

May 17, 2023

Re: SOPHiA GENETICS SA Form 20-F for the Fiscal Year Ended December 31, 2022 Form 6-K furnished May 9, 2023 File No. 001-40627

U.S. Securities and Exchange Commission Division of Corporation Finance 100 F Street, N.E. Washington, D.C. 20549 Attention: Mary Mast and Frank Wyman

Dear Ms. Mast and Mr. Wyman:

SOPHIA GENETICS SA (the "Company") submits this letter to set forth the Company's response to the comment provided by the staff (the "Staff") of the U.S. Securities and Exchange Commission (the "Commission") contained in the Staff's letter dated May 11, 2023.

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.

Response: The Company acknowledges the Staff's comment. The Company respectfully advises the Staff that the Form 6-K furnished on May 9, 2023 is not incorporated by reference into any registration statement, prospectus or annual report. In the Commission's final rule regarding Conditions for Use of Non-GAAP Financial Measures (Release Nos. 33-8176; 34-47226), the Commission noted that materials submitted to the Commission on Form 6-K, while subject to Regulation G, are not subject to Item 10 of Regulation S-K, under which the equal-or-greater prominence requirement to which Question 102.10(a) through (c) of the Compliance and Disclosure Interpretations on Non-GAAP Financial Measures are issued by the Staff, unless the information in the Form 6-K is incorporated by reference into a registration statement, prospectus or annual report. Nonetheless, the Company has considered the Staff's comment and Question 102.10(a) through (c) of the Compliance and Disclosure Interpretations on Non-GAAP Financial Measures and informs the Staff that, in future submissions to the Commission, the Company will present non-IFRS financial measures separately, including reconciliation of each such measure to the most comparable IFRS measure, and in a manner not resembling a full consolidated statement of profit and loss.

Please do not hesitate to contact Yasin Keshvargar at (212) 450-4839 or Deanna L. Kirkpatrick at (212) 450-4135 if you have any questions regarding the foregoing or if we can provide any additional information.

* * *

Very truly yours,

/s/ Daan van Well

Daan van Well Chief Legal Officer