to the third party information. Please revise these statements to eliminate any implication that investors are not entitled to rely on the information included in your registration statement.***

In response to the Staff's comment, the Company has revised its disclosure on page 77 of the Registration Statement.

Our Differentiated Approach, page 114

9. ***Please revise to provide legible graphics on page 114. We note that the text accompanying the pictures is illegible.***

In response to the Staff's comment, the Company has revised its graphics on pages 115 and 116 of the Registration Statement.

Figure 12. ATH-1017 Had a Large and Rapid Effect on P300 Latency in AD Subjects, page 120

10. ***We refer to your graphics comparing your P300 latency results to results observed after treatment with approved therapies Donepezil and Rivastigmine. Since you have not conducted head to head trials, please revise your disclosure to clearly state this fact and disclose why you believe this comparison is appropriate. If you provide disclosure regarding results from other trials, expand your disclosure to provide the other information regarding these trials that would help an investor make a meaningful comparison (e.g., number of patients, dosage, how the baseline was measured in each study, etc.).***

In response to the Staff's comment, the Company has revised its disclosure on pages 122 and 123 of the Registration Statement.

Event-related Potential, page 125

11. ***Please provide support for your statement that "the sustained effects on P300 latency observed in the pre-dose recordings on subsequent testing days . . . most likely reflect the long-term regeneration of neuronal connections and the improvement in brain function."***

In response to the Staff's comment, we are providing the requested support on a supplemental basis by letter of even date herewith.

Our Neuropsychiatric Program (ATH-1019), page 131

12. ***We note your statement that ATH-1019 "has been shown to activate the HGF/MET system, and distribute to the CNS, and is neuroactive in animal models." Please provide the data that you used to make this conclusion.***

In response to the Staff's comment, we are providing the requested support on a supplemental basis by letter of even date herewith.

Our Collaboration and Grant Agreements
Washington State University Research Foundation License Agreement and Amended and Restated Washington State University License Agreement, page 137

13. ***Please disclose the royalty term and termination provisions for the amended and restated license agreement and file the agreement as an exhibit or explain the basis for your determination that it is not required to be filed. We also note that your licensed patents under this agreement include WSU's rights to a patent jointly owned with Pacific Northwest Biotechnology, Inc. Please discuss whether you expect this joint ownership to have any effect on your license of the patent or your development of the product candidate to which the patent relates.***

In response to the Staff's comment, the Company has revised its disclosure on page 141 of the Registration Statement to include disclosure regarding the termination provisions of the WSU license agreement and has filed the agreement as an exhibit to the Registration Statement. We would respectfully draw the Staff's attention to page 91 of the Registration Statement, where the Company discloses that it is obligated to pay WSU a royalty in the mid-single digits of net sales. We respectfully submit that this disclosure is adequate for an investor to assess the WSU license agreement and that additional disclosure would not be material to an investor and would be competitively harmful to the Company. The Company does not expect the joint ownership of the patents included in the WSU license agreement to materially affect the licenses of such patents or the development of any of the Company's product candidates.

Principal Stockholders, page 174

14. ***Please revise your disclosure to identify the natural person or persons who have voting and investment control of the shares held by the entities affiliated with RTW Master Fund, Ltd., Viking Global Opportunities Illiquidity Investments Sub-Master LP and the entities affiliated with Franklin Templeton Investments. Please also revise your disclosure to identify the natural person or persons who share, along with Mr. Edelman, voting and dispositive power over the shares held by Perceptive Life Sciences Master Fund Ltd.***

In response to the Staff's comment, the Company has revised its disclosures on pages 182 and 183 of the Registration Statement to identify the natural person or persons who have voting and investment control of the shares held by the entities affiliated with RTW Investments LP and Viking Global Opportunities Illiquid Investments Sub-Master LP and to clarify the nature of Mr. Edelman's beneficial ownership over the shares held by Perceptive Life Sciences Master Fund Ltd. We are still obtaining information related to identifying the natural person or persons who have voting and investment control of the shares held by entities affiliated with Franklin Templeton Investments and will further address the Staff's comment in a pre-effective amendment to the Registration Statement or in a subsequent response letter.

Financial Statements
Notes to Financial Statements
7. Significant Agreements, page F-15

15. ***Please clarify how you determined that the grant liability is an eligible item under ASC 825-10-15-4. If applicable, describe how the grant liability meets the definition of a financial liability.***

The Company respectfully advises the Staff that terms of the contracts with the Washington Life Sciences Discovery Fund ("LSDF") provide LSDF the right to receive cash payments upon the occurrence of expected triggering events, each of which is disclosed on page F-15 of the Registration Statement. In assessing whether the contracts with LSDF met the definition of a financial liability, the Company considered whether LSDF would receive creditor rights in the event of a liquidation of the Company. The Company believes that LSDF would be considered as a creditor in the event of a liquidation and therefore, the contracts embody a liability thereby precluding classification as a component of stockholders' equity. The definition of a financial liability includes "an obligation on one entity to deliver cash or another financial instrument to a second entity" and LSDF's creditor rights impose such an obligation on the Company. Accordingly, the Company concluded that the contracts with LSDF met the definition of a financial liability.

To determine the accounting for the grant liability, the Company considered the scope exceptions from fair value accounting included in ASC 825-10-15-4 and noted that the grant liability did not meet any of the scope exceptions. Therefore, the Company made the election to account for the grant liability at fair value with changes in fair value recognized as a component of earnings at the end of each reporting period.

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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