SOPHiA GENETICS™

Democratizing Data-Driven Medicine Together

Corporate Overview

September 2021

Disclosure

This presentation contains statements that constitute forward-looking statements. All statements other than statements of historical facts contained in this presentation, 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 presentation. We expressly disclaim any obligation or undertaking to update these forward-looking statements contained in this presentation 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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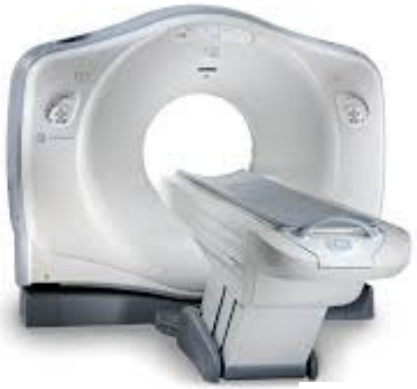
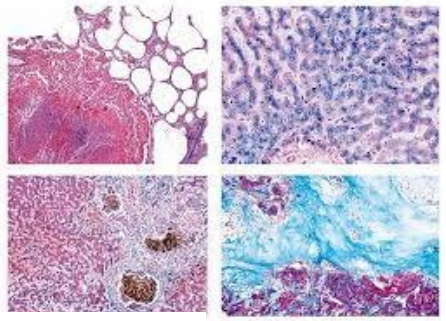
This presentation includes non-IFRS measures. These measures are not measures of financial performance prepared in accordance with IFRS as issued by the IASB and may exclude items that are significant in understanding and assessing our financial results and condition. Therefore, these measures should not be considered in isolation or as alternatives to IFRS measures. In addition, other companies may calculate similarly-titled non-IFRS measures differently. For reconciliation of IFRS measures to non-IFRS measures, see Appendix.

Our Vision for Technology to Improve Patient Care and Diagnosis

Delivering a SaaS platform to break data silos and share insights

TODAY





Single Modality

Data Siloes

Centralized Model

Limited

Disconnected

Difficult to Scale

TOMORROW

Multimodal

Machine Learning

Decentralized

Scalable

Global Network

Knowledge Sharing

Our SOPHiA Platform

A decentralized model where users keep data and share insights

+ Software as a Service (SaaS) cloud platform
+ Leverages AI to analyze and standardize data
+ Creates network effects

770,000+
GENOMIC PROFILES ANALYZED[1]

~780
HOSPITALS, LABS & BIOPHARMA CUSTOMERS[1]

~330
SUPPORTED NGS TEST KITS[1]

- ✓ Designed to be HIPAA and GDPR compliant
- ✓ Designed to be Safe & Secure
- ✓ Technology agnostic

1. As of June 30, 2021

Global Impact

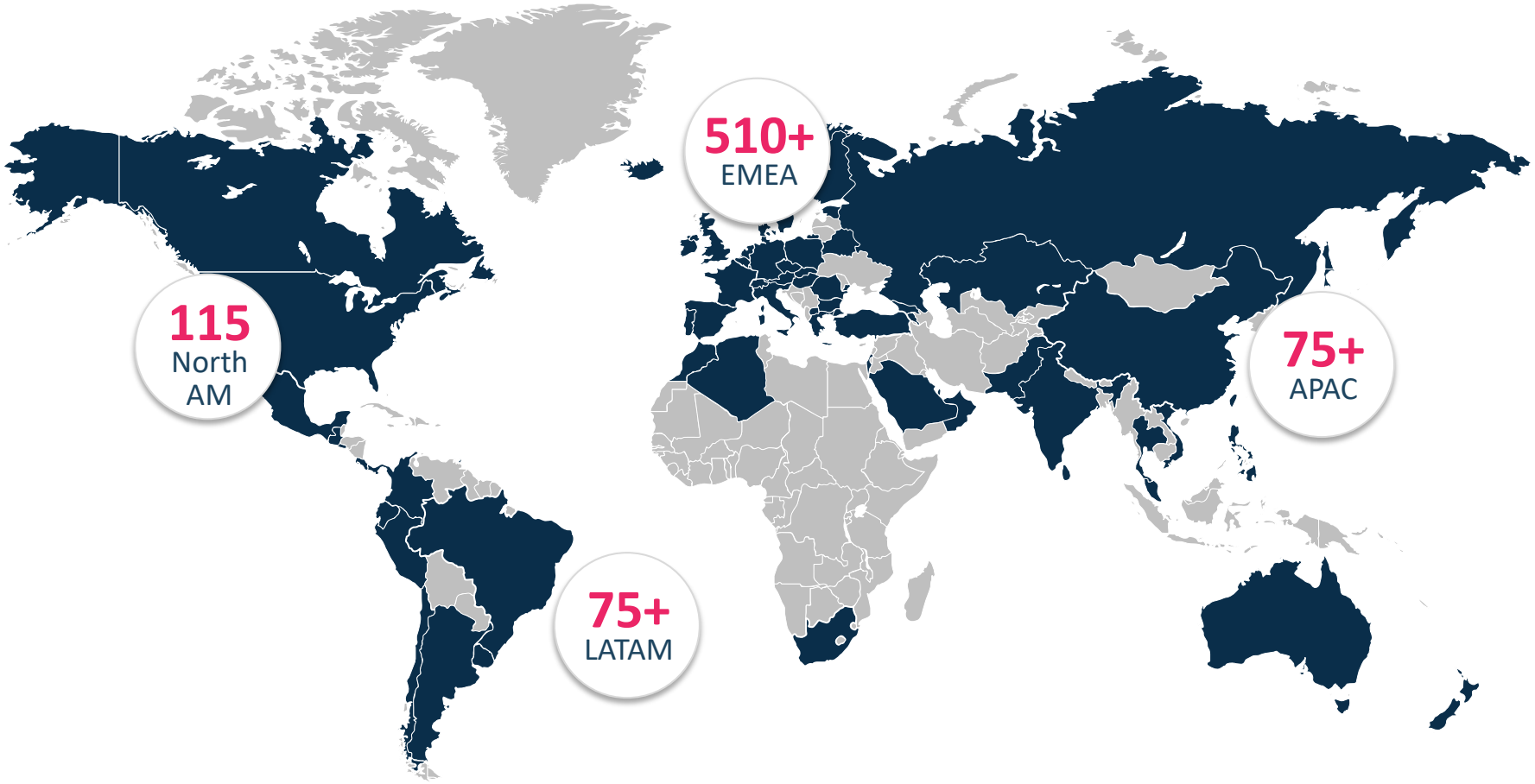
World's largest network of hospitals for clinical genomics

~780

INSTITUTIONS[1]

72

COUNTRIES[1]



1. As of June 30, 2021

SOPHiA Platform is Adaptable

To different and emerging clinically relevant data modalities

SOPHiA GENETICS™

SOPHiA Platform

- Technology Agnostic
- Machine Learning
- Pattern Recognition
- Predictive Models

Modalities Today

Genomics
NGS Data
(2014)

Radiomics
CT/MRI/PET Data
(2019)

Clinical Trials
BioPharma Data
(2019)

Clinical and EMR Data

Future Modalities

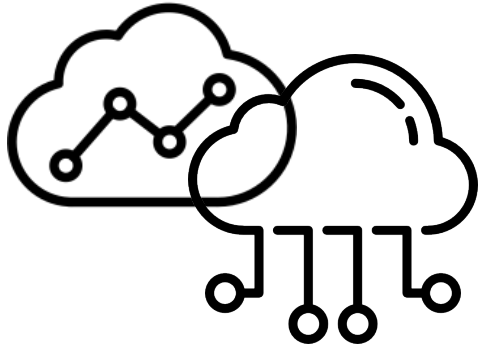
- Proteomics
- Digital Pathology
- Spatial Genomics
- Metabolomics

( ) = year launched

SOPHiA GENETICS™ + GE Healthcare

Our vision to generate novel multimodal insights through a global network of connected hospitals to drive better patient outcomes

A partnership intended to facilitate clinical trial precision and efficiency and make it easier and faster for clinicians to provide the integrated insights they need to stratify, treat and care for their patients more effectively



SOPHiA™

combined with

Powered By Edison

GE Healthcare

=

Cloud-Based Platform

Standardize, compute and analyze multimodal health data across hospitals and labs

Cloud & On-Prem Analytics

Advanced visualization of radiomic data and the versatility of the Edison platform

The Key Enabler

Precision health partnership enabling deeper insights and better patient outcomes

SOPHiA GENETICS™ + GE Healthcare

Collaboration Goals

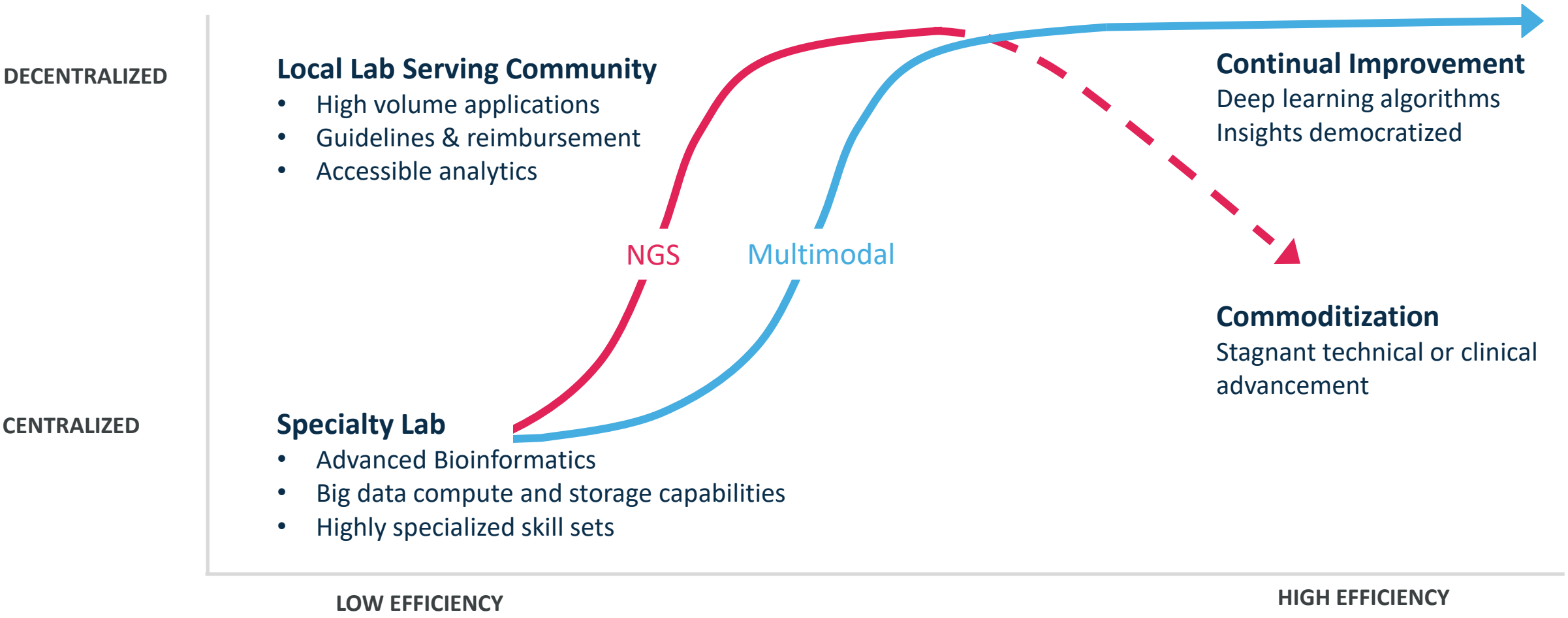
- Address the needs of **different stakeholders in both the clinical and biopharma segments**
- Build a **collective intelligence** through **knowledge sharing**
- Combine **multimodal data** across instruments and **across sites**
- Deploy **AI-powered analytics as CDx and CDS to standardize and analyze** multimodal health data
- Ensure **strict adherence to data privacy and information security** rules
- Establish a **global network of hospitals connected through the cloud** for knowledge building and app deployment

"The integration of genomics-based artificial intelligence into oncology workflow solutions would be a major breakthrough for integrated cancer medicine and for future clinical research, which increasingly depend on the ability to select those patients most likely to respond to new therapies"

Jan Makela
President & CEO, Imaging at GE Healthcare

Volume Expected to Drive Tipping Point from Centralized to Decentralized

SOPHiA Platform enables labs to serve community with advanced analytics



Current Applications Span the Oncology Continuum of Care

With opportunity to impact additional disease categories

	SCREENING	EARLY DETECTION	DIAGNOSIS	THERAPY SELECTION	MONITORING	CLINICAL TRIALS
GENOMICS **GERMLINE**	●		●	●		●
GENOMICS **SOMATIC**			●	●	●	●
RADIOMICS **SOMATIC**			●	●	●	●

Genomics impact in other categories offers significant opportunity

RARE DISEASE

CARDIOLOGY

NEUROLOGY

METABOLISM

SOPHiA Has a Unique Position in Healthcare Ecosystem

Allowing for broad partnerships

SOPHiA Cloud-Based Platform

Generates high quality data insights

SOPHiA GENETICS™

Upload raw digital health data

Genomics, Radiomics, Clinical trials data, Clinical data, EMR

Access anonymized statistical data insights

Hospital Labs BioPharma

SOPHiA Community

Patients benefit from better care through data-driven medicine

SOPHiA's Offerings Address an Underpenetrated

$35 billion market opportunity in 2020

Total Global Addressable Market
$35bn

By application	Clinical Market $21bn						Biopharma Market $14bn		
By disease area	Oncology $20.5bn					Rare Diseases $0.5bn	Oncology $14bn		
By segment	Screening	Early Detection	Diagnosis	Therapy Selection	Monitoring	Diagnosis	Clinical Trials	Insights & Awareness	CDx
Global	$7bn	$8bn	$2bn	$1bn	$2.5bn	$0.5bn	$4bn	$9bn	$1bn
U.S.	$2bn	$3.5bn	$0.5bn	$0.5bn	$1.2bn	$0.2bn	n.a.	$6.5bn	n.a.
Global (U.S.) patients	45mm (11mm) at risk of inherited cancer	147mm (50mm) ages 50-79	5mm (900k) newly diagnosed cancer patients	2mm (900k) metastatic patients	20mm (9mm) metastatic patients and survivors	3.3mm (900k) new-borns	400k enrolled in 4,000+ oncology clinical programs	1.4mm (900k) metastatic patients	n.a.

Established market | Emerging market

Over time, our platform could enable meaningful TAM expansion through new disease areas / modalities

SOPHiA GENETICS™

Source: U.S. Census, WHO, CDC, United Nations, Cancer.org, IARC, NCBI, ClinicalTrials.gov, JCO, McKinsey, Clarivate, GRAIL, Seer, Archer Dx and Guardant.

SOPHiA Platform Applications Currently in the Market

Clinical Applications

SOPHiA DDM™

Approximately ~330 applications for analyzing genomic data, empowering customers to build their own precision medicine operations

Alamut™

Stand-alone genomics analysis software that allows customers deeper and more informed genomic data interpretation

BioPharma Applications

SOPHiA Trial Match™

Place “molecular alerts” in SOPHiA platform to accelerate biomarker-defined patient enrollment into clinical trials

SOPHiA Insights™

Leverage SOPHiA platform dataset and multimodal AI analytics capabilities to generate insights pre- and post-approval of a drug

SOPHiA CDx™

Leverage SOPHiA’s capabilities to develop variant detection and identification algorithms to support companion diagnostics programs

SOPHiA Awareness™

Provide real-world insights on NGS testing to support BioPharma customers’ market-shaping and commercial strategies

ONCOLOGY • RARE DISEASE • CARDIOLOGY • NEUROLOGY • METABOLISM

Cutting Edge Technologies

Exceptional analytical performance

18 PATENTED TECHNOLOGIES

Leveraging 3 Core Proprietary Algorithmic Technologies

PEPPER™ — Accurate SNP and INDEL detection

MUSKAT™ — Superior CNV resolution

MOKA™ — Advanced variant annotation

	Somatic Oncology[1]	Germline Oncology[2]	Rare Diseases[3]	Cardiology[4]
SENSITIVITY	98.77%	100.00%	98.93%	100.00%
SPECIFICITY	100.00%	99.99%	99.99%	99.99%
ACCURACY	99.97%	99.99%	99.99%	99.99%
PRECISION	100.00%	99.86%	99.41%	99.62%

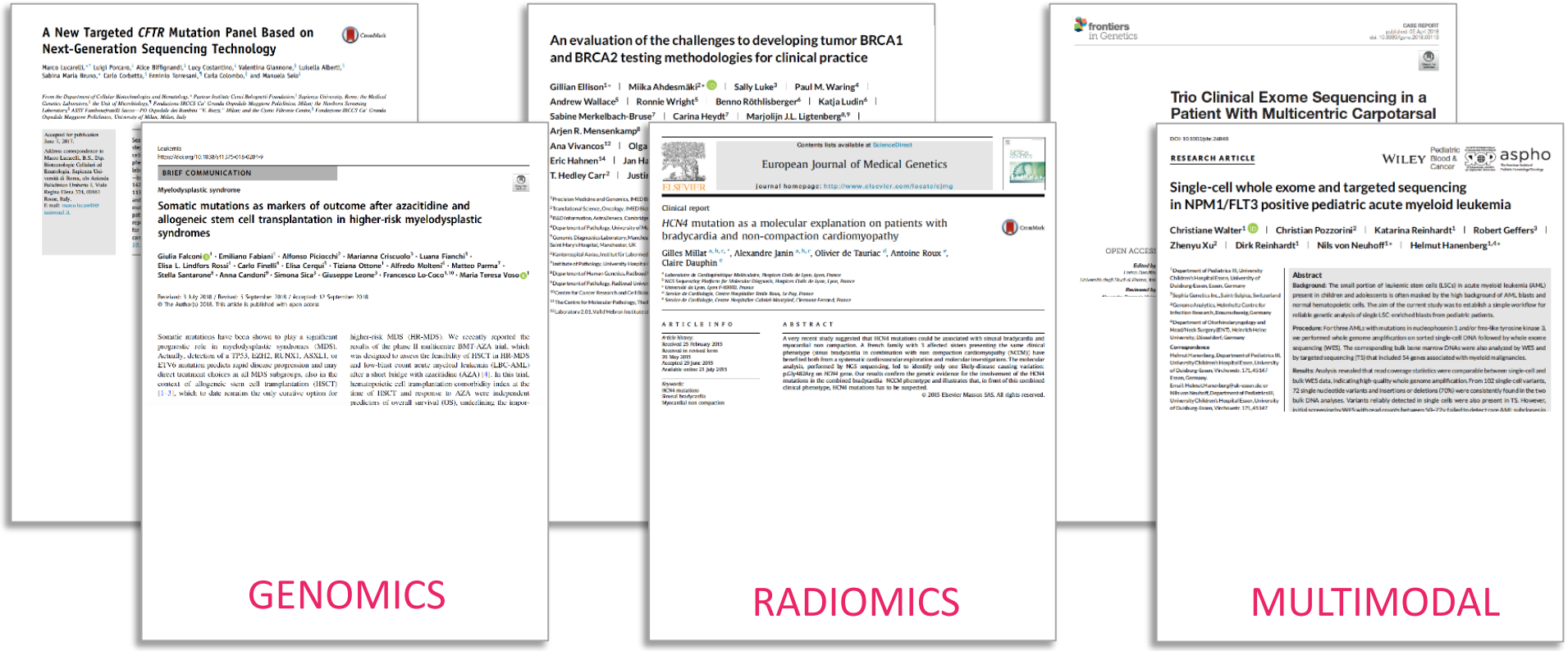
1. Results of the CE-IVD study based on our Solid Tumor Solution (STS) that included data from 6 different sequencing centers and a total of 155 clinical and commercial FFPE samples in which 192 confirmed variants were used as the standard.
2. Results of the CE-IVD study based on our Hereditary Cancer Solution (HCS) that included data from 7 different sequencing centers and a total of 159 clinical and commercial samples in which 1252 confirmed variants were used as the standard.
3. Results based on the clinical exome analysis of the Ashkenazim trio (mother, father and son's DNA) from the Genome In a Bottle consortium that included data from 2 different sequencing centers and a total of 9 samples (including replicates) in which an average of 6241.2 confirmed variants per sample were used as the standard.
4. Results based on two similar studies that included data from 2 different sequencing centers and a total of 113 clinical and commercial samples in which 833 confirmed variants were used as the standard.

Robust Body of Evidence

Improving life science research

250+

PEER REVEREWED PUBLICATIONS[1]



1. As of June 30, 2021

Multimodal Approach to Non-Small Cell Lung Cancer

Predicting response to immunotherapy

CONTEXT

POPULATION STUDY

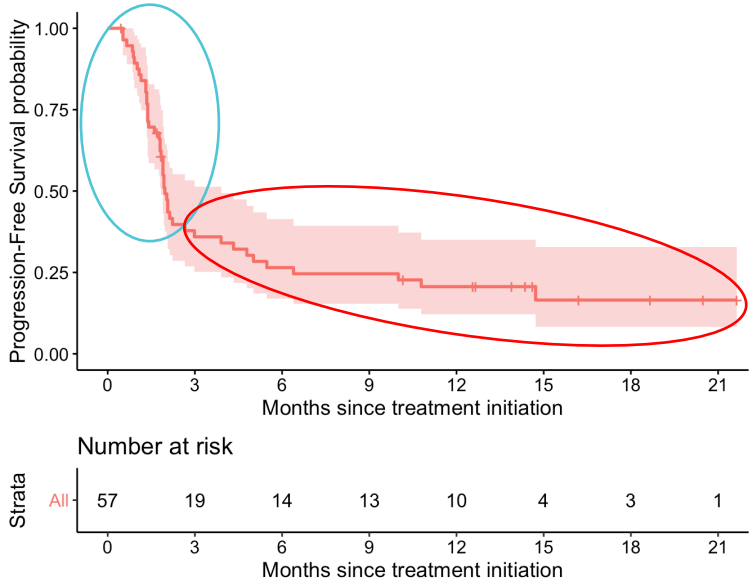
- Retrospective analysis of 57 patients treated for NSCLC using nivolumab in R/R setting
- 3+ previous lines of therapy

OBJECTIVE

Identify predictive markers of IO response based on multiple sources of data (clinical, genomics, biological and imaging) through machine learning analysis

For Research Use Only. Not for Diagnostic Procedures

Two groups of patients - fast relapse and slow relapse



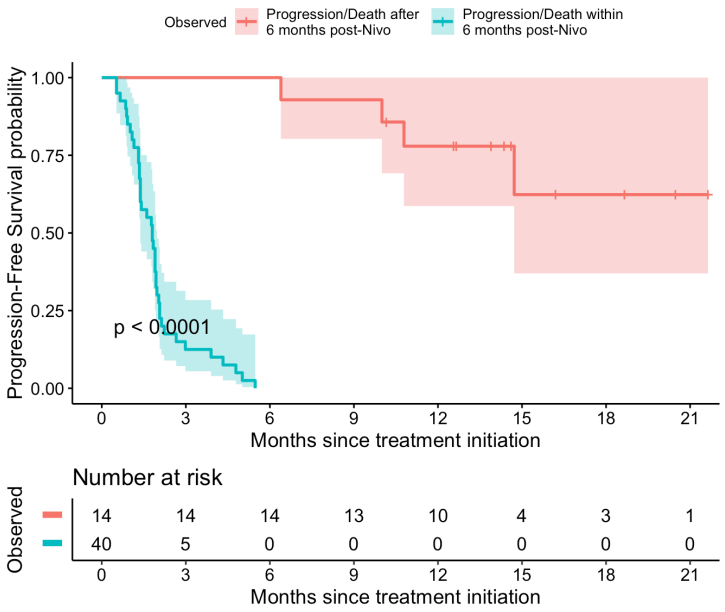
PFS Kaplan-Meier curves show there are two groups of patients responding to the IO therapy

Machine Learning Models Predict Response

Using baseline data and can help identify markets that are predictive of response

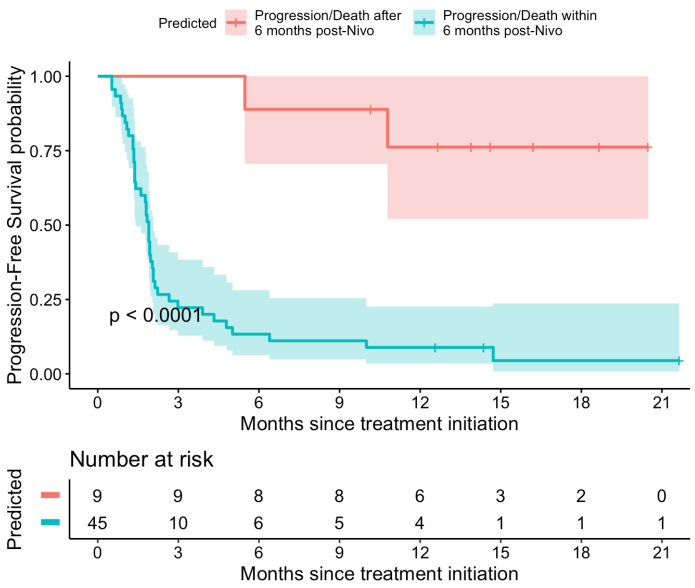
PFS Curves Observed

Stratification with respect to PFS>6 months



PFS Curves Predicted

Applying algorithm on multimodal data available at diagnosis



Progression at First Evaluation:

(6 patients excluded because of missing data)

- **Sensitivity: 27/32 (84%)**
  (27 progressions well predicted)
- **Specificity: 13/19 (68%)**
  (13 partial responses well predicted)

PFS <> 6 Months:

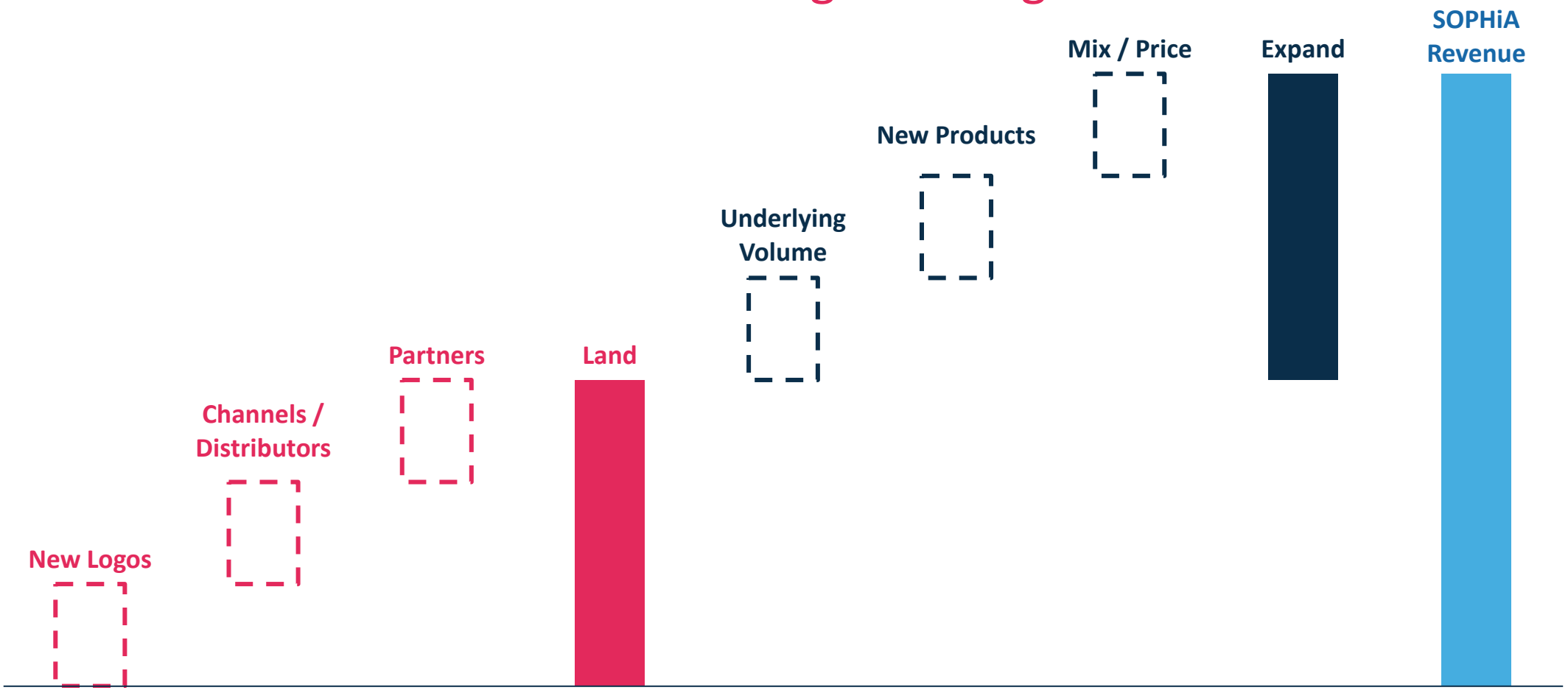
(3 patients excluded because of missing data)

- **Sensitivity: 39/40 (98%)**
  (39 PFS < 6 months well predicted)
- **Specificity: 8/14 (57%)**
  (8 PFS > 6 months well predicted)

Confirming results in a large-scale real-world observational study recruiting 4,000 patients in 1L NSCLC

Our Land and Expand Revenue Build

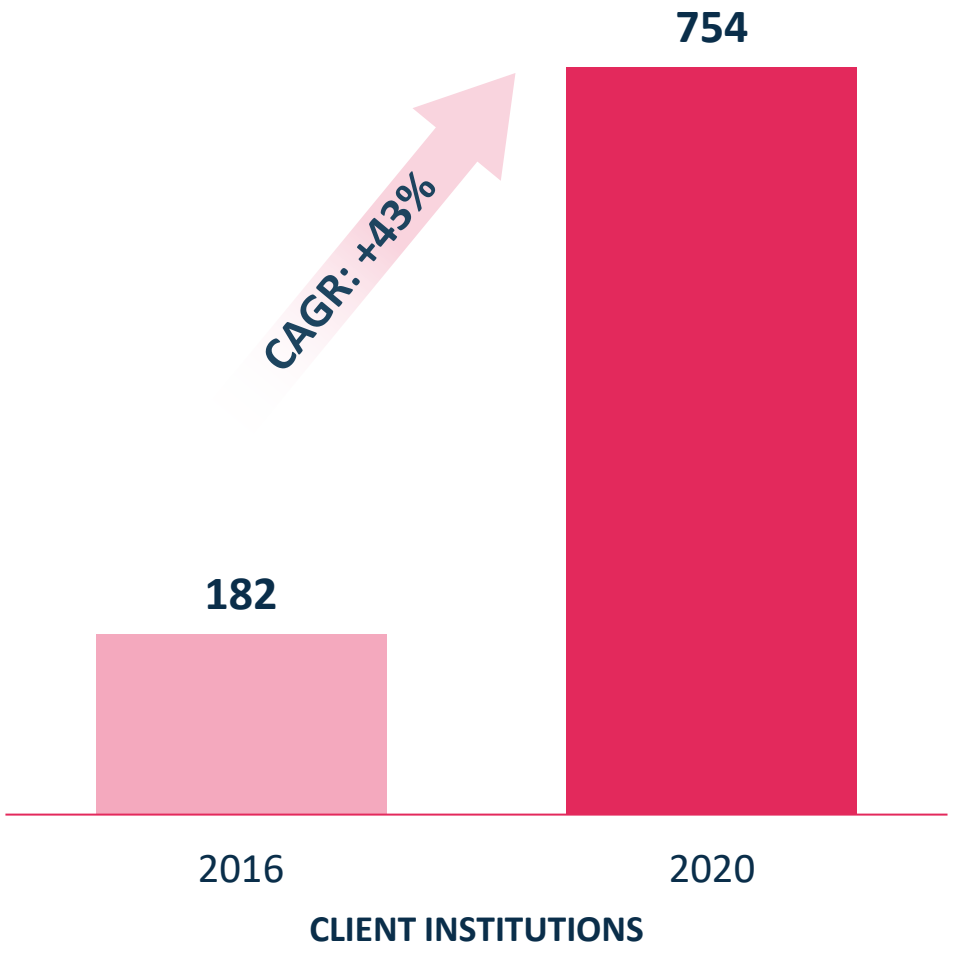
Is a hallmark of our growth algorithm

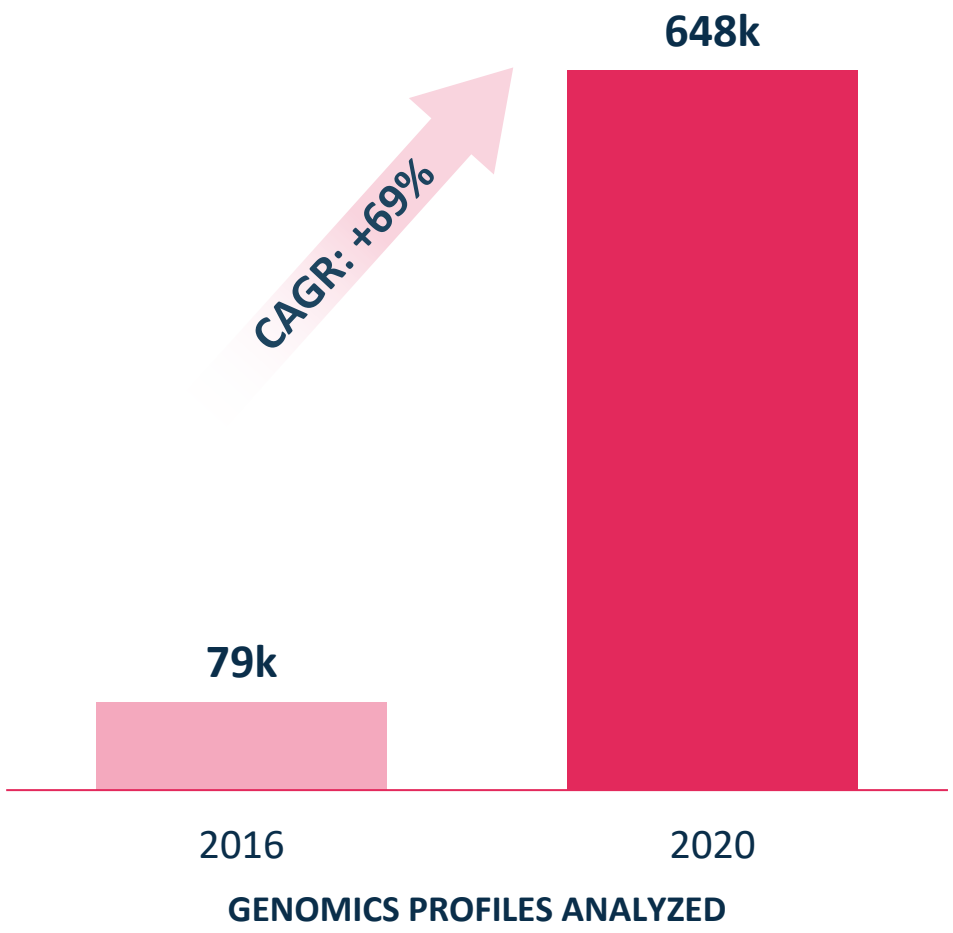


SOPHiA's steady growth is fueled by a balanced mix of drivers, de-risking reliance on a singular strategy

A Leading Position

By number of client institutions and genomics profiles analyzed





Steady Expansion

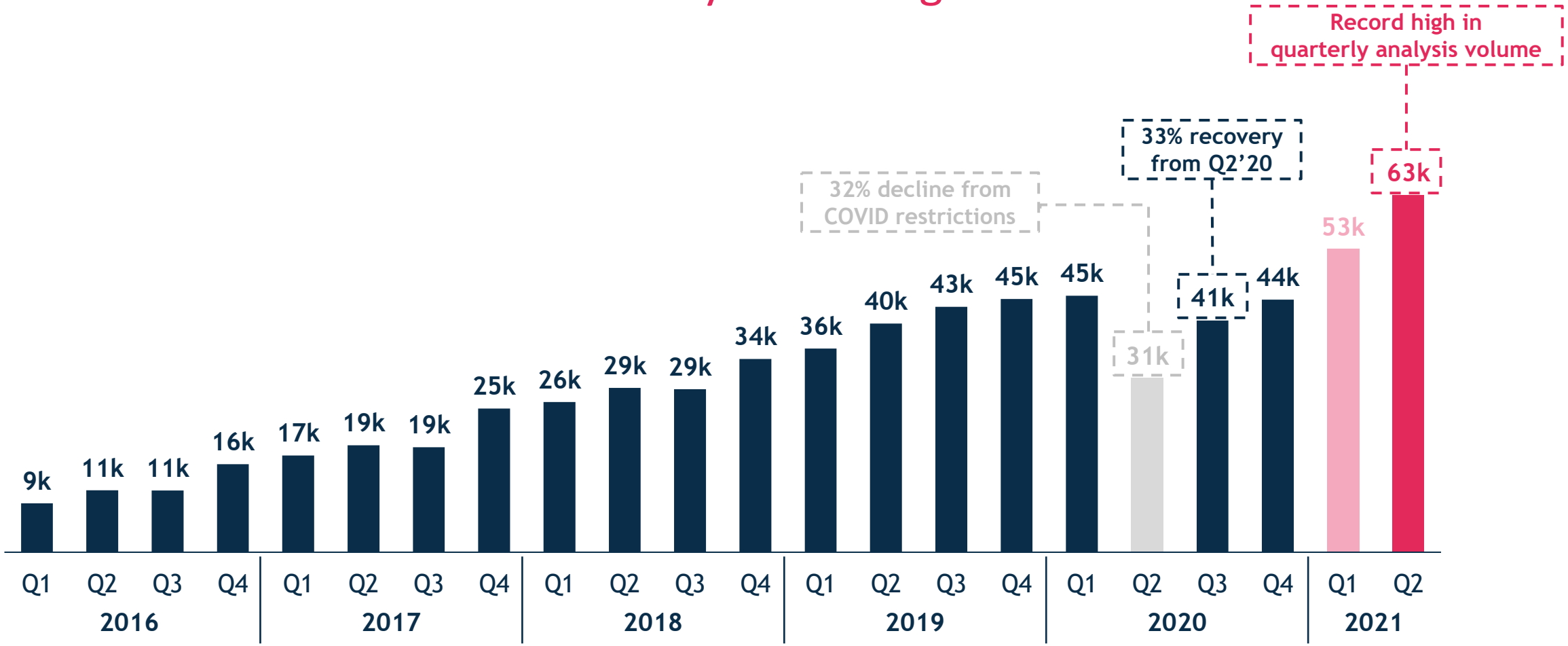
Fueled by balanced volume growth + NPI + price/mix

Platform Analysis Volume by Cohort						
Cohort	Year 1	Year 2	Year 3	Year 4	Year 5	CAGR
2015	29,586 *100%*	36,473 *123%*	47,926 *162%*	55,874 *189%*	56,921 *192%*	18%
2016	23,291 *100%*	25,205 *108%*	29,864 *128%*	33,499 *144%*		13%
2017	22,924 *100%*	28,689 *125%*	33,626 *147%*			21%
2018	19,602 *100%*	24,322 *124%*				24%
2019	20,476 *100%*					NA

Our customers are assigned to a particular cohort based on the year in which they first accessed our SOPHiA platform through the dry lab or bundle access model. We track and aggregate analysis volume generated through our platform grouped by customer cohorts in 12-month intervals from the respective customer onboard date. "Customer" refers to any customer who accesses our SOPHiA platform through the dry lab and bundle access models. We exclude from this definition any customers accessing our SOPHiA platform using the integrated business model because they tend to use our platform in an ad hoc manner compared to our dry lab and bundle access customers who typically do so in a recurring fashion, generate an immaterial portion of our revenue and analysis volume and constitute a small part of our customer base. We also exclude from this definition customers who only use Alamut through our SOPHiA platform.

Platform Analysis Volume Growth

Has been steadily increasing ex-COVID



Analysis volumes fully recovered from COVID shock by YE 2020 and resumed healthy expansion in 1H'21

Note: Includes chargeable dry lab and bundle access analyses.

Real-Time Visibility

Into the healthcare ecosystem

Illustrative SOPHiA Dashboard

From 2021-03-01

To 2021-03-31

LOAD >

22,189 Patients

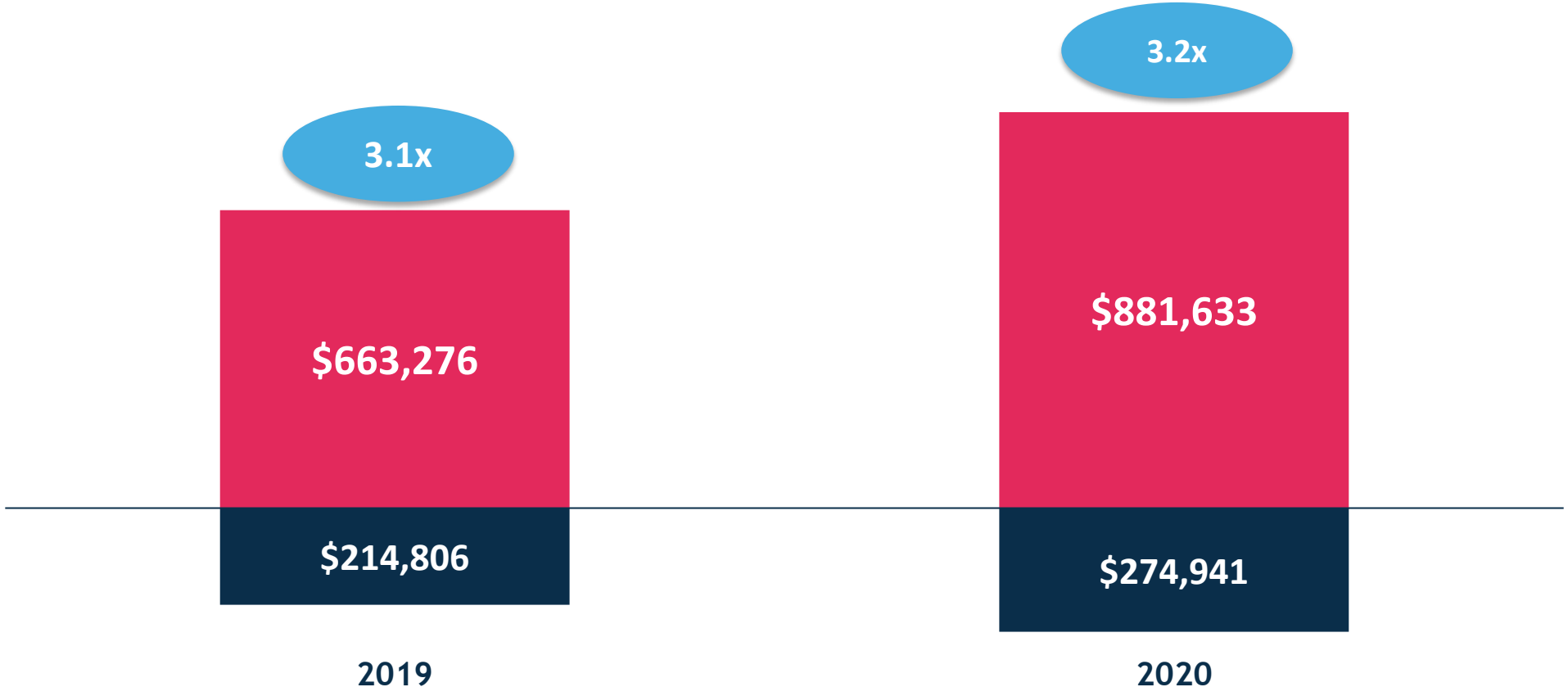
24,313 Analyses

Current Month

- Client
- Product
- Product Owner
- Germline & Somatic
- Contract Type
- Territory Manager
- Opportunity Owner
- Solution Type
- Billing Country

Top Account	Institution	City	Country	Access Mode	Clinical Application
✓	Comprehensive Cancer Center	Not Disclosed	USA	Bundle	Somatic liquid tumors
✓	Central Laboratory	Not Disclosed	Brazil	Bundle	Hereditary cancers
✓	Central Laboratory	Not Disclosed	Brazil	Dry lab	Somatic solid tumors
✓	Central Laboratory	Not Disclosed	Brazil	Bundle	Clinical exome
✓	Academic Hospital	Not Disclosed	USA	Bundle	Somatic solid tumors
✗	University Hospital	Not Disclosed	France	Bundle	Cardiology
✓	Centre de Lutte Contre le Cancer (CLCC)	Not Disclosed	France	Dry lab	Somatic solid tumors
✓	Academic Hospital	Not Disclosed	Spain	Bundle	Somatic solid tumors
✓	University Hospital	Not Disclosed	Australia	Dry lab	Whole exome

Scalable Business Model



3x+ LTV / CAC ratio highlights ability to layer attractive annuity streams with strong returns

Lifetime Value (LTV) | Customer Acquisition Cost (CAC) | LTV / CAC

Historical Financial Performance

$ millions	2019	2020	Q2 2021	1H 2021
Revenue *(Y-O-Y Growth)*	$25.4 --	$28.4 *12%*	$10.2 *72%*	$19.2 *43%*
Gross Profit *(Gross Margin)*	$17.8 *(70%)*	$17.7 (1) *(62%)*	$6.2 *(61%)*	$11.8 *(62%)*
Adj. Gross Profit (2) *(Adj. Gross Margin)*	--	--	$6.3 *(62%)*	$12.0 *(63%)*
Operating Loss	($32.3)	($37.4)	($15.9)	($30.0)
Adjusted Operating Loss (3)	--	--	($14.3)	($27.0)
Net Cash Used in Operating Activities	($31.7)	($31.7)	($16.2)	($26.3)

Despite COVID headwinds, SOPHiA exhibited growth in 2020, and 2021 is on track to be a record year

Notes:
(1) Includes the impact of a one-time write-off of inventory associated with the loss of a key customer.
(2) Adjusted gross profit excludes the amortization of capitalized research and development expenses. Adjusted gross profit and adjusted gross margin are non-IFRS measures. For reconciliation of IFRS measures, see Appendix.
(3) Adjusted operating loss excludes the adjustments made to calculate adjusted gross profit, amortization of intangible assets, share-based compensation expense, non-cash portion of pension expenses paid in excess of actual contributions to match the actuarial expense, and non-recurring expenses related to the IPO. Adjusted operating loss is a non-IFRS measure. For reconciliation of IFRS measures, see Appendix.

Industry-Leading Experts

Jurgi Camblong
CEO - Founder
SOPHiA GENETICS™

Bram Goorden
Chief Operating Officer
FOUNDATION MEDICINE®
Lilly

Ross Muken
Chief Financial Officer
Click Therapeutics
EVERCORE

Lara Hashimoto
Chief Business Officer
Roche

Melissa Finocchio
SVP Regulatory /Quality
BIOMÉRIEUX

Philippe Menu
Chief Medical Officer
McKinsey &Company

Zhenyu Xu
Chief Scientific Officer
SOPHiA GENETICS™

Daan Van Well
General Counsel
pwc
Ahold Delhaize

Manuela Valente
Chief People Officer
IQVIA
Medtronic

Board of Directors

Jurgi Camblong	Troy Cox	Tomer Berkovitz	Kathy Hibbs	Didier Hirsch	Vincent Ossipow	Milton Silva-Craig
CEO – Founder	Chairman of the Board	Director	Director	Director	Director	Director
SOPHiA GENETICS™	FOUNDATION MEDICINE	aMoon ACCELERATING CURE	23andMe	Agilent	OMEGA FUNDS	QCentrix

- Over 460 employees across 27 countries
- 45% of employees in R&D
- 30% of employees have PhDs

Note: As of June 30, 2021.

SOPHiA Platform

Bringing value to patients

+ Network

One of the largest global network of connected hospitals with over **780 institutions** connected across **72 countries**

+ Technology

Accuracy recognized and **valued** by customers who pay on a per usage basis

+ Scalability

50 terabytes of data generated per month for genomics, radiomics and multimodal data across a broad range of disease areas

Appendix

Reconciliation of IFRS to Adjusted Gross Profit and Gross Profit Margin (Amounts in USD thousands, except percentages)

	Three months ended June 30,		Six months ended June 30,	
	2021	2020	2021	2020
Revenue	**$ 10,178**	**$ 5,916**	**$ 19,154**	**$ 13,397**
Cost of revenue	(3,948)	(1,950)	(7,307)	(4,863)
Gross profit	**6,230**	**3,966**	**11,847**	**8,534**
Amortization of capitalized research and development expenses [1]	109	—	177	—
Adjusted Gross Profit	**$ 6,339**	**$ 3,966**	**$ 12,024**	**$ 8,534**
Gross profit margin	**61%**	**67%**	**62%**	**64%**
Amortization of capitalized research and development expenses [1]	1%	—	1%	—
Adjusted gross profit margin	**62%**	**67%**	**63%**	**64%**

Note:
(1) Amortization of capitalized research and development expenses consists of software development costs amortized using the straight-line method over an estimated life of five years. These expenses do not have a cash impact but remain a recurring expense generated over the course of our research and development initiatives.

Reconciliation of IFRS to Adjusted Operating Loss (Amounts in USD thousands)

	Three months ended June 30,		Six months ended June 30,	
	2021	2020	2021	2020
Operating loss	**$ (15,924)**	**$ (7,040)**	**$ (29,978)**	**$ (16,669)**
Amortization of capitalized research and development costs (1)	109	—	177	—
Amortization of intangible assets (2)	161	142	313	263
Share-based compensation expense (3)	1,197	314	1,836	584
Non-cash pension expense (4)	158	204	335	428
Non-recurring IPO-related expenses (5)	—	—	323	—
Adjusted operating loss	**$ (14,299)**	**$ (6,380)**	**$ (26,994)**	**$ (15,394)**

Notes:

(1) Amortization of capitalized research and development expenses consists of software development costs amortized using the straight-line method over an estimated life of five years. These expenses do not have a cash impact but remain a recurring expense generated over the course of our research and development initiatives.

(2) Amortization of intangible assets consists of costs related to intangible assets amortized over the course of their useful lives. These expenses do not have a cash impact but we could continue to generate such expenses through future capital investments.

(3) Share-based compensation expense represents the cost of equity awards issued to our directors, officers, and employees. The fair value of awards is computed at the time the award is granted and is recognized over the vesting period of the award by a charge to the income statement and a corresponding increase in other reserves within equity. These expenses do not have a cash impact but remain a recurring expense for our business and represent an important part of our overall compensation strategy.

(4) Non-cash pension expense consists of the amount recognized in excess of actual contributions made to our defined pension plans to match actuarial expenses calculated for IFRS purposes. The difference represents a non-cash expense but remain a recurring expense for our business as we continue to make contributions to our plans for the foreseeable future.

(5) Non-recurring IPO-related expenses represent expenses incurred for our initial public offering that were not capitalized and are not expected to be recurring during the ordinary course of our business.

SOPHiA GENETICS™