## VIA EDGAR

April 3, 2024

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

Re: Aura Biosciences, Inc.

Acceleration Request for Registration Statement on Form S-3

File No. 333-278253

Dear Jessica Dickerson,

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 April 5, 2024, at 4:05 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.

If you have any questions regarding this request, please contact Danielle Lauzon of Goodwin Procter LLP at (617) 570 1955 or Stephanie Richards 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: Elisabet de los Pinos, Ph.D., *Aura Biosciences, Inc.*Danielle Lauzon, Esq., *Goodwin Procter LLP*Stephanie Richards, Esq., *Goodwin Procter LLP*