UNITED STATES SECURITIES AND EXCHANGE COMMISSION

WASHINGTON, D.C. 20549

FOR REGISTRATION OF CERTAIN CLASSES OF SECURITIES PURSUANT TO SECTION 12(b) OR 12(g) OF THE SECURITIES EXCHANGE ACT OF 1934

SOPHIA GENETICS SA

(Exact Name of Registrant as Specified in Its Charter)

Switzerland (State of or other jurisdiction of incorporation or organization) Not Applicable (I.R.S. Employer Identification No.)

Rue du Centre 172 CH-1025 Saint-Sulpice Switzerland (Address of principal executive offices) (Zip Code)

Securities to be registered pursuant to Section 12(b) of the Act:

Title of each class to be so registered
Ordinary shares, par value CHF 0.05 per share

Name of each exchange on which each class is to be registered

The Nasdaq Stock Market LLC

If this form relates to the registration of a class of securities pursuant to Section 12(b) of the Exchange Act and is effective pursuant to General Instruction A.(c) or (e), check the following box. \boxtimes

If this form relates to the registration of a class of securities pursuant to Section 12(g) of the Exchange Act and is effective pursuant to General Instruction A.(d) or (e), check the following box. \Box

If this form relates to the registration of a class of securities concurrently with a Regulation A offering, check the following box. \Box

Securities Act registration statement or Regulation A offering statement file number to which this form relates: 333-257646 (if applicable)

Securities to be registered pursuant to Section 12(g) of the Act:

None

(Title of Class)

INFORMATION REQUIRED IN REGISTRATION STATEMENT

Item 1. Description of Registrant's Securities to be Registered

The description under the heading "Description of Share Capital and Articles of Association" relating to the ordinary shares, par value CHF 0.05 per share (the "Shares"), of SOPHiA GENETICS SA (the "Registrant") in the preliminary prospectus included in the Registrant's Registration Statement on Form F-1 (Registration No. 333-257646) filed with the Securities and Exchange Commission on July 19, 2021, and the description under the heading "Description of Share Capital and Articles of Association" relating to the Shares in the Registrant's final prospectus to be filed with the Securities and Exchange Commission pursuant to Rule 424(b) under the Securities Act of 1933, as amended, are incorporated herein by reference.

Item 2. Exhibits

Under the Instructions as to Exhibits with respect to Form 8-A, no exhibits are required to be filed because no other securities of the Registrant are registered on the Nasdaq Stock Market LLC and the securities registered hereby are not being registered pursuant to Section 12(g) of the Securities Exchange Act of 1934, as amended.

SIGNATURE

Pursuant to the requirements of Section 12 of the Securities Exchange Act of 1934, the registrant has duly caused this registration statement to be signed on its behalf by the undersigned, thereto duly authorized.

SOPHIA GENETICS SA

Date: July 19, 2021

By: /s/ Daan van Well

Name: Daan van Well Title: Chief Legal Officer