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 January, 2022.

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): ☐
SIGNATURE

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: January 11, 2022

By:  /s/ Daan van Well
Name:  Daan van Well
Title:  Chief Legal Officer

EXHIBIT INDEX

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SOPHiA GENETICS Reports Strong Traction in the Launch Phase of its DEEP-Lung-IV Multimodal Clinical Study

Study leverages deep learning-enabled analysis of the aggregation of real-world multimodal data to validate predictive signatures associated with response to immunotherapy and prognosis of patients with stage IV non-small cell lung cancer.

Since study launch, 12 sites across 5 countries have already signed up for participation.

BOSTON and LAUSANNE, Switzerland, January 11, 2021 — SOPHiA GENETICS SA (Nasdaq: SOPH), the creator of a global data pooling and knowledge sharing platform that advances data-driven medicine, announced today strong traction in the launch phase of their DEEP-Lung-IV clinical study (NCT04994795). Since officially launching last month, 12 sites across 5 countries have already signed up for participation in the study.

Despite the clinical promise of immunotherapy, significant challenges remain as the majority of non-small cell lung cancer (NSCLC) patients fail to respond to immune checkpoint inhibitors. Today, PD-L1 is the only standard predictive biomarker for immune checkpoint inhibitor efficacy, however it remains a very suboptimal biomarker with several well-characterized issues limiting its clinical utility. Thus, there is an urgent need to discover new predictive biomarkers of response to immunotherapy. SOPHiA GENETICS’ DEEP-Lung-IV clinical study leverages deep learning-enabled analysis of the aggregation of real-world multimodal data (including genomics, radiomics and clinical data) to identify and validate predictive signatures associated with response to immunotherapy and prognosis of patients with metastatic (stage IV) NSCLC. Such signatures could help identify patients that are likely to benefit from immunotherapy versus those that are not, as well as stratify patients according to risk, helping clinicians make more informed therapeutic decisions for their patients and supporting biopharma to ensure the right patients are selected for clinical trials.

The 12 initial sites that have signed up for participation in the study include Carbone Comprehensive Cancer Center at University of Wisconsin and Holden Comprehensive Cancer Center at University of Iowa Health Care in the US, Assistance Publique-Hôpitaux de Paris and Hospices Civils de Lyon in France, Leipzig University in Germany, Sunnybrook Health Sciences Center in Toronto, Canada, and Shaare Zedek Medical Center in Jerusalem, Israel, among others. Together, these sites are projected to contribute over 2,000 of the 4,000 total patients targeted for enrollment over the course of the study. An additional 10 sites are lined up for onboarding in the first quarter of 2022, with more expected candidates to follow.

“We are very pleased with the strong traction since launching our DEEP-Lung-IV multimodal clinical study. The positive reception from the participating sites highlights the high interest in unlocking the predictive potential of multimodal health data sets through large-scale real-world studies” said Dr. Jurgi Camblong, Co-founder and Chief Executive Officer at SOPHiA GENETICS. “We very much look forward to further accelerating this momentum in the first months of 2022.”
To learn more about the DEEP-Lung-IV clinical study, visit [https://clinicaltrials.gov/ct2/show/NCT04994795](https://clinicaltrials.gov/ct2/show/NCT04994795).

About SOPHiA GENETICS

SOPHiA GENETICS (Nasdaq: SOPH) 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 790 hospital, laboratory, and biopharma institutions globally. For more information, visit [SOPHIAGENETICS.COM](https://www.sophiagenetics.com), or connect on [Twitter](https://twitter.com/sophiagenetics), [LinkedIn](https://www.linkedin.com/company/sophia-genetics), and [Instagram](https://www.instagram.com/sophiagenetics). Where others see data, we see answers.

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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