

May 11, 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  
Form 6-K furnished

May 9, 2023

File No. 001-40627

Dear Ross Muken:

We have limited our review of your filing to the financial statements and related disclosures and have the following comment. In our comment, we may ask you to provide us with information so we may better understand your disclosure.

Please respond to the comment within ten business days by providing the requested information or advise us as soon as possible when you will respond. If you do not believe our comment applies to your facts and circumstances, please tell us why in your response.

After reviewing your response to the comment, we may have additional comments.

Form 6-K furnished May 9, 2023

Exhibit 99.3  
Reconciliation of IFRS to Adjusted IFRS Statement of Profit and Loss,  
page 11

1. Your non-IFRS presentation appears to represent a full consolidated statement of profit and loss. Please tell us why you believe your presentation is consistent with Question 102.10(a) through (c) of the Compliance and Disclosure Interpretations on Non-GAAP Financial Measures.

Ross Muken  
FirstName LastNameRoss  
SOPHiA GENETICS SA Muken  
Comapany NameSOPHiA GENETICS SA  
May 11, 2023

May 11,  
Page 2 2023 Page 2  
FirstName LastName

In closing, 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.

You may contact Mary Mast at (202) 551-3613 or Frank Wyman at (202) 551-3660 with any questions.

Sincerely,

Corporation Finance  
Sciences

Division of  
Office of Life