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