

UNITED STATES SECURITIES AND EXCHANGE COMMISSION WASHINGTON, D.C. 20549

May 18, 2023

Ross Muken Chief Financial Officer SOPHiA GENETICS SA 185 Dartmouth Street Floor 5 Boston, MA 02116

Re: SOPHIA GENETICS SA

Form 20-F for the Fiscal Year Ended December 31, 2022

Filed March 7, 2023 File No. 001-40627

Dear Ross Muken:

We have completed our review of your filing. We remind you that the company and its management are responsible for the accuracy and adequacy of their disclosures, notwithstanding any review, comments, action or absence of action by the staff.

Sincerely,

Division of Corporation Finance Office of Life Sciences