

September 27, 2021

Elisabet de los Pinos, Ph.D.  
Chief Executive Officer  
Aura Biosciences, Inc.  
85 Bolton Street  
Cambridge, MA 02140

Inc.

Draft Registration Statement on Form S-1  
20, 2021

Re: Aura Biosciences,  
Amendment No. 1 to  
Submitted September  
CIK No. 0001501796

Dear Dr. de los Pinos:

We have reviewed your amended draft registration statement and have the following comments. In some of our comments, we may ask you to provide us with information so we may better understand your disclosure.

Please respond to this letter by providing the requested information and either submitting an amended draft registration statement or publicly filing your registration statement on EDGAR. If you do not believe our comments apply to your facts and circumstances or do not believe an amendment is appropriate, please tell us why in your response.

After reviewing the information you provide in response to these comments and your amended draft registration statement or filed registration statement, we may have additional comments.

Amendment No. 1 to Draft Registration Statement on Form S-1

Prospectus Summary  
Our Team and Investors, page 3

1. We note your response to prior comment 3. The identification of past investors appears to suggest that potential investors may consider investments made by these investors as a factor in making their investment decisions without knowing the amount of their investment in total or on a per share basis, their investment strategies or whether these investors continue to hold their shares. Additionally, as these shareholders are not subject to the reporting requirements of Section 16, investors will not know when they decide to sell their shares. Therefore, we continue to believe the disclosure is inappropriate for the registration statement.

Please revise.

Elisabet de los Pinos, Ph.D.  
Aura Biosciences, Inc.  
September 27, 2021

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Business  
Preliminary design of the pivotal trial, page 119

2. We note your response to comment 8. Based on your amended disclosure that you plan to conduct your Phase 3 trial after the first pivotal study, it appears that the "registry trial" mentioned on this page is not your second pivotal trial. As such, we request that you clarify that this second pivotal trial is not the Phase 3 trial. Additionally, please provide

more information about the second pivotal trial, including its primary and secondary endpoints and how, if at all, it differs from the first pivotal trial. Executive Compensation, page 165

3. We note your response to comment 10. Please confirm that you intend to file the new employment agreement for each of the named executive officers as exhibits or tell us why you are filing a form of agreement. Principal Stockholders, page 181

4. We note your response to prior comment 11 that no natural person directly or indirectly exercises sole or shared voting and/or dispositive power with respect to the common stock held by Chiesi Ventures, LP. Given the disclosure that that Chiesi Ventures, Inc., as General Partner of Chiesi Ventures, LP, may be deemed to have voting and investment authority over the shares held by Chiesi Ventures, LP, please disclose the natural person or persons who control Chiesi Ventures, Inc, through its board of directors or otherwise. You may contact Tracey Houser at 202-551-3736 or Jeanne Baker at 202-551-3691 if you have questions regarding comments on the financial statements and related matters. Please contact Dillon Hagius at 202-551-7967 or Tim Buchmiller at 202-551-3635 with any other questions.

FirstName LastNameElisabet de los Pinos, Ph.D.  
Corporation Finance  
Comapany NameAura Biosciences, Inc.

Sincerely,  
Division of  
Office of Life

Sciences  
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cc: Danielle Lauzon, Esq.  
FirstName LastName