VIA EDGAR

October 26, 2021

United States Securities and Exchange Commission Division of Corporation Finance Office of Life Sciences 100 F Street, N.E. Washington, D.C. 20549 Attention: Dillon Hagius and Joe McCann

Re: Aura Biosciences, Inc.
Acceleration Request for Registration Statement on Form S-1
File No. 333-260156

Dear Mr. Hagius,

Pursuant to Rule 461 under the Securities Act of 1933, as amended (the "Act"), Aura Biosciences, Inc. (the "Company") hereby requests that the effective date of the above-referenced registration statement (the "Registration Statement") be accelerated to October 28, 2021, at 4:00 p.m., Eastern Time, or as soon thereafter as practicable, unless we or our outside counsel, Goodwin Procter LLP, request by telephone that such Registration Statement be declared effective at some other time. In making this acceleration request, the Company acknowledges that it is aware of its responsibilities under the Act.

Once the Registration Statement is effective, please orally confirm the event with our counsel, Goodwin Procter LLP by calling Stephanie Richards at (617) 570-1927. We also respectfully request that a copy of the written order from the Securities and Exchange Commission (the "Commission") verifying the effective time and date of the Registration Statement be sent to our counsel, Goodwin Procter LLP, Attention: Stephanie Richards, by facsimile to (617) 321-4374.

If you have any questions regarding this request, please contact Stephanie Richards of Goodwin Procter LLP at (617) 570-1927.

Sincerely,

AURA BIOSCIENCES, INC.

/s/ Elisabet de los Pinos

Elisabet de los Pinos, Ph.D. President and Chief Executive Officer

cc: Julie Feder, Chief Financial Officer, Aura Biosciences, Inc. Danielle M. Lauzon, Esq., *Goodwin Procter LLP* Stephanie Richards, Esq., *Goodwin Procter LLP*