August 11, 2022

Jurgi Camblong Chief Executive Officer SOPHIA GENETICS SA Rue du Centre 172 CH-1025 Saint-Sulpice Switzerland Re: SOPHiA GENETICS SA Registration Statement on Form F-3 Filed August 9, 2022 File No. 333-266704 Dear Dr. Camblong: This is to advise you that we have not reviewed and will not review your registration statement. Please refer to Rules 460 and 461 regarding requests for acceleration. 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. Please contact Jordan Nimitz at 202-551-5831 with any questions.

Sincerely,

Division of Corporation Finance

Office of Life Sciences