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Investor Presentation J.P. Morgan Healthcare Conference

January 2022

Disclaimer

This presentation contains forward-looking statements under the meaning of the Private Securities Litigation Reform Act of 1995. Forward-looking statements are statements that do not relate to historical facts and events and such statements and opinions pertaining to the future that, for example, contain wording such as "may," "might," "wuill," "could," "expect," "intend," "plan," "objective," "anticipate," "believe," "estimate," "predict," "potential," "continue," "ongoing," or the negative of these terms, or other comparable terminology intended to identify statements about the future. Forward-looking statements contained in this presentation include, but are not limited to, statements about: our estimates of our volumes and revenue for the fourth quarter and full year of fiscal year 2021, our addressable market, market growth, future revenue, key performance indicators, expenses, capital requirements and our needs for additional financing, our commercial launch plans, our strategic plans for our business and products, market acceptance of our products, our competitive position and developments and projections relating to our competitors, domestic and foreign regulatory approvals, third-party manufacturers and suppliers, our intellectual property, the potential effects of government regulation and local, regional and national and international economic conditions and events affecting our business. We cannot assure that the forward-looking statements in this presentation will prove to be accurate. Furthermore, if our forward-looking statements prove to be inaccurate, the inaccuracy may be material. These statements involve known and unknown risks, uncertainties and other important factors that may cause our actual results, levels of activity, performance or achievements to be materially different from the information expressed or implied by these forward-looking statements.

The forward-looking statements and opinions contained in this presentation are based on our management's beliefs and assumptions and are based upon information currently available to our management as of the date of this presentation and, while we believe such information forms a reasonable basis for such statements, such information may be limited or incomplete, and our statements should not be read to indicate that we have conducted an exhaustive inquiry into, or review of, all potentially available relevant information. In light of the significant uncertainties in these forward-looking statements, you should not regard these statements as a representation or warranty by us or any other person that we will achieve our objectives and plans in any specified time frame, or at all. Actual results, performance or events may differ materially from those in such statements due to, without limitation, risks generally associated with product development, including delays or challenges that may arise in the development, launch or scaling of our new products, programs or services, challenges in the commercialization of our products and services, the risk that we may not maintain our existing relationships with suppliers or enter into new ones, or that we will not realize the intended benefits from such relationships, any inability to protect our intellectual property effectively, changes in general economic conditions, in particular economic conditions in the markets on which we operate, changes affecting interest rate levels, changes affecting interest rate levels, changes in laws and regulations. The information, opinions and forward-looking statements contained in this announcement speak only as of its date, and are subject to change without notice.

Use of Non-GAAP Financial Measures

This presentation includes non-GAAP financial measures, including Adjusted EBITDA, Adjusted Gross Profit and Adjusted Gross Margin. Adjusted EBITDA is defined as net loss adjusted for interest (income) expense, net, other (income) expense, net, provision for (benefit from) income taxes, gain on extinguishment of debt, depreciation and amortization and stock-based compensation expenses, and COVID-19 costs. Management believes that these non-GAAP measures of financial results are useful in evaluating the Sema4's operating performance compared to that of other companies in its industry, as this metric generally eliminates the effects of certain items that may vary from company to company for reasons unrelated to overall operating performance. Please refer to the Appendix for Non-GAAP to GAAP Reconciliation.

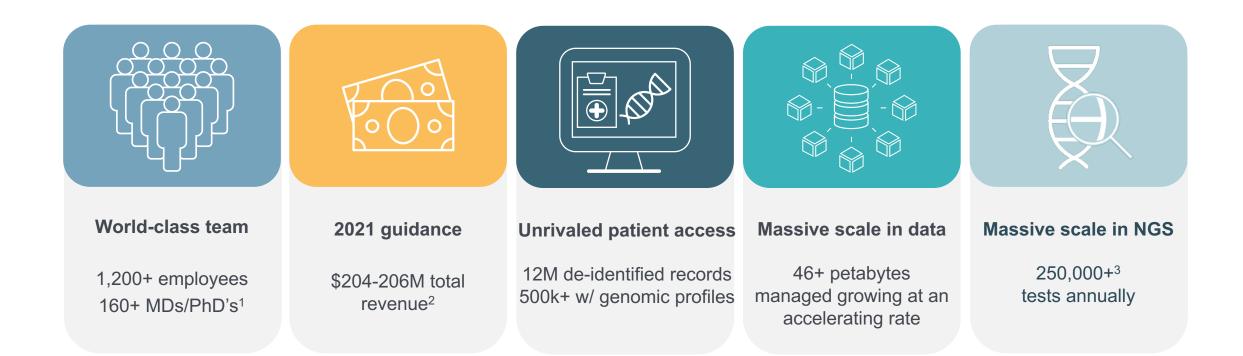
This presentation contains estimates, projections and other information concerning our industry, our business, and the markets for our products and services. Information that is based on estimates, forecasts, projections, market research or similar methodologies is inherently subject to uncertainties, and actual events or circumstances may differ materially from events and circumstances that are assumed in this information. Unless otherwise expressly stated, we obtained this industry, business, market and other data from our own internal estimates and research as well as from reports, research surveys, studies and similar data prepared by market research firms and other third parties, industry, medical and general publications, government data and similar sources. While we believe our internal company research as to such matters is reliable and the market definitions are appropriate, neither such research nor these definitions have been verified by any independent source.

We discuss these and other risks and uncertainties in greater detail in the sections entitled "Risk Factors" and "Management's Discussion and Analysis of Financial Condition and Results of Operations" in our periodic reports and other filings we make with the SEC from time to time. Given these uncertainties, you should not place undue reliance on the forward-looking statements. Moreover, we operate in a very competitive and rapidly changing environment. New risks emerge from time to time. Except as required by law, we undertake no obligation to update publicly any forward-looking statements for any reason after the date of this presentation to conform these statements to actual results or to changes in our expectations. We file reports, proxy statements, and other information with the SEC. Such reports, proxy statements, and other information concerning us is available at http://www.sec.gov. Requests for copies of such documents should be directed to our Investor Relations department at Sema4 Holdings Corp. 333 Ludlow Street, North Tower, 8th Floor, Stamford, CT 06902. Our telephone number is 800-298-6470



A Patient-Centered Health Intelligence Company Leveraging Genomics and Al

Corporate Snapshot



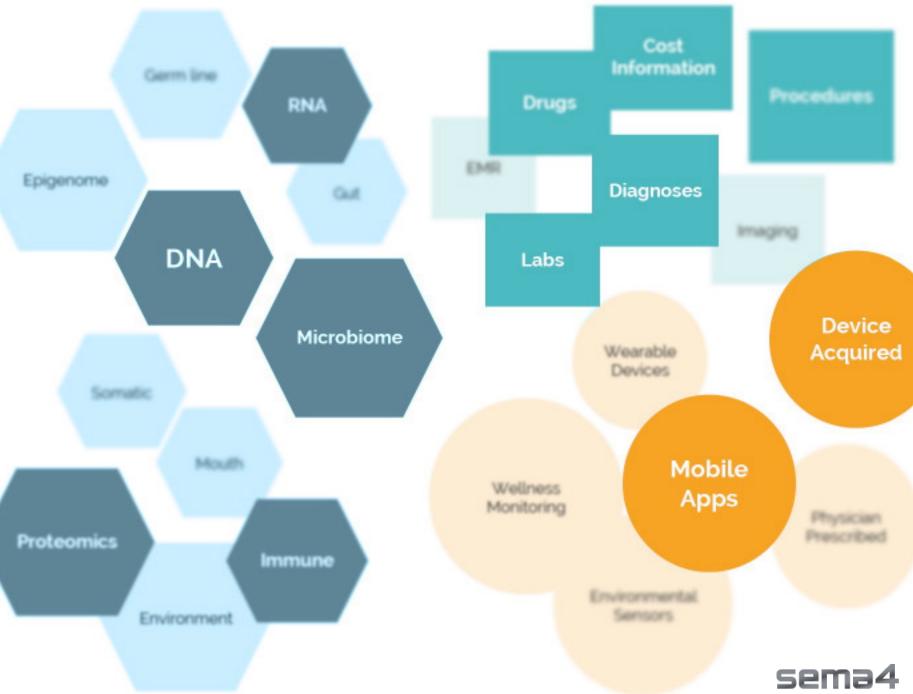
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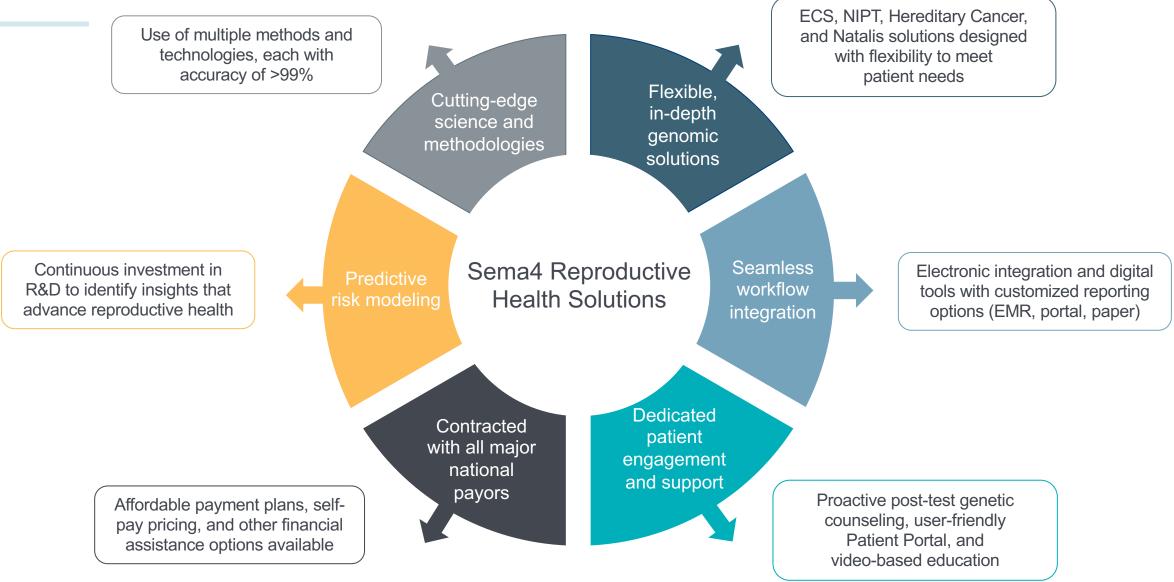


The Problem

on patients



Our Solution: A Holistic Approach to Patient Care...



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...Combined with Centrellis, our Flywheel for Patient Data and Insights

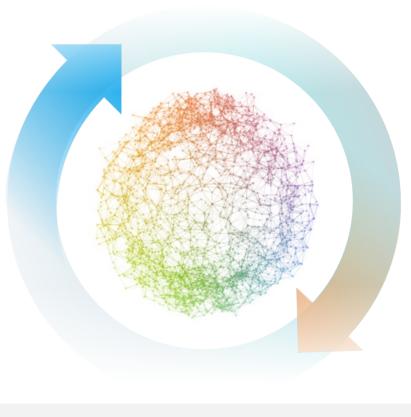
Enhanced Data Feed

Channels

Health Systems EMR, Imaging, Molecular, Claims

Third Parties EMR, Imaging, Molecular, Claims

Outside Data Source Literature, Knowledge Graph, Omics Repositories



Insights & Engagement

Clinical Trials Clinical Decision Support Population Health Models Patients & Provider Portals Real-World Evidence Drug Discovery Models

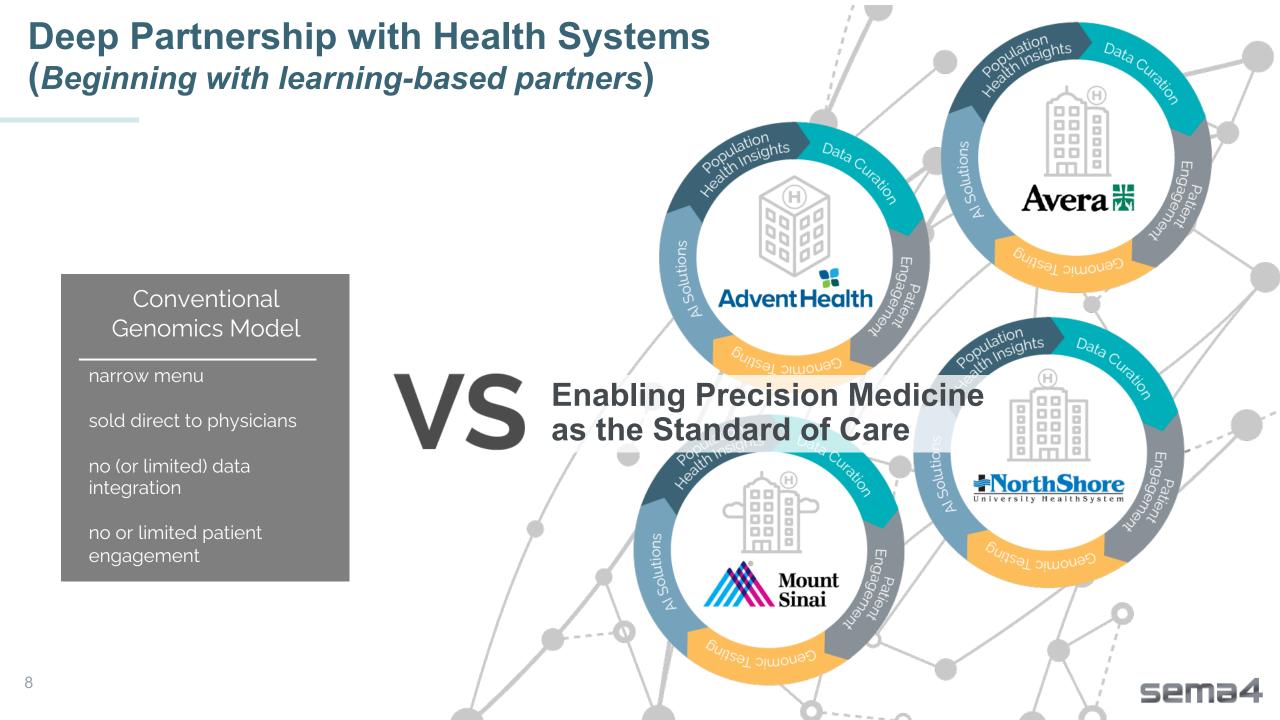


Standard Dx Pathway

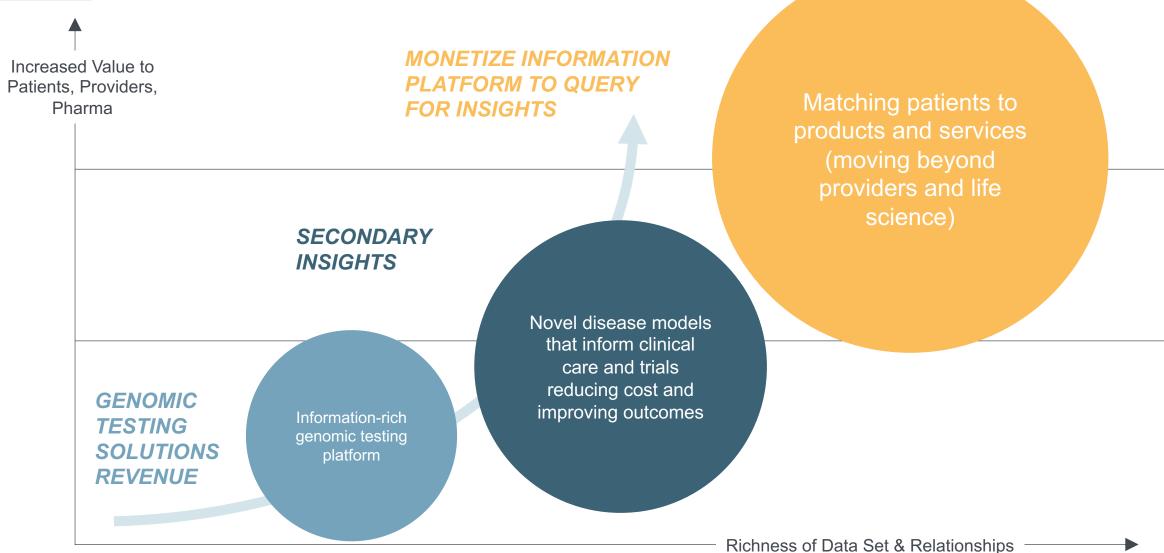
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Clinical Reports



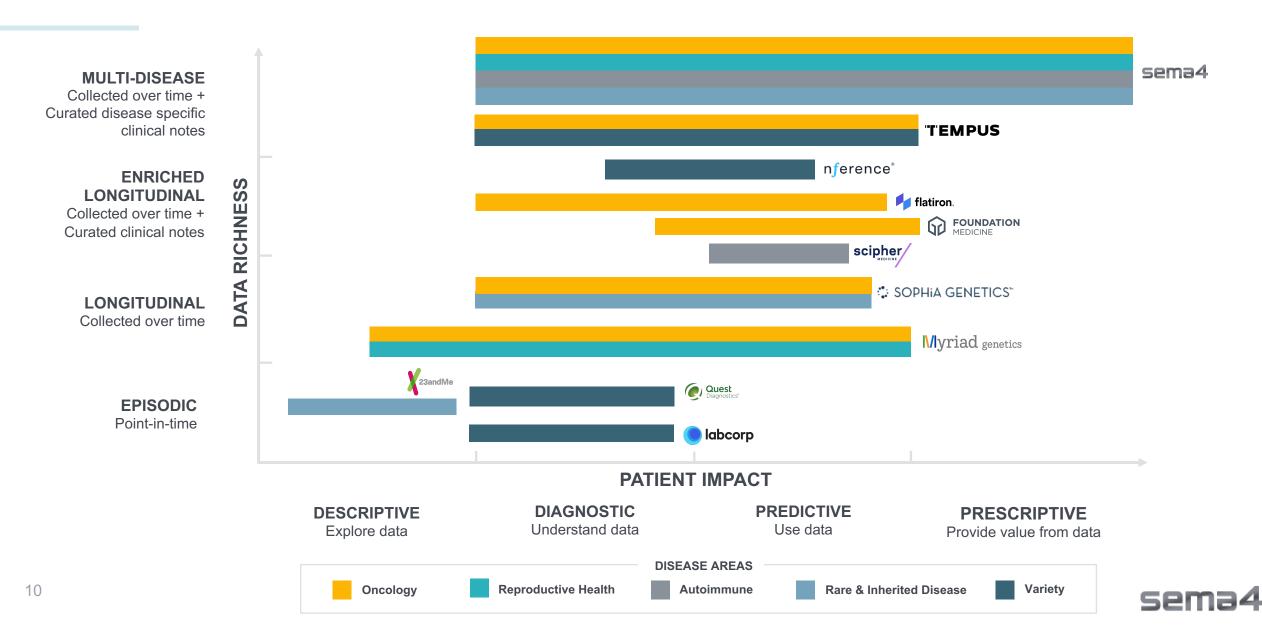


Evolution Towards a *Platform of Algorithms*

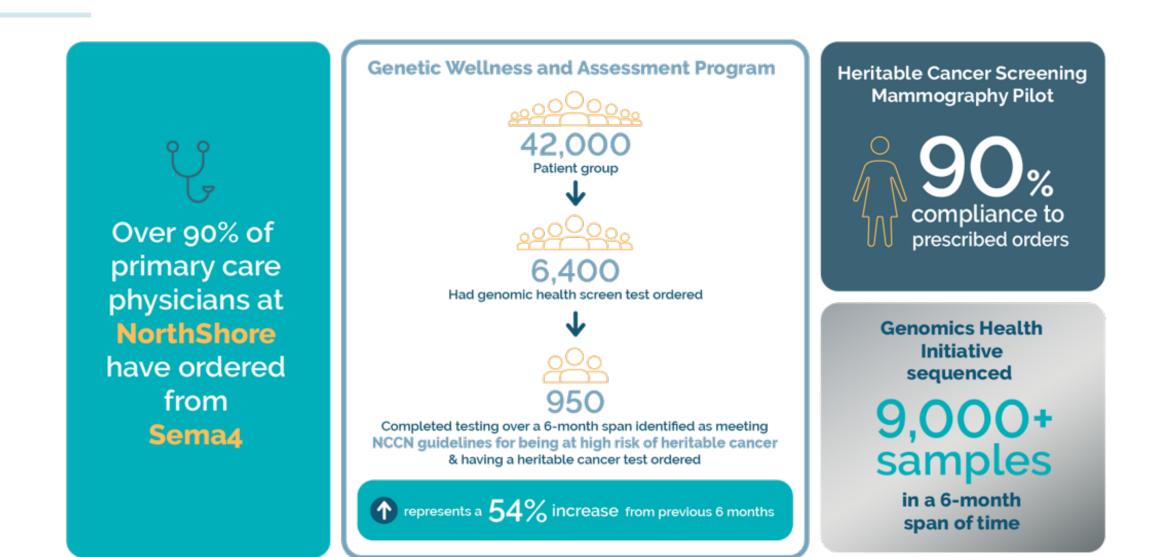


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The Value of Data: Must be Longitudinal and Prescriptive



NorthShore: The First Six Months





Enabling Biopharma Partners and Customers

SEMA4 OFFERING Clinical trial matching	SaaS-based lic	ensing	Deep Partnerships leveraging data science			
LEAD IDENTIFICATION Drive increased probability of success and terminate bad molecules sooner	EARLY CLINICAL Reduce trial duration, minimize dose finding / escalation, better patient selectivity	Maximize tri reduce time	OPTIMIZATION al opportunity, to market, and arket access	REAL WORLD DATA Characterize patient journeys and diagnostic odysseys		

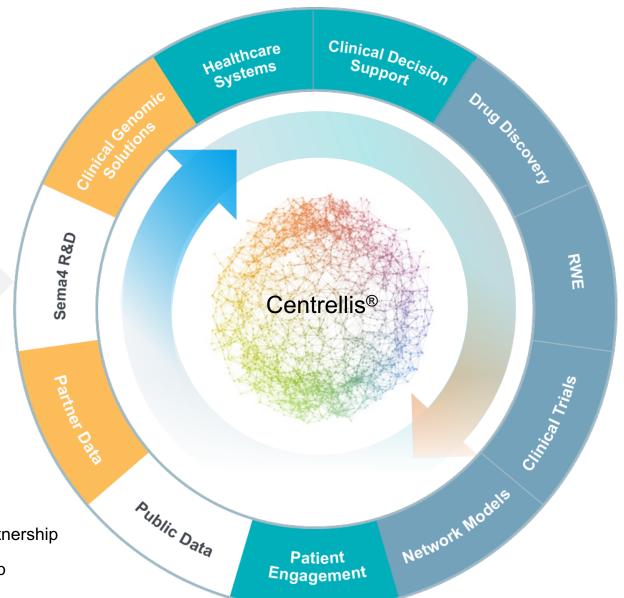
Research	Preclinical		Phase II	Phase III	Phase IV / RWE	
DISCOVERY	DEVELOPMENT					



Health System Partnerships Helping Accelerate Biopharma Partnerships



Health System Dominant Partnership Pharma Dominant Partnership HS-Pharm Synergistic Partnership





Molecular Profiling and Real-World Evidence

Merus Patient Id and Recruitment

> SANOFI Drug Discovery Collaboration

Janssen

Clinical Trial Match and Recruitment into Trials w/Health System Partners

Lilly

Precision Medicine Drug Screening Collaboration



4Q Update: Strong Close to 2021¹

4Q Resulted Volume

Will exceed 80,000 tests excluding COVID-19

Guidance was 73,000 - 79,000²

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4Q Total Revenue

Expects total revenues in the range of \$50-52 million

Guidance was \$46.6 - 49.6 million²

4Q Balance Sheet

~\$400 million in Cash & Cash Equivalents as of 12/31/21

¹ Our estimates of our fourth quarter 2021 revenue, resulted volume and our cash and cash equivalents as of December 31, 2021 are subject to revision, which could be material, as we complete the preparation of our 2021 year-end financial statements (including all required disclosures) and as we complete our 2021 year-end audit. See Disclaimer on slide 2. ² 4Q guidance implied from FY2021 guidance provided on 11/15/21



Operational Improvements: Key Highlights and Future Focus



Key Actions

- Hired seasoned SVP Lab Operations
- Key investments in Lab Automation

Areas of Focus in 2022

- Improve turn-around-times
- Portfolio optimization



Key Actions

 Increased salesforce headcount by 84% in 2021

Areas of Focus in 2022

- New products open additional channel opportunities
- Health system entry points drive growth in oncology



Key Actions

- Hired Chief Data & Chief Science Officers
- Announced hiring of Chief Medical Science Officer
- Submitted the Centrellis HITRUST validated assessment to HITRUST for final CSF certification in 2021

Areas of Focus in 2022

 C-Suite Focus shift to Pharma Development & Data Monetization



Capital Allocation

Significant Capital Resources to Drive Long Term Strategy

\$400M Cash & Cash Equivalents \$125M Revolver, undrawn¹

Acquisition Criteria Include

Enhance Our Reach into Health Systems Enhance Our Data Capabilities

Commercial Revenue

¹ Our estimates of our fourth quarter 2021 cash and cash equivalents as of December 31, 2021 are subject to revision, which could be material, as we complete the preparation of our 2021 year-end financial statements (including all required disclosures) and as we complete our 2021 year-end audit. See Disclaimer on slide 2







Historical COVID Revenue Mix

% of Total Revenue¹

	1Q20	2Q20	3Q20	FY20	1Q21	2Q21	3Q21
Diagnostic Test	99%	93%	84%	79%	73%	87%	86%
COVID	0%	6%	14%	18%	25%	8%	10%
Other	1%	1%	2%	2%	2%	4%	4%



Non-GAAP Gross Margin Reconciliation

USD Millions

		FY2020			FY2021			
	1Q	2Q	3Q	FY	1Q	2Q	3Q	
Revenue	46.7	30.1	38.6	179.3	64.4	46.9	43.2	
Cost of Service	39.3	36.0	36.5	184.6	71.8	49.7	58.8	
Gross (Loss) Profit	7.4	(5.9)	2.1	(5.3)	(7.4)	(2.8)	(15.6)	
Gross Margin	15.8%	(19.6%)	5.4%	(3.0%)	(11.5%)	(6.0%)	(36.1%)	
Stock-based compensaton	0.1	(0.1)	3.5	13.9	19.8	(0.3)	3.7	
COVID-19 costs ⁽¹⁾	-	3.2	-	3.2	-	-	-	
Other	-	-	-	16.4	-	-	-	
Adjusted Gross (Loss) Profit	7.5	(2.8)	5.6	28.2	12.4	(3.1)	(11.9)	
Adjusted Gross Margin	16.1%	(9.3%)	14.5%	15.7%	19.3%	(6.6%)	(27.5%)	

(1) Represents labor costs with respect to laboratory employees' downtime. During the second quarter of 2020, we did not reduce the workforce in our laboratory from COVID-19. However, we suffered significantly due to the decrease in volume in Women's Health and other products. Accordingly, we have adjusted our Gross Profit to reflect the managementassessed impact from the decrease in productivity of existing laboratory employees due to COVID-19 in the second quarter of 2020.



Non-GAAP EBITDA Reconciliation

JSD Millions	FY2020				FY2021		
	1Q	2Q	3Q	FY	1Q	2Q	3Q
Net Profit (Loss)	(27.0)	(32.1)	(56.6)	(241.3)	(191.0)	(45.4)	31.4
Interest expense, net ⁽¹⁾	0.2	0.5	0.6	2.0	0.7	0.7	0.7
Depreciation and amortization	2.4	2.7	3.1	11.7	4.9	5.6	5.5
Stock-based compensation expense	0.8	(0.2)	29.4	120.2	165.0	(0.5)	18.0
Transaction costs ⁽²⁾	-	-	-	-	1.9	3.2	0.4
Change in fair market value of warrant and earn-out contingent liabilities ⁽³⁾	-	-	-				(122.2)
Other (income) expense, net ⁽⁴⁾	(0.0)	(2.6)	-	(2.6)	(5.6)	-	0.3
COVID-19 costs ⁽⁵⁾	-	3.2	-	3.2		-	-
Adjusted EBITDA	(23.6)	(28.5)	(23.5)	(106.8)	(24.1)	(36.4)	(65.9)

(1) Represents the total of Interest Expense related to our capital leases and interest-bearing loans and Interest Income on money market funds.

(2) Represents professional service costs incurred in connection with pursuing the Business Combination transaction that did not meet the requirement for capitalization.

(3) For the nine months ended September 30, 2021, represents the change in fair market value of the liabilities associated with our public warrants and private placement warrants and the earn-out shares issuable under the terms of the Merger Agreement.

(4) For the nine months ended September 30, 2021 and 2020, consists primarily of funding received under the CARES Act Provider Relief Fund, offset by penalties related to early extinguishment of debt occurred in three months ended September 30, 2021.

(5) Represents labor costs with respect to laboratory employees' downtime. During the second quarter of 2020, we did not reduce the workforce in our laboratory from COVID-19. However, we suffered significantly due to the decrease in volume in Women's Health and other products. Accordingly, we have adjusted our Gross Profit to reflect the managementassessed impact from the decrease in productivity of existing laboratory employees due to COVID-19 in the second quarter of 2020.



SMFR Nasdaq Listed

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