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**

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): □

For the month of March, 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
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): □

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: March 14, 2022

By: /s/ Daan van Well

Name: Daan van Well
Title: Chief Legal Officer

EXHIBIT INDEX

Exhibit No. Description

99.1 Press release dated March 14, 2022

SOPHIA GENETICS and REALM IDx Sign Letter of Intent to Collaborate in Accelerating Cancer Research

The intended collaboration aims to help improve patient care by enhancing next-generation sequencing research for cancer care and expanding data sources for precision medicine.

BOSTON & ALISO VIEJO, Calif., United States and LAUSANNE, Switzerland – March 14, 2022 – SOPHIA GENETICS (Nasdaq: SOPH) and REALM IDx announced today that they signed a letter of intent to collaborate in the co-development of novel genomic applications and commercialization of multi-modal applications. Together, the companies aim to expand next-generation sequencing (NGS) research for cancer care and develop new multi-modal data streams to improve patient outcomes. The companies expect to enter into a definitive collaboration agreement following further discussion.

NGS is becoming the new standard of care in cancer diagnostics, particularly as novel therapies require genomic information to be prescribed in a personalized way. With the intended collaboration, SOPHiA GENETICS and REALM IDx's endeavor is to enrich and scale the analysis of NGS assays, including Homologous Recombination Deficiency (HRD). Assessments can leverage TumorNEXT-HRD, a product of Ambry Genetics, a subsidiary of REALM IDx. SOPHiA GENETICS and REALM IDx also expect to explore the potential for increasing diagnostic insights by combining Ambry Genetics' Variant Assessment database (AVA) with SOPHiA GENETICS' SOPHiA DDM (Data-Driven Medicine) platform for HRD detection.

"SOPHIA GENETICS' mission is to advance data-driven medicine to improve health outcomes worldwide. We want to bring together our global SOPHIA DDM platform, powered by AI and machine learning, with REALM IDx's cancer screening capabilities and early detection diagnostics. Our goal is to enable health care professionals to leverage insights across multiple data sources with the aim to provide better diagnosis and treatments for the benefit of patients around the world," said Jurgi Camblong, co-founder and CEO, SOPHIA GENETICS.

SOPHiA GENETICS and REALM IDx also share an interest in bringing together genomics, radiology, and pathology data, combined with artificial intelligence, to generate actionable insights. While REALM IDx's subsidiary Ambry Genetics has focused on screening and early detection diagnostics in pancreatic and breast cancers, SOPHiA GENETICS' focus has been on prediction response models in advanced stage cancers, such as lung cancer. The companies hope that synergies between SOPHiA GENETICS and REALM IDx may provide opportunities to explore combining data sources and capabilities in the multimodal space, potentially creating a roadmap for comprehensive oncology applications.

As part of the intended collaboration, SOPHiA GENETICS may use Ambry Genetics' lab for their sequencing needs. The companies believe that the combination of Ambry Genetics' decades of leadership in clinical next-generation sequencing and translational analysis and the SOPHiA DDM cloud-based analytics platform, can support improved clinical research decisions by pharmaceutical companies.

"The heart of our work is the ability to combine patient data from multiple sources to improve treatment decisions and discover new medicines," said Jonathan Usuka, Ph.D., chief strategy and informatics officer of REALM IDx. "With the synergies we hope to realize from collaborating with SOPHiA GENETICS, we will continue to enhance our ability to address some of health care's most challenging diseases."

About REALM IDx

REALM IDx, Inc. is a health care company pioneering in the field of Integrated Diagnostics (IDx), an advanced field of clinical science that brings together laboratory medicine, radiology, pathology and sophisticated artificial intelligence to derive actionable insights to predict, diagnose and treat disease. Powered by proprietary software platforms, industry-leading genomics technology from Ambry Genetics Corporation and radiology and pathology services from Invicro, LLC, the company is equipped to collect, analyze and report on multi-modal precision diagnostic data sets. REALM's extensive network of health care providers and pharmaceutical partners will drive clinical access to innovations that lead to better medical solutions for patient care. To learn more, visit REALMIDx.com.

About SOPHIA GENETICS

SOPHiA GENETICS (Nasdaq: SOPH) is a health care 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, or connect on Twitter, LinkedIn and Instagram. Where others see data, we see answers.

SOPHIA GENETICS products are for Research Use Only and not for use in diagnostic procedures, unless specified otherwise. The information in this press release is 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@sophiagenertics.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 press release speak only as of the date hereof. 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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