

August 11, 2022

## **VIA EDGAR**

Securities and Exchange Commission Division of Corporation Finance 100 F Street, N.E. Washington, D.C. 20549

Attention: Jordan Nimitz

Re: SOPHIA GENETICS SA

Registration Statement on Form F-3 Registration No. 333-266704

Dear Ms. Nimitz:

In accordance with Rule 461 under the Securities Act of 1933, as amended, we hereby request acceleration of the effective date of the Registration Statement on Form F-3 (File No. 333-266704) (the "Registration Statement") of SOPHiA GENETICS SA. We respectfully request that the Registration Statement be declared effective as of 4:00 p.m., Eastern time, on August 15, 2022, or as soon as practicable thereafter.

Once the Registration Statement has been declared effective, please orally confirm that event with our counsel, Davis Polk & Wardwell LLP, by calling David Li at (212) 450-3861.

Thank you for your assistance in this matter.

Sincerely,

SOPHIA GENETICS SA

By: /s/ Daan van Well

Name: Daan van Well Title: Chief Legal Officer