UNITED STATES
SECURITIES AND EXCHANGE COMMISSION
Washington, D.C. 20549

FORM 6-K

REPORT OF FOREIGN PRIVATE ISSUER PURSUANT TO RULE 13a-16 OR 15d-16 UNDER THE SECURITIES EXCHANGE
ACT OF 1934

For the month of October, 2021.

Commission File Number: 001-40627

SOPHiA GENETICS SA
(Exact name of registrant as specified in its charter)

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

Indicate by check mark whether the registrant files or will file annual reports under cover of Form 20-F or Form 40-F:

Form 20-F ☒ Form 40-F ☐

Indicate by check mark if the registrant is submitting the Form 6-K in paper as permitted by Regulation S-T Rule 101(b)(1): ☐

Indicate by check mark if the registrant is submitting the Form 6-K in paper as permitted by Regulation S-T Rule 101(b)(7): ☐
Pursuant to the requirements of the Securities Exchange Act of 1934, the registrant has duly caused this report to be signed on its behalf by the undersigned, thereunto duly authorized.

**SOPHiA GENETICS SA**

Date: October 12, 2021

By: /s/ Daan van Well  
Name: Daan van Well  
Title: Chief Legal Officer
<table>
<thead>
<tr>
<th>Exhibit No.</th>
<th>Description</th>
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<tbody>
<tr>
<td>99.1</td>
<td>Press release dated October 12, 2021</td>
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</table>
SOPHiA GENETICS offers new genomic application for a deeper investigation of Mendelian diseases

SOPHiA Clinical Exome Solution v3 offers a streamlined end-to-end workflow to facilitate the assessment of challenging Mendelian disorders.

BOSTON and LAUSANNE, Switzerland, October 12, 2021 — SOPHiA GENETICS SA (Nasdaq: SOPH), the creator of a global data pooling and knowledge sharing platform that advances data-driven medicine, announced today the launch of SOPHiA Clinical Exome Solution v3, a new genomic application that offers enhanced probe design and increased detection capabilities for a deeper investigation of Mendelian diseases.

SOPHiA Clinical Exome Solution v3 combines a capture-based target enrichment kit with the analytical capabilities and interpretation-support functionalities of the SOPHiA DDM™ platform, offering deep coverage of the target regions and accurate analysis of multiple types of variants (SNVs, Indels, and CNVs) in one unique experiment.

With new and improved probe design, rare and inherited disorder analyses benefit from increased detection capabilities within the entire mitochondrial genome, as well as non-coding variants in 280 genomic locations known to be disorder-causing. The probe design is highly optimized for high on-target reads percentage and coverage uniformity even in GC-rich regions, including the first exon.

Additionally, with improved analytical performance, institutions can reach more than 90% analytical sensitivity for CNV detection, helping them efficiently find the pathogenic needle in the big data haystack to improve turnaround time and free up resources.

The SOPHiA DDM™ platform analyzes complex NGS data by detecting, annotating, and pre-classifying multiple types of genomic variants in all the genes of the panel.

To learn more about the SOPHiA Clinical Exome Solution v3 application, visit https://www.sophiagenetics.com/clinical/inherited-disorders/rare-diseases/clinical-exome-solution-v3/.

About SOPHiA GENETICS:
SOPHiA GENETICS is a healthcare technology company dedicated to establishing the practice of data-driven medicine as the standard of care and for life sciences research. It is the creator of the SOPHiA DDM™ Platform, a cloud-based SaaS platform capable of analyzing data and generating insights from complex multimodal data sets and different diagnostic modalities. The SOPHiA DDM™ Platform and related solutions, products and services are currently used by more than 780 hospital, laboratory, and biopharma institutions globally.

SOPHiA GENETICS products are for Research Use Only and not for use in diagnostic procedures, unless specified otherwise. Information about products that may or may not be available in different countries and, if applicable, may or may not have received approval or market clearance by a governmental regulatory body for different indications for use. Please contact support@sophiagenetics.com to obtain the appropriate product information for your country of residence.
SOPHiA GENETICS Forward-Looking Statements:

This press release contains statements that constitute forward-looking statements. All statements other than statements of historical facts contained in this press release, including statements regarding our future results of operations and financial position, business strategy, products and technology, as well as plans and objectives of management for future operations, are forward-looking statements. Forward-looking statements are based on our management’s beliefs and assumptions and on information currently available to our management. Such statements are subject to risks and uncertainties, and actual results may differ materially from those expressed or implied in the forward-looking statements due to various factors, including those described in our filings with the U.S. Securities and Exchange Commission. No assurance can be given that such future results will be achieved. Such forward-looking statements contained in this document speak only as of the date of this press release. We expressly disclaim any obligation or undertaking to update these forward-looking statements contained in this press release to reflect any change in our expectations or any change in events, conditions, or circumstances on which such statements are based unless required to do so by applicable law. No representations or warranties (expressed or implied) are made about the accuracy of any such forward-looking statements.

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