UNITED STATES SECURITIES AND EXCHANGE COMMISSION

Washington, D.C. 20549

FORM S-1

REGISTRATION STATEMENT

UNDER

THE SECURITIES ACT OF 1933

Sema4 Holdings Corp.

(Exact Name of Registrant as Specified in Its Charter)

Delaware (State or Other Jurisdiction of Incorporation or Organization) (Primary Standard Industrial Classification Code Number)

85-1966622 (I.R.S. Employer Identification Number)

333 Ludlow Street, North Tower, 8th Floor Stamford, Connecticut 06902 (800) 298-6470

(Address, Including Zip Code, and Telephone Number, Including Area Code, of Registrant's Principal Executive Offices)

Eric Schadt

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(800) 298-6470

(Name, Address, Including Zip Code, and Telephone Number, Including Area Code, of Agent for Service)

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Approximate date of commencement of proposed sale to the public: From time to time after the effective date of this registration statement.

If any of the securities being registered on this Form are to be offered on a delayed or continuous basis pursuant to Rule 415 under the Securities Act of 1933, check the following box. x

If this Form is filed to register additional securities for an offering pursuant to Rule 462(b) under the Securities Act, check the following box and list the Securities Act registration statement number of the earlier effective registration statement for the same offering. O

If this Form is a post-effective amendment filed pursuant to Rule 462(c) under the Securities Act, check the following box and list the Securities Act registration statement number of the earlier effective registration statement for the same offering. O

If this Form is a post-effective amendment filed pursuant to Rule 462(d) under the Securities Act, check the following box and list the Securities Act registration statement number of the earlier effective registration statement for the same offering. O

Indicate by check mark whether the registrant is a large accelerated filer, an accelerated filer, a non-accelerated filer, a smaller reporting company or an emerging growth company. See the definitions of "large accelerated filer," "accelerated filer," "smaller reporting company" and "emerging growth company" in Rule 12b-2 of the Exchange Act.

Large accelerated filer Accelerated filer Non-accelerated filer Smaller reporting company |X||X|Emerging growth company

If an emerging growth company, indicate by check mark if the registrant has elected not to use the extended transition period for complying with any new or revised financial accounting standards provided pursuant to Section 7(a)(2)(B) of the Securities Act. 0

Title of Each Class of Securities to be Registered	Amount to be Registered	Proposed Maximum Offering Price Per Share	Proposed Maximum Aggregate Offering Price	Amount of Registration Fee
Class A common stock, par value \$0.0001 per share ⁽¹⁾⁽²⁾	236,223,522	\$10.56 ⁽⁵⁾	\$2,494,520,393 ⁽⁵⁾	\$272,153.00(8)
Class A common stock, par value \$0.0001 per share ⁽¹⁾⁽³⁾	21,995,000	\$11.50 ⁽⁶⁾	\$252,942,500 ⁽⁶⁾	\$27,596.03 ⁽⁸⁾
Warrants to purchase common stock ⁽¹⁾⁽⁴⁾	7,236,667	\$ ⁽⁷⁾	\$ ⁽⁷⁾	\$ ⁽⁷⁾
Total				\$299,749.03

Pursuant to Rule 416(a) of the Securities Act of 1933, as amended (the "Securities Act"), there are also being registered an indeterminable number of additional securities as may be issued to

prevent dilution resulting from stock splits, stock dividends or similar transactions.

The number of shares of Class A common stock, par value \$0.0001 per share ("Class A common stock"), being registered represents 236,223,522 shares of Class A common stock to be offered and sold by the selling securityholders named in the prospectus (the "Selling Securityholders"), consisting of (i) 35,000,000 shares of Class A common stock issued in a private placement pursuant to subscription agreements each entered into on February 9, 2021 (the "PIPE Financing"); (ii) 11,068,750 shares of Class A common stock issued in connection with the consummation of the Business Combination (as defined in the prospectus), in exchange for shares of the registrant's Class B common stock originally issued in a private placement to CMLS Holdings LLC (the "Sponsor"); (iii) 182,918,105 shares of Class A common stock issued or issuable to certain former stockholders and equity award holders of Sema4 in connection with or as a result of the consummation of the Business Combination, consisting of (a) 149,856,840 shares of Class A common stock; (b) 14,039,689 shares of Class A common stock issuable upon the exercise or vesting of certain equity awards; and (c) 19,021,576 shares of Class A common stock (the "Earn-Out Shares") that certain Sema4 equity holders have the contingent right to receive upon the achievement of certain vesting conditions; and (iv) 7,236,667 shares of Class A common stock issuable upon the exercise of the private placement warrants (as defined below).

- (3) The number of shares of Class A common stock being registered represents up to 21,995,000 shares of Class A common stock to be offered and sold by the registrant, consisting of: (i) 14,758,333 shares of Class A common stock that are issuable by the registrant upon the exercise of 14,758,333 warrants originally issued in the registrant's initial public offering; and (ii) up to 7,236,667 shares of Class A common stock that are issuable by the registrant upon the exercise of the private placement warrants following the public resale of the private placement warrants by the Selling Securityholders pursuant to the prospectus.
- The number of warrants being registered represents 7,236,667 warrants (the "private placement warrants") originally issued in a private placement to the Sponsor and certain directors of the
- Estimated solely for the purpose of calculating the registration fee, based on the average of the high and low prices of the common stock on the Nasdaq Global Select Market on August 2, 2021 (\$10.56 per share). This calculation is in accordance with Rule 457(c) of the Securities Act. Calculated pursuant to Rule 457(g) under the Securities Act, based on the exercise price of the warrants.
- No separate fee due in accordance with Rule 457(g).
- Calculated by multiplying the proposed maximum aggregate offering price of securities to be registered by 0.0001091.

The registrant hereby amends this registration statement on such date or dates as may be necessary to delay its effective date until the registrant shall file a further amendment which specifically states that this registration statement shall thereafter become effective in accordance with Section 8(a) of the Securities Act of 1933, as amended, or until the registration statement shall become effective on such date as the Securities and Exchange Commission, acting pursuant to said Section 8(a), may determine.

The information in this preliminary prospectus is not complete and may be changed. The securities may not be sold until the registration statement filed with the Securities and Exchange Commission is effective. This preliminary prospectus is not an offer to sell these securities and is not soliciting an offer to buy these securities in any jurisdiction where the offer or sale is not permitted.

SUBJECT TO COMPLETION, DATED AUGUST 4, 2021

PRELIMINARY PROSPECTUS



Sema4 Holdings Corp. 236,223,522 Shares of Common Stock 7,236,667 Warrants to Purchase Shares of Common Stock 21,995,000 Shares of Common Stock Underlying Warrants

This prospectus relates to the offer and sale from time to time by the selling securityholders named in this prospectus (the "Selling Securityholders") of (A) up to 236,223,522 shares of our Class A common stock, par value \$0.0001 per share ("Class A common stock" or "common stock"), consisting of (i) up to 35,000,000 shares of our Class A common stock (the "PIPE shares") issued in a private placement pursuant to subscription agreements each entered into on February 9, 2021 (the "PIPE Financing"); (ii) up to 11,068,750 shares of our Class A common stock (the "Founder Shares") issued in connection with the consummation of the Business Combination (as defined below), in exchange for shares of our Class B common stock originally issued in a private placement to CMLS Holdings LLC (the "Sponsor"); (iii) up to 182,918,105 shares of our Class A common stock issued or issuable to certain former stockholders and equity award holders of Sema4 (the "Sema4 equity holders") in connection with or as a result of the consummation of the Business Combination, consisting of (a) up to 149,856,840 shares of our Class A common stock; (b) up to 14,039,689 shares of our Class A common stock issuable upon the exercise or vesting of certain equity awards; and (c) up to 19,021,576 shares of Class A common stock (the "Earn-Out Shares") that certain Sema4 equity holders have the contingent right to receive upon the achievement of certain vesting conditions; and (iv) up to 7,236,667 shares of our Class A common stock issuable upon the exercise of the private placement warrants (as defined below); and (B) up to 7,236,667 warrants (the "private placement warrants") originally issued in a private placement to the Sponsor and certain of the other Initial Stockholders (as defined herein).

In addition, this prospectus relates to the offer and sale of: (i) up to 14,758,333 shares of our Class A common stock that are issuable by us upon the exercise of 14,758,333 warrants (the "public warrants") originally issued in our initial public offering (the "IPO"); and (ii) up to 7,236,667 shares of our Class A common stock that are issuable by us upon the exercise of the private placement warrants following the public resale of the private placement warrants by the Selling Securityholders pursuant to this prospectus.

On July 22, 2021, we consummated the transactions contemplated by that certain Agreement and Plan of Merger, dated as of February 9, 2021 (as amended, the "Merger Agreement"), by and among CM Life Sciences, Inc. ("CMLS" and, after the consummation of the Business Combination, "Sema4 Holdings"), S-IV Sub, Inc. ("Merger Sub") and Mount Sinai Genomics, Inc. d/b/a Sema4 ("Sema4"). In particular, on July 22, 2021, we consummated the merger contemplated by the Merger Agreement, whereby Merger Sub merged with and into Sema4, with Sema4 surviving the merger as a wholly-owned subsidiary of CMLS (the "Merger" and, together with the other transactions contemplated by the Merger Agreement, the "Business Combination"). In connection with the consummation of the Business Combination, CMLS changed its name to "Sema4 Holdings Corp." and Sema4 changed its name to "Sema4 OpCo, Inc."

The Selling Securityholders may offer, sell or distribute all or a portion of the securities hereby registered publicly or through private transactions at prevailing market prices or at negotiated prices. We will not receive any of the proceeds from such sales of the shares of our common stock or warrants, except with respect to amounts received by us upon the exercise of the warrants for cash. We will bear all costs, expenses and fees in connection with the registration of these securities, including with regard to compliance with state securities or "blue sky" laws. The Selling Securityholders will bear all commissions and discounts, if any, attributable to their sale of shares of our common stock or warrants. See "Plan of Distribution" beginning on page 160 of this prospectus.

Our common stock and public warrants are listed on the Nasdaq Global Select Market (the "Nasdaq") under the symbols "SMFR" and "SMFRW", respectively. On August 2, 2021, last reported sales price of our common stock was \$11.33 per share and the last reported sales price of our public warrants was \$3.20 per warrant.

We are an "emerging growth company" as defined in Section 2(a) of the Securities Act of 1933, as amended, and, as such, have elected to comply with certain reduced disclosure and regulatory requirements.

Investing in our securities involves risks. See the section entitled "Risk Factors" beginning on page 10 of this prospectus to read about factors you should consider before buying our securities.

Neither the Securities and Exchange Commission nor any state securities commission has approved or disapproved of these securities or determined if this prospectus is truthful or complete. Any representation to the contrary is a criminal offense.

The date of this prospectus is

, 2021

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ABOUT THIS PROSPECTUS

This prospectus is part of a registration statement on Form S-1 that we filed with the Securities and Exchange Commission (the "SEC") using the "shelf" registration process. Under this shelf registration process, the Selling Securityholders may, from time to time, sell or otherwise distribute the securities offered by them as described in the section titled "*Plan of Distribution*" in this prospectus. We will not receive any proceeds from the sale by such Selling Securityholders of the securities offered by them described in this prospectus. This prospectus also relates to the issuance by us of the shares of common stock issuable upon the exercise of any warrants. We will receive proceeds from any exercise of the warrants for cash.

Neither we nor the Selling Securityholders have authorized anyone to provide you with any information or to make any representations other than those contained in this prospectus or any applicable prospectus supplement or any free writing prospectuses prepared by or on behalf of us or to which we have referred you. Neither we nor the Selling Securityholders take responsibility for, and can provide no assurance as to the reliability of, any other information that others may give you. Neither we nor the Selling Securityholders will make an offer to sell these securities in any jurisdiction where the offer or sale is not permitted.

We may also provide a prospectus supplement or post-effective amendment to the registration statement to add information to, or update or change information contained in, this prospectus. You should read both this prospectus and any applicable prospectus supplement or post-effective amendment to the registration statement together with the additional information to which we refer you in the sections of this prospectus entitled "Where You Can Find More Information."

Unless the context otherwise requires, references in this prospectus to the "Company," "we," "us" or "our" refers to Mount Sinai Genomics, Inc. d/b/a Sema4, a Delaware corporation ("Sema4"), prior to the consummation of the Business Combination (the "Closing," and such date of the consummation of the Business Combination, the "Closing Date") and to Sema4 Holdings Corp. ("Sema4 Holdings") and its subsidiary following the Business Combination. References to "CMLS" refer to CM Life Sciences, Inc. prior to the consummation of the Business Combination.

SELECTED DEFINITIONS

Unless otherwise stated in this prospectus or the context otherwise requires, references to:

- "Amended and Restated Certificate of Incorporation" means the Third Amended and Restated Certificate of Incorporation of the Company.
- "Board" or "Board of Directors" means the board of directors of the Company.
- "Bylaws" means the Restated Bylaws of the Company.
- "Business Combination" means the transactions contemplated by the Merger Agreement, including the Merger and the PIPE Investment.
- "CMLS" means CM Life Sciences, Inc., a Delaware corporation, prior to the Closing.
- "Class A common stock" or "common stock" means the shares of Class A common stock, par value \$0.0001 per share, of the Company.
- "Class B common stock" means the shares of Class B common stock, par value \$0.0001 per share, of the Company, which automatically converted into shares of Class A common stock in connection with the Closing.
 - "Closing" means the closing of the Business Combination.
 - "Closing Date" means July 22, 2021.
 - "Code" means the Internal Revenue Code of 1986, as amended.
 - "Company" means Sema4 prior to the Closing and Sema4 Holdings and its subsidiary following the Closing.
 - "DGCL" means the General Corporation Law of the State of Delaware.
- "Earn-Out Shares" means up to 19,021,576 shares of our Class A common stock issuable pursuant to the Merger Agreement to certain Sema4 holders upon the achievement of certain vesting conditions.
- "Earn-Out RSU Shares" means up to 2,689,764 shares of our Class A common stock issuable pursuant to the Earn-Out RSUs upon achievement of certain vesting conditions.
 - "Earn-Out RSUs" means certain RSU awards issuable pursuant to the Merger Agreement to certain Sema4 equity holders.
 - "ESPP" means the Sema4 Holdings Corp 2021 Employee Stock Purchase Plan.
 - "Exchange Act" means the Securities Exchange Act of 1934, as amended.
- "Founder Shares" means the 11,068,750 shares of our Class A common stock issued to the Sponsor and the other Initial Stockholders in connection with the automatic conversion of the Class B common stock in connection with the Closing.
 - "GAAP" means United States generally accepted accounting principles.
 - "Incentive Plan" means the Sema4 Holdings Corp 2021 Equity Incentive Plan.
 - "Initial Stockholders" means the Sponsor together with Munib Islam, Emily Leproust and Nat Turner.
 - "Investment Company Act" means the Investment Company Act of 1940, as amended.
- "IPO" or "CMLS IPO" means the Company's initial public offering, consummated on September 4, 2020, of 44,275,000 units (including 5,775,000 units that were subsequently issued to the underwriters in connection with the partial exercise of their over-allotment option) at \$10.00 per unit.

- "JOBS Act" means the Jumpstart Our Business Startups Act of 2012.
- "Merger" means the merger contemplated by the Merger Agreement, whereby Merger Sub merged with and into Sema4, with Sema4 surviving the merger as a wholly-owned subsidiary of the Company on the Closing Date.
- "Merger Agreement" means that certain Agreement and Plan of Merger, dated as of February 9, 2021, by and among the Company, Merger Sub and Sema4, as amended by the Amendment to Agreement and Plan of Merger dated May 3, 2021.
 - "Merger Sub" means S-IV Sub, Inc., a Delaware corporation.
 - "Nasdaq" means the Nasdaq Global Select Market, LLC.
- "PIPE Investment" means the private placement pursuant to which the PIPE Investors collectively subscribed for 35,000,000 shares of our Class A common stock at \$10.00 per share, for an aggregate purchase price of \$350,000,000, on the Closing.
 - "PIPE Investors" means certain institutional investors that invested in the PIPE Investment.
 - "PIPE Shares" means the 35,000,000 shares of our Class A common stock issued in the PIPE Investment.
- "private placement warrants" means the 7,236,667 warrants originally issued to the Sponsor and certain of the other Initial Stockholders in a private placement in connection with our IPO, each of which is exercisable for three-quarters of one share of common stock, in accordance with its terms.
 - "public shares" means shares of common stock included in the units issued in our IPO.
 - "public stockholders" means holders of public shares.
- "public warrants" means the warrants included in the units issued in our IPO, each of which is exercisable for three-quarters of one share of common stock, in accordance with its terms.
 - "RSUs" means restricted stock units granted under the Incentive Plan or in accordance with the terms of the Merger Agreement.
 - "Sarbanes-Oxley Act" or "SOX" means the Sarbanes-Oxley Act of 2002.
 - "SEC" means the United States Securities and Exchange Commission.
 - "Securities Act" means the Securities Act of 1933, as amended.
 - "Selling Securityholders" means the selling securityholders named in this prospectus.
 - "Sema4" means Mount Sinai Genomics, Inc. d/b/a Sema4, a Delaware corporation, prior to the Closing.
 - "Sema4 Holdings" means Sema4 Holdings Corp., a Delaware corporation, following the Closing.
 - "Sema4 equity holder" means certain former stockholders and equity award holders of Sema4.
 - "Sponsor" means CMLS Holdings LLC, a Delaware limited liability company.
- "Subscription Agreements" means, collectively, those certain subscription agreements, entered into on February 9, 2021, between the Company and the PIPE Investors.
 - "Transfer Agent" means Continental Stock Transfer & Trust Company.
- "Trust Account" means the trust account of the Company that held the proceeds from the IPO and a portion of the proceeds from the sale of the private placement warrants.

MARKET AND INDUSTRY DATA

This prospectus contains estimates and information concerning our industry, our business, and the market for our products and services, including our general expectations of our market position, market growth forecasts, our market opportunity, and size of the markets in which we participate, that are based on industry publications, surveys, and reports that have been prepared by independent third parties. This information involves a number of assumptions and limitations, and you are cautioned not to give undue weight to these estimates. Although we have not independently verified the accuracy or completeness of the data contained in these industry publications, surveys, and reports are generally reliable, although such information is inherently subject to uncertainties and imprecision. The industry in which we operate is subject to a high degree of uncertainty and risk due to a variety of factors, including those described in the section titled "Risk Factors." These and other factors could cause results to differ materially from those expressed in these publications and reports.

CAUTIONARY NOTE REGARDING FORWARD-LOOKING STATEMENTS

This prospectus contains forward-looking statements within the meaning of the "safe harbor" provisions of the Private Securities Litigation Reform Act of 1995. These statements are based on the current expectations and beliefs of our management, and are subject to a number of factors and uncertainties that could cause actual results to differ materially from those described in the forward-looking statements. These forward-looking statements include statements about our future financial and operating results; the benefits of the Business Combination; statements of the plans, strategies and objectives of our management for our future operations; and statements regarding future economic conditions or performance. Forward-looking statements may contain words such as "will be," "will," "expect," "anticipate," "continue," "project," "believe," "plan," "could," "estimate," "forecast," "guidance," "intend," "may," "plan," "possible," "potential," "predict," "pursue," "should," "target" or similar expressions, and include the assumptions that underlie such statements. These statements include, but are not limited to, statements about:

- our ability to realize the benefits expected from the Business Combination;
- · factors relating to our business, operations and financial performance, including:
 - our ability to comply with laws and regulations applicable to our business; and
 - market conditions and global and economic factors beyond our control;
- intense competition and competitive pressures from other companies worldwide in the industries in which we operate;
- · litigation and the ability to adequately protect our intellectual property rights; and
- other factors detailed under the section entitled "Risk Factors."

Factors that could cause the actual results to differ materially from those described in the forward-looking statements include those set forth in the risk factors included in this prospectus. Any forward-looking statements made in this prospectus are qualified in their entirety by the forward-looking statements contained or referred to in this section, and there is no assurance that the actual results or developments anticipated by us will be realized. All subsequent written and oral forward-looking statements concerning us, the Business Combination or other matters attributable to us or any person acting on our behalf are expressly qualified in their entirety by the forward-looking statements above. Except to the extent required by applicable law, we are under no obligation (and expressly disclaim any such obligation) to update or revise these forward-looking statements whether as a result of new information, future events, or otherwise.

PROSPECTUS SUMMARY

The following summary highlights information contained in greater details elsewhere in this prospectus. This summary is not complete and does not contain all of the information you should consider in making your investment decision. You should read the entire prospectus carefully before making an investment in our common stock or warrants. You should carefully consider, among other things, our financial statements and related notes and the sections titled "Risk Factors" and "Management's Discussion and Analysis of Financial Condition and Results of Operations" included elsewhere in this prospectus.

Company Overview

We are a patient-centered, health intelligence company with a mission to use artificial intelligence, or AI, and machine learning to enable personalized medicine for all. Our integrated information platform leverages longitudinal patient data, AI-driven predictive modeling, and genomics in combination with other molecular and high-dimensional data in our efforts both to deliver better outcomes for patients and to transform the practice of medicine, including how disease is diagnosed, treated, and prevented.

We have established one of the largest, most comprehensive, and fastest growing integrated health information platforms, collecting and leveraging genomic and clinical data in partnership with patients, healthcare providers and an extensive ecosystem of life science industry contributors. We are now generating and processing over 30 petabytes of data per month, growing by almost 1 petabyte per month, and maintain a database that includes more than 11.5 million de-identified clinical records, many with genomic profiles, integrated in a way that enables physicians to proactively diagnose and manage disease. This expanding database is a virtuous cycle of data: new data enables us to further develop, train, and refine predictive models and drive differentiated insights, which models and insights we deploy through our next generation diagnostic and research solutions and portals to support clinicians and researchers and engage patients, all of which interactions generate more data to continue the cycle.

Today, by providing differentiated insights through diagnostic testing solutions to physicians and patients across the United States in areas such as reproductive health, or Women's Health, population health, and oncology, or Oncology, we are reimbursed by payors, providers, and patients for providing these services. In collaboration with pharmaceutical and biotech, or Biopharma, companies, we receive payments for a broad range of services relating to the aggregated data on our information platform, such as consenting and recontacting patients, the development and implementation of a wide range of predictive models, including drug discovery programs, conducting real-world evidence studies, and aiding in the identification and recruitment of patients into clinical trials. Over the next several years, we expect to focus on expanding the revenue from our health system and Biopharma partners, while also working to continue to grow the volumes and revenues from our diagnostics test solutions.

While there are many companies seeking to harness the potential of "big data" to address the challenges within the healthcare ecosystem, we believe that few have the scale of our company combined with our revenue-generating diagnostics testing business and origins as a company conceived and nurtured within a world-class health system. These characteristics have enabled us to build a significant and highly differentiated technological and informational asset positioned to drive precision medicine solutions into the standard of care in an unparalleled way.

Our World Class Team and Unique Origins

Sema4 was founded by Eric Schadt, Ph.D. as part of Icahn School of Medicine at Mount Sinai's Department of Genetics and Genomic Sciences and the Icahn Institute for Genomics and Multiscale Biology. Dr. Schadt is a world-renowned expert on constructing predictive models of disease that link molecular data to physiology to enable clinical medicine. He has published more than 450 peer-reviewed papers in leading scientific journals, with a public citation or h-index of 128, and contributed to discoveries relating to the genetic basis of common human diseases such as cancer, diabetes, obesity, and Alzheimer's disease. As of March 31, 2021, we had almost 1000 employees, including over 160 Ph.D.-level data scientists whose collective work has been recognized in areas such as data science, network modeling, multiscale biotechnology and genomics.

Sema4 was established out of the Mount Sinai Health System (which we refer to together with its related entities as Mount Sinai) and commenced operations in June 2017 as a commercial entity that could effectively

engage diverse patient populations and health care institutions at scale, founded on the idea that more information, deeper AI-driven learning, and increased engagement of patients and their providers will improve diagnosis, treatment, and prevention of disease. We have since established and deployed our comprehensive and integrated genomics and information platforms, and intend to continue to expand our scale and reach through organic and inorganic growth.

Our Purpose-Built, Flexible Platforms Address Immediate and Untapped Market Opportunities

With the rapid decline in next generation sequencing costs and the increased accessibility of large scale, commoditized computer hardware and storage information products through the cloud, we expect that our core information platform, Centrellis®, supported and fueled by our genomic analysis platform, TraversaTM, will be well-positioned to drive improved clinical outcomes competitively in the healthcare market.

Our information platform was built to be highly adaptable to different data types and different diseases and health conditions, with the aim to deliver precision medicine and improved health outcomes across a patient's entire life cycle. Accordingly, we expect our platforms to capitalize on a wide range of growth opportunities, and we intend to apply capital over time to make targeted acquisitions to accelerate our ability to reach a wider range of patients, integrate more deeply into clinical workflows, and address the significant, unaddressed white space for health intelligence in the healthcare ecosystem. These include a broad range of therapeutic segments, beyond our existing focus of our diagnostics solutions for Women's Health, and Oncology, where we believe there is an immediate need for precision medicine solutions such as in autoimmune disorders, which are expected to represent an approximately \$149.4 billion global market by 2025, rare diseases, which are expected to represent an approximately \$317 billion global market in 2026, and cardiovascular disease, which are expected to represent an approximately \$106.1 billion global market in 2023.

By combining our data-driven approach and our deep understanding of health system workflows, we have developed a holistic health information platform, Centrellis, to transform the disease diagnosis and treatment paradigm for the entire healthcare ecosystem: patients, physicians, health systems, payers, and Biopharma companies. The Centrellis platform is comprised of a data management backend that supports a wide array of databases, data warehouses, and knowledge bases, a data analytics layer to mine the data and construct predictive models that provide differentiated insights, and a series of application programmable interfaces to enable tool and software applications to access the data and models. Centrellis serves as the underlying foundation of our precision medicine solution and comprises a sophisticated data management and analytics engine. In the data management layer, our platform processes and stores data in a highly structured and accessible way, which is then analyzed by an advanced insights engine in the analytics layer that deploys state-of-the-art AI, probabilistic causal reasoning and machine learning approaches, and complementary analytics capabilities to deliver increasingly accurate insights to patients, providers, and researchers across a broad range of applications. Centrellis is designed to transform treatment decisions across multiple therapeutic areas by engaging large-scale, high-dimensional data and querying the predictive models of disease and wellness using patient-specific data to derive highly personalized, clinically actionable insights. Centrellis supports various applications, such as delivery of personalized and actionable treatment insights into clinical reports, clinical trial matching, real-world evidence trials and clinical decision support, through an advanced programmable interface, or API, layer.

We have also developed a comprehensive genomic platform, TraversaTM, to serve as the backbone of our screening and diagnostic products and with the capacity to deliver molecular data that can be re-accessed, analyzed and delivered throughout a patient's lifetime. Traversa is designed to simultaneously assay at clinical-grade coverage all known medically relevant regions of the genome, as well as survey the entirety of the human genome, to surface signals that might be medically relevant to a patient in the future. Traversa is integrated with the Centrellis information platform and is designed to adapt at the rate of learning and to match the significant pace of information and knowledge growth, especially in the genomics arena, to allow us to provide actionable, accurate, and cutting-edge insights from complex and comprehensive data assets. We also expect this platform to enable us to scale our operations and to improve our margins in generating secondary insights for patients and providers.

We Are Building Richer Longitudinal Data Through Deeper Patient and Provider Engagement

We engage with patients, physicians, and health systems as partners and based on principles of transparency, choice, and consent. Driven by our direct engagement with patients and strategic relationships with multiple health systems, the database we have built contains extensive electronic medical record, or EMR, data, surpassing 11.5 million de-identified clinical records, many with genomic profiles, and has been designed to enable Centrellis to draw from our extensive data assets in a way that enables physicians to proactively diagnose and manage disease. We expect our current and targeted strategic relationships will provide us with access to additional active patient cohorts and datasets to fuel this growth and perpetuate our iterative, data-driven business model, including by rapidly scaling our diagnostic test solutions franchise with physicians and patients through direct engagement with multiple health system partners.

In addition to providing a majority of our current revenue and generating hundreds of thousands of genomic profiles, our established diagnostic test solutions also allow us to engage patients directly as partners, both as part of their clinical care and also acting on their behalf, with appropriate informed consent, to acquire, organize and manage any health data generated on them through the course of their care, all of which contributes to the further development of our genomics and information platforms. Further, we have demonstrated patients' willingness to partner with us. For example, over 80% of diagnostics solutions patients and users who engaged with our patient portal have given us their informed consent to retrieve, organize, and manage their health records and data, and to facilitate their access to and sharing of those data, as well as additional data that patients share and create through their use of our expanding suite of digital experience products.

Our Established Diagnostic Solutions Are Scaling Rapidly

We currently operate a mature diagnostic business that generates revenue and engages with patients through our varied and sophisticated diagnostics and screening offerings. Our population health offerings are designed to run through our Traversa platform and give us the ability to inform on thousands of diseases and conditions, from rare disorders, to drug safety, to risk profiles across a broad range of common human diseases of significant public health concern. We have developed an array of diagnostic and screening solutions to inform across a patient's life course, ranging from reproductive health and newborn screening to drug safety and oncology. Our Women's Health solutions sequence and analyze an industry-leading number of genes, and use Centrellis' interpretive information tools to translate raw sequencing and clinical data efficiently and accurately into digestible clinical reports that guide decision making by patients and physicians. Our Oncology diagnostic solutions feature both somatic tumor profiling and hereditary cancer screenings, along with a foundational whole exome and whole transcriptome sequencing approach.

Centrellis enables the complex interpretations of these data to identify key driver genes, activated and suppressed pathways, molecular subtypes, therapeutic interventions and matching to clinical trials. We believe our array of diverse diagnostic solutions, built on our differentiated grounding in scientific excellence and coupled with an end-to-end full-service model, have led to our rapidly growing customer bases in Women's Health and Oncology and increasing traction with health systems, as well as deep, trusting engagement with patients.

We Are Embedding Our Solutions Through Innovative, Deep Relationships

Our origins in and subsequent work with Mount Sinai have provided us with an extensive understanding of health systems, patient, and physician workflows as well as the complex interconnectivities that define patient-physician relationships. We have used this knowledge to develop our integrated health system collaboration model, where we have the capabilities necessary to integrate across health system workflows as a holistic health intelligence partner in order to deploy our comprehensive genomics and information platforms, our data curation and harmonization capabilities, and our patient and provider engagement software applications. Our solutions support our health system partners across their operations, helping them integrate a new standard of care and creating a deep relationship with us that helps both partners realize the potential of the relationship. In addition to creating diagnostic revenue and a clinical relationship with our health system partners and their patients, this engagement provides us with access to insights informed by analyzed and processed EMRs from the health system, as well as the expansive molecular information we generate from our genomics platform as the health system's precision medicine

partner. Learning from our long-standing relationship with Mount Sinai, we have refined a health system engagement model that is both operational and economic and designed to maximize both our and our health system partner's value from the relationship. We are currently activating and expanding our relationships with several leading health systems that will expand our access to data and that we expect will position our platforms for rapid growth and broad commercial opportunities, and have recently signed contracts with three new health systems in support of this strategy.

Centered on Centrellis and Traversa, we have also established and continue to seek strategic relationships with Biopharma companies to enable innovation across the entire drug lifecycle, from next generation drug discovery and development, to post-market efficacy surveillance, to informing on bioavailability, toxicity, tolerability, and other features critical to drug development. We have demonstrated the ability to integrate across all aspects of the next generation therapeutic and drug development process, including: biomarker identification as part of early stage drug discovery; identification, validation and prioritization of drug targets; clinical trial patient recruitment; real-world evidence studies; and identifying new markets and indications for existing assets. We believe our solutions allow our Biopharma partners to harness the potential of big data to enable the development of next generation precision medicine therapeutics.

Corporate Information

We were incorporated on July 10, 2020 as a special purpose acquisition company and a Delaware corporation under the name CM Life Sciences, Inc. ("CMLS"). On September 4, 2020, CMLS completed its initial public offering. On July 22, 2021, CMLS consummated the Business Combination with Sema4 pursuant to the Merger Agreement. In connection with the Business Combination, CMLS changed its name to Sema4 Holdings Corp. ("Sema4 Holdings").

Our address is 333 Ludlow Street, North Tower, 8th Floor, Stamford, Connecticut 06902. Our telephone number is 1(800) 298-6470. Our website address is https://sema4.com. Information contained on our website or connected thereto does not constitute part of, and is not incorporated by reference into, this prospectus or the registration statement of which it forms a part.

Summary of Risk Factors

In evaluating an investment in our securities, investors should carefully read the risks described below, this prospectus and especially consider the factors discussed in the section entitled "*Risk Factors*." If any of the following events occur, our business, financial condition and operating results may be materially adversely affected. In that event, the trading price of our securities could decline, and you could lose all or part of your investment. Such risks include, but are not limited to:

- The COVID-19 pandemic has affected and may further materially and adversely affect our business and financial results.
- Due to the high degree of uncertainty regarding the implementation and impact of the CARES Act and other legislation related to COVID-19, there can be no assurance that we will be able to comply with the applicable terms and conditions of the CARES Act and retain such assistance.
- Other companies or institutions may develop and market novel or improved technologies, which may make our technologies less
 competitive or obsolete. If we do not continue to innovate and provide products and services that are useful to users, we may not
 remain competitive, which could harm our business and operating results.
- If third-party payors, including managed care organizations, private health insurers and government health plans, do not provide
 adequate reimbursement for our tests, or seek to amend or renegotiate their fee reimbursement schedules, or if we are unable to
 comply with their requirements for reimbursement, our commercial success could be negatively affected.

- Ethical, legal and social concerns related to the use of genomic medicine and health information analysis could reduce demand for our tests.
- If we fail to comply with federal and state laboratory licensing requirements or standards, we could lose the ability to perform our tests or experience disruptions to our business.
- We rely on highly skilled personnel in a broad array of disciplines and, if we are unable to hire, retain or motivate these individuals, or maintain our corporate culture, we may not be able to maintain the quality of our services or grow effectively.
- We need to scale our infrastructure in advance of demand for our products and services, and our failure to generate sufficient demand for our products and services would have a negative impact on our business and our ability to attain profitability.
- International expansion of our business could expose us to business, regulatory, political, operational, financial and economic risks associated with doing business outside of the United States.
- Unfavorable U.S. or global economic conditions could adversely affect our business, financial condition or results of operations.
- We rely on a limited number of product and suppliers or, in some cases, single suppliers, for data infrastructure and some of our laboratory instruments and materials and may not be able to find replacements or immediately transition to alternative suppliers or service providers.
- · Our current and future products and services may never achieve significant commercial market acceptance.
- Our projections are subject to significant risks, assumptions, estimates and uncertainties, including assumptions regarding adoption
 of our products and services. As a result, our projected revenues, market share, expenses and profitability may differ materially
 from our expectations in any given quarter or fiscal year.
- We have estimated the sizes of the markets for our current and future products and services, and these markets may be smaller than we estimate.
- We may never become profitable.
- Our operating results could be subject to significant fluctuation, which could increase the volatility of our stock and warrant price and cause losses to our stockholders.
- Our revenue growth rate could decline over time, and we may experience downward pressure on our operating margins in the future.
- We may need to raise additional capital to fund our existing operations, develop additional products and services, commercialize new products and services or expand our operations.
- We have identified material weaknesses, some of which have a pervasive effect across the organization, and may identify additional material weaknesses or significant deficiencies, in our internal controls over financial reporting. Our failure to remedy these matters could result in a material misstatement of our financial statements.
- We rely on third-party laboratories to perform certain elements of our service offerings, and rely on Mount Sinai, a related party, and our clinicians for a portion of our test volume in connection with our diagnostic solutions and for data programs.
- We may be subject to increased compliance risks as a result of our rapid growth, including our dependence on our sales, marketing and billing efforts.

- We and our partners will have to maintain compliance with FDA requirements for research, products and services and failure to maintain compliance with FDA requirements may prevent or delay the marketing of our products and services.
- · Compliance with the HIPAA security, privacy and breach notification regulations may increase our costs.
- · We face uncertainty related to healthcare reform, pricing, coverage and reimbursement, which could reduce our revenue.
- Our inability to effectively protect our proprietary products, processes, and technologies, including the confidentiality of our trade secrets, could harm our competitive position.
- If patent regulations or standards are modified, such changes could have a negative impact on our business.
- Litigation or other proceedings resulting from either third-party claims of patent infringement, or asserting infringement by third parties of our technology, could be costly, time-consuming, and could limit our ability to commercialize our products or services.
- Interruption, interference with, or failure of our information technology and communications systems could hurt our ability to effectively provide our products and services, which could harm its reputation, financial condition, and operating results.
- Security breaches, privacy issues, loss of data and other incidents could compromise sensitive, protected, or personal information
 related to our business, could prevent us from accessing critical information, and could expose us to regulatory liability, which
 could adversely affect our business.
- We depends on our scientific computing and information technology and management systems and any failure of these systems could harm our business.
- If the Business Combination's benefits do not meet the expectations of investors, stockholders or financial analysts, the market price of our securities may decline.
- Changes in laws, regulations or rules, or a failure to comply with any laws, regulations or rules, may adversely affect our business, investments and results of operations.

Emerging Growth Company

We are an "emerging growth company," as defined in Section 2(a) of the Securities Act, as modified by the Jumpstart Our Business Startups Act of 2012 (the "JOBS Act"), and we may take advantage of certain exemptions from various reporting requirements that are applicable to other public companies that are not emerging growth companies, including, but not limited to, not being required to comply with the auditor attestation requirements of Section 404 of the Sarbanes-Oxley Act of 2002 (the "Sarbanes-Oxley Act"), reduced disclosure obligations regarding executive compensation in our periodic reports and proxy statements, and exemptions from the requirements of holding a nonbinding advisory vote on executive compensation and stockholder approval of any golden parachute payments not previously approved.

Further, Section 102(b)(1) of the JOBS Act exempts emerging growth companies from being required to comply with new or revised financial accounting standards until private companies (that is, those that have not had a registration statement under the Securities Act declared effective or do not have a class of securities registered under the Exchange Act) are required to comply with the new or revised financial accounting standards. The JOBS Act provides that a company can elect to opt out of the extended transition period and comply with the requirements that apply to non-emerging growth companies but any such election to opt out is irrevocable. We have elected not to opt out of such extended transition period, which means that when a standard is issued or revised and it has different application dates for public or private companies, we, as an emerging growth company, can adopt the new or revised standard at the time private companies adopt the new or revised standard. This may make comparison of our financial statements with certain other public companies difficult or impossible because of the potential differences in accounting standards used.

We will remain an emerging growth company until the earliest of (i) the last day of the fiscal year: (a) following September 1, 2025, the fifth anniversary of our IPO; (b) in which we have total annual gross revenue of at least \$1.07 billion; or (c) in which we are deemed to be a large accelerated filer, which means the market value of our common stock that is held by non-affiliates exceeds \$700.0 million as of the prior June 30th, and (ii) the date on which we have issued more than \$1.0 billion in non-convertible debt during the prior three-year period. References herein to "emerging growth company" have the meaning associated with it in the JOBS Act.

The Offering

Issuer

Issuance of common stock

Shares of common stock offered by us

Shares of common stock outstanding as of July 28, 2021 Exercise price of public warrants and private placement warrants Use of proceeds

Resale of common stock and warrants

Shares of common stock offered by the Selling Securityholders

Warrants offered by the Selling Securityholders Terms of the offering

Use of proceeds

Sema4 Holdings Corp.

Up to 21,995,000 shares of Class A common stock issuable upon exercise of warrants, consisting of:

- a. up to 14,758,333 shares of Class A common stock that are issuable upon the exercise of the public warrants; and
- up to 7,236,667 shares of Class A common stock that are issuable upon the exercise of the private placement warrants following the public resale of the private placement warrants by the Selling Securityholders

240,190,402 shares of Class A common stock

\$11.50 per share, subject to adjustments as described herein

We will receive up to an aggregate of approximately \$252.9 million from the exercise of the warrants, assuming the exercise in full of all of the warrants for cash. We expect to use the net proceeds from the exercise of the warrants for investment in growth and general corporate purposes. See "*Use of Proceeds*."

Up to 236,223,522 shares of Class A common stock, consisting of:

- a. up to 35,000,000 PIPE Shares;
- b. up to 11,068,750 founder shares;
- c. to 7,236,667 shares of our Class A common stock issuable upon the exercise of the private placement warrants; and
- d. up to 182,918,105 shares of Class A common stock issued or issuable to the Sema4 equity holders in connection with or as a result of the consummation of the Business Combination consisting of:
 - (i) up to 149,856,840 shares of our Class A common stock;
 - (ii) up to 14,039,689 shares of Class A common stock issuable upon the exercise or vesting of certain equity awards; and
 - (iii) up to 19,021,576 Earn-Out Shares.

Up to 7,236,667 private placement warrants

The Selling Securityholders will determine when and how they will dispose of the shares of common stock and warrants registered under this prospectus for resale.

We will not receive any proceeds from the sale of shares of common stock or warrants by the Selling Securityholders.

Lock-up restrictions

Certain of our stockholders are subject to certain restrictions on transfer until the termination of applicable lock-up periods. See "Certain Relationships and Related Person Transactions — Related Party Transactions Entered into in Connection with the Business Combination — ISMMS Lock-up Agreement and Shareholder Lock-up Agreement"."

Nasdaq symbols

Our common stock and public warrants are listed on the Nasdaq under the symbols SMFR and SMFRW, respectively.

Risk factors

See "*Risk Factors*" and other information included in this prospectus for a discussion of factors you should consider before investing in

our securities.

RISK FACTORS

You should carefully review and consider the following risk factors and the other information contained in this prospectus, including our financial statements and notes to the financial statements and the section titled "Management's Discussion and Analysis of Financial Condition and Results of Operations" in this prospectus, before deciding whether to invest in our common stock. We cannot assure you that any of the events discussed below will not occur. These events could have a material and adverse impact on our business, financial condition, results of operations and prospects. Unless otherwise indicated, references to our business being harmed in these risk factors will include harm to our business, reputation, financial condition, results of operations, net revenue and future prospects. In such event, the trading price of our common stock could decline, and you could lose all or part of your investment. We may face additional risks and uncertainties that are not presently known to us, or that we currently deem immaterial, which may also impair our business or financial condition. The following discussion should be read in conjunction with the financial statements and notes to the financial statements included herein.

Risks Related to Our Business, Industry and Operations

The COVID-19 pandemic has affected and may further materially and adversely affect our business and financial results.

The COVID-19 pandemic, together with related precautionary measures, began to materially disrupt our business in April 2020 and may continue to disrupt our business for an unknown period of time. The territories in which we market, sell, distribute and perform our tests and performs our health information and data science services are attempting to address the COVID-19 pandemic in varying ways, including stay-at-home orders, temporarily closing businesses, restricting gatherings, restricting travel, and mandating social distancing and face coverings. Certain jurisdictions have begun re-opening only to return to restrictions due to increases in new COVID-19 cases and the emergence of new variant strains of COVID-19. Even in areas where "stay-at-home" restrictions have been lifted and the number of cases of COVID-19 has declined, many individuals remain cautious about resuming activities such as preventive-care medical visits. Medical practices continue to be cautious about allowing individuals, such as sales representatives, into their offices. Many individuals continue to work from home rather than from an office setting. The level and nature of the disruption caused by COVID-19 is unpredictable, may be cyclical and long-lasting and may vary from location to location, and the emergence of new variant strains of COVID-19 in regions that have reopened has necessitated, and may in the future necessitate, renewed government restrictions. As a result, we experienced a significant impact to our 2020 operating results, including our order volumes, revenues, margins, and cash utilization, among other measures.

Beginning in March 2020, we undertook temporary precautionary measures intended to help minimize the risk of the virus to our employees, including requiring most employees to work remotely; suspending field-based, face-to-face interactions by our sales force; requiring on-site employees to undergo COVID-19 testing, wear personal protective equipment (including face masks or shields) and maintain social distancing; pausing all non-essential travel for our employees; and limiting employee attendance at industry events and in-person work-related meetings, to the extent those events and meetings are continuing. Our current partners also took similar precautions, including suspending face-to-face interactions between sales representatives and healthcare providers.

We expect to adjust our precautionary measures at our various locations based on local recovery levels and applicable governmental regulations. For example, a portion of our sales force has recommenced field-based interactions, although access to healthcare providers remains limited and the resumption of normal activities is expected to be gradual. Our business could be negatively affected if it takes excessive, ineffective or inadequate precautions.

The COVID-19 pandemic has materially impacted our business, and may continue to impact our business for an unknown period of time. Such impacts may include the following:

 Healthcare providers or patients have canceled or delayed scheduling, and for an extended period of time may continue to cancel or delay scheduling, standard wellness visits and other non-emergency appointments and procedures (including oncology and pregnancy-related screenings), contributing to a decline in orders for our products or services;

- · Restrictions on travel, commerce and shipping may prevent patients and pathologists from shipping samples to our clinical laboratories;
- Illnesses, quarantines, financial hardships, restrictions on travel, commerce and shipping, or other consequences of the pandemic, may disrupt our supply chain or other business relationships, and it or other parties may assert rights under force majeure clauses to excuse performance;
- We have experienced, and for an extended period of time may continue to experience, reduced volumes at our clinical laboratories and it may need to suspend operations at some or all of our clinical laboratories;
- We have taken, and may take additional, cost cutting measures, which may hinder our efforts to commercialize our products or delay the development of future products and services. Further, we might not realize all of the cost savings it expects to achieve as a result of those efforts;
- · We and our partners have postponed or cancelled clinical studies, which may delay or prevent our launch of future products and services;
- Our workforce, much of which has been asked to work remotely in an effort to reduce the spread of COVID-19, may be infected by the virus or otherwise distracted;
- A combination of factors, including infection from the virus, supply shortfalls, and inability to obtain or maintain equipment, could adversely affect
 our lab capacity and our ability to meet the demand for our testing services. In addition, in April of 2020 we began offering a COVID-19 test and by
 devoting lab capacity and supplies to that test, we may experience capacity limitations and supply shortfalls that adversely affect our ability to
 provide women's health and oncology testing, and other tests that may generate more revenue and higher profits; and
- We may inaccurately estimate the duration or severity of the COVID-19 pandemic, which could cause us to misalign our staffing, spending, activities and precautionary measures with current or future market conditions.

Despite our efforts, the ultimate impact of COVID-19, or the impact of the emergence of new strains of the virus and any future resurgences of COVID-19 or variant strains, depends on factors beyond our knowledge or control, including the duration and severity of the pandemic, third-party actions taken to contain its spread and mitigate its public health effects and short- and long-term changes in the behaviors of medical professionals and patients resulting from the pandemic.

Additionally, the anticipated economic consequences of the COVID-19 pandemic have adversely impacted financial markets, resulting in high share price volatility, reduced market liquidity, and substantial declines in the market prices of the securities of many publicly traded companies. Volatile or declining markets for equities could adversely affect our ability to raise capital in the future when needed through the sale of shares of common stock or other equity or equity-linked securities. If these market conditions persist when and if we need to raise capital, and if we are able to sell shares of our common stock under then prevailing market conditions, we might have to accept lower prices for our shares and issue a larger number of shares than might have been the case under better market conditions, resulting in significant dilution of the interests of our stockholders.

Due to the high degree of uncertainty regarding the implementation and impact of the CARES Act and other legislation related to COVID-19, there can be no assurance that we will be able to comply with the applicable terms and conditions of the CARES Act and retain such assistance.

On March 27, 2020, the CARES Act was signed into law, aimed at providing emergency assistance and health care for individuals, families, and businesses affected by the COVID-19 pandemic and generally supporting the U.S. economy. The CARES Act, among other things, includes provisions relating to refundable payroll tax credits, deferment of employer social security payments, net operating loss carryback periods, alternative minimum tax credit refunds, and modifications to the net interest deduction limitations. The CARES Act and similar legislation intended to provide assistance related to the COVID-19 pandemic also authorized \$175.0 billion in funding to be

distributed by the U.S. Department of Health and Human Services, or the HHS, to eligible health care providers. This funding, known as the Provider Relief Fund, is designated to fund eligible healthcare providers' healthcare-related expenses or lost revenues attributable to COVID-19. On December 27, 2020, the Consolidated Appropriations Act, 2021 was signed into law, which adds \$3.0 billion to the Provider Relief Fund. Payments from the Provider Relief Fund are subject to certain eligibility criteria, as well as reporting and auditing requirements, but do not need to be repaid to the U.S. government if recipients comply with the applicable terms and conditions.

In 2020, we received \$5.4 million as part of the stimulus, comprised of \$2.6 million received under the Provider Relief Fund, or PRF, distribution and \$2.8 million received under the Employee Retention Credit, or ERC, distribution. During the three months ended March 31, 2021, we received an additional \$5.6 million under the PRF distribution. PRF distributions to healthcare providers are not loans and will not be required to be repaid; however, as a condition to receiving these payments, providers must agree to certain terms and conditions and submit sufficient documentation demonstrating that the funds are being used for healthcare-related expenses or lost revenue attributable to the COVID-19 pandemic. ERC distributions are refundable tax credits for 50% of qualified wages paid to employees during the pandemic. A company is eligible for the ERC if it has not received a Paycheck Protection Program loan under the Cares Act and (1) its operations have been fully or partially suspended because of COVID-19 or (2) its gross receipts in a calendar quarter in 2020 declined by more than 50% from the same period in 2019. At the time of applying for the ERC, we concluded that the eligibility requirements were met. However, subsequent to the filing of the application, our revenue was revised due to a change in estimate as a result of finalizing its accounting records, which impacted the applicable periods and calculations for determining eligibility, and may no longer meet the eligibility requirements. As such, we have deferred the recognition of the ERC distribution and recorded the proceeds in other liabilities on the balance sheets as of December 31, 2020 and March 31, 2021. See Note 2 to our audited financial statements and Note 2 to our unaudited condensed financial statements contained elsewhere in this prospectus.

Due to the high degree of uncertainty regarding the implementation of the CARES Act, the Consolidated Appropriations Act, 2021 and other stimulus legislation, and due to our revenue revisions, there can be no assurance that the terms and conditions of the PRF, ERC or other relief programs will not change or be interpreted in ways that affect our ability to comply with such terms and conditions in the future, which could affect our ability to retain such assistance. We will continue to monitor our compliance with the terms and conditions of the PRF, including demonstrating that the distributions received have been used for healthcare-related expenses or lost revenue attributable to COVID-19, and the ERC. If we are unable to comply with current or future terms and conditions, our ability to retain some or all of the distributions received may be impacted, and we may be subject to actions including payment recoupment, audits and inquiries by governmental authorities, and criminal, civil or administrative penalties.

Other companies or institutions may develop and market novel or improved technologies, which may make our technologies less competitive or obsolete.

We operate in a rapidly evolving and highly competitive industry. There are a number of private and public companies that offer products or services or have announced that they are developing products or services that compete, or may one day compete, with our products or services. Some of our current and potential competitors possess greater brand recognition, financial and other resources and development capabilities than it does. As the fields of genomic analysis and health information become more widely known to the public, we anticipate that competition will further increase. We expect to compete with a broad range of organizations in the U.S. and other countries that are engaged in the development, production and commercialization of genetic screening products, including women's health and oncology screening products, health information services, and analytics, and data science services, and other diagnostic products. These competitors include:

- companies that offer clinical, research and data clinical services, molecular genetic testing and other clinical diagnostics, life science research and drug discovery services, data services and healthcare analytics, and consumer genetics products;
- academic and scientific institutions;

- · governmental agencies; and
- public and private research organizations.

We may be unable to compete effectively against our competitors either because their products and services are superior or because they may have more expertise, experience, financial resources, or stronger business relationships. These competitors may have broader product lines and greater name recognition than we do. Furthermore, we must compete successfully in our existing markets, including women's health and oncology, but also in any new markets it expands into. Even if we do develop new marketable products or services, our current and future competitors may develop products and services that are more commercially attractive than ours, and they may bring those products and services to market earlier or more effectively than it. If we are unable to compete successfully against current or future competitors, we may be unable to increase market acceptance for and sales of our tests and services, which could prevent us from increasing or sustaining our revenues or achieving sustained profitability.

We face intense competition. If we do not continue to innovate and provide products and services that are useful to users, we may not remain competitive, which could harm our business and operating results.

Our business environment is rapidly evolving and intensely competitive. Our businesses face changing technologies, shifting provider and patient needs, and frequent introductions of rival products and services. To compete successfully, we must accurately anticipate technology developments and deliver innovative, relevant and useful products, services, and technologies in a timely manner. As our businesses evolve, the competitive pressure to innovate will encompass a wider range of products and services. We must continue to invest significant resources in research and development, including through acquisitions and collaborations, joint ventures and partnerships, in order to enhance our current diagnostics and health information and data science technologies, and existing and new products and services based off these technologies.

We have many competitors in different industries. Our current and potential domestic and international competitors range from large and established companies to emerging start-ups in addition to academic and scientific institutions, and public and private research organizations. Some competitors have longer operating histories in various sectors. They can use their experience and resources in ways that could affect our competitive position, including by making acquisitions, continuing to invest heavily in research and development and in talent, aggressively initiating intellectual property claims (whether or not meritorious), and continuing to compete aggressively for our customers and partners in the market for health information and data science products and services. Our competitors may be able to innovate and provide products and services faster than we can or may foresee the need for products and services before we do.

Our operating results may also suffer if our products and services are not responsive to the needs of our customers and partners. As technologies continue to develop, our competitors may be able to offer products and services that are, or that are seen to be, substantially similar to or better than our current products and services. This may force us to compete in different ways and expend significant resources in order to remain competitive. If our competitors are more successful than it in developing compelling products and services for or in attracting and retaining customers or partners in the market for health information and data science products and services, our operating results could be harmed.

If third-party payors, including managed care organizations, private health insurers and government health plans, do not provide adequate reimbursement for our tests, or seek to amend or renegotiate their fee reimbursement schedules, or if we are unable to comply with their requirements for reimbursement, our commercial success could be negatively affected.

Our ability to increase the number of billable tests and our revenue therefrom will depend on our success in achieving reimbursement for our tests from third-party payors. Reimbursement by a payor may depend on a number of factors, including a payer's determination that a test is appropriate, medically necessary, cost-effective and has received prior authorization. The commercial success of our current and future products, if approved, will depend on the extent to which our customers receive coverage and adequate reimbursement from third-party payors, including as managed care organizations and government payers (e.g., Medicare and Medicaid).

Since each payer makes its own decision as to whether to establish a policy or enter into a contract to cover our tests, as well as the amount it will reimburse for a test, seeking these approvals is a time-consuming and costly process. In addition, the determination by a payer to cover and the amount it will reimburse for our tests will likely be made on an indication-by-indication basis and may consider our billing practices and reimbursements from other payors and from our patient billing programs. To date, we have obtained policy-level reimbursement approval or contractual reimbursement for some indications for our tests from most of the large commercial third-party payors in the United States, and the Centers for Medicare & Medicaid Services, or CMS, provides reimbursement for our multi-gene tests for hereditary breast and ovarian cancer-related disorders as well as other tests. We believe that establishing adequate reimbursement from Medicare is an important factor in gaining adoption from healthcare providers. Our claims for reimbursement from third-party payors may be denied upon submission, and we must appeal the claims. The appeals process is time consuming and expensive and may not result in payment. In cases where there is not a contracted rate for reimbursement, there is typically a greater coinsurance or copayment requirement from the patient, which may result in further delay or decreased likelihood of collection.

A significant portion of the payments for our tests are paid or reimbursed under insurance programs with third-party payors. To contain reimbursement and utilization rates, third-party payors often attempt to, or do in fact, amend or renegotiate their fee reimbursement schedules. Loss of revenue caused by third-party payor cost containment efforts or an inability to negotiate satisfactory reimbursement rates could have a material adverse effect on our revenue and results of operations.

Furthermore, in cases where we or our partners have established reimbursement rates with third-party payors, we face additional challenges in complying with their procedural requirements for reimbursement. These requirements often vary from payer to payer and are reassessed by third party payors on a regular basis, and we have needed additional time and resources to comply with them. We have also experienced, and may continue to experience, delays in or denials of coverage if it does not adequately comply with these requirements. Our third-party payors have also requested, and in the future may request, audits of the amounts paid to it. We have been required to repay certain amounts to payers as a result of such audits, and we could be adversely affected if we are required to repay other payers for alleged overpayments due to lack of compliance with their reimbursement policies. In addition, we have experienced, and may continue to experience, delays in reimbursement when we transition to being an in-network provider with a payer.

We expect to continue to focus our resources on increasing adoption of, and expanding coverage and reimbursement for, our current tests and any future tests we may develop or acquire. If we fail to expand and maintain broad adoption of, and coverage and reimbursement for, our tests, our ability to generate revenue could be harmed and our future prospects and our business could suffer.

We have limited experience with the development and commercialization of our databases and our health information and genomic platforms.

We have limited experience with the development or commercialization of clinical or research products in connection with the databases it manages and to which it has access, and our Centrellis and Traversa platforms. our partners' usage of an advanced machine learning engine for therapeutic decision-making are at an early stage of development and usage under current and proposed collaborations, and we are continuing to develop new processes that may support the development of new therapeutics applications such as the delivery of personalized clinically actional insights into clinical reports, clinical trial matching, real-world evidence trials, and clinical decision support, via an advanced programmable interface layer. Although our partners have invested significant financial resources to develop and utilize new technologies to support preclinical studies and other early research and development activities, and provide general and administrative support for these operations, our future success is dependent on our current and future partners' ability to successfully derive actionable insights from the database and our platform, and our partners' ability, where applicable, to obtain regulatory approval for new therapeutic solutions based off existing models or to obtain regulatory approval and marketing for, and to successfully commercialize, new therapeutics. The use of our platform and the databases it manages and to which it has access for these purposes will require additional regulatory investments for Centrellis, such as "good practice" quality guidelines and regulations, or GxP, and data quality and integrity controls.

Ethical, legal and social concerns related to the use of genomic medicine and health information analysis could reduce demand for our tests.

Genomic medicine and health information analysis has raised ethical, legal and social issues regarding privacy rights and the appropriate uses of the resulting information. Domestic and international governmental and regulatory authorities could, for social or other purposes, such as data privacy, limit or regulate the use of health information or health information testing or prohibit testing for specific information derived from health information testing, including, for example, data on genetic predisposition to certain conditions, particularly for those that have no known cure. Similarly, these concerns may lead patients to refuse to use, or clinicians to be reluctant to order, genomic tests as part of health information assessment even if permissible, or lead patients to withhold or withdraw consent for our use of their data. These and other ethical, legal and social concerns may limit market acceptance of our tests or services or reduce the potential markets for our tests, or services either of which could have an adverse effect on our business, research, financial condition or results of operations.

If we fail to comply with federal and state laboratory licensing requirements or standards, we could lose the ability to perform our tests or experience disruptions to our business.

We are subject to Clinical Laboratory Improvement Amendments of 1988, or CLIA, a federal law that regulates clinical laboratories that perform testing on specimens derived from humans for the purpose of providing information for the diagnosis, prevention or treatment of disease. CLIA regulations establish specific standards with respect to personnel qualifications, facility administration, proficiency testing, quality control, quality assurance and inspections. CLIA certification is also required in order for us to be eligible to bill state and federal healthcare programs, as well as many private third-party payors, for our tests. We have current CLIA, CAP, and other certifications to conduct our tests at our laboratories in Connecticut. To renew these certifications, we are subject to survey and inspection on a regular basis and at the request of the certifying bodies. Moreover, CLIA inspectors may make random inspections of our clinical reference laboratories.

We would also be required to maintain in-state licenses if we were to conduct testing in other states. Several states require the licensure of out-of-state laboratories that accept specimens from certain states.

In addition to having laboratory licenses in New York, our clinical reference laboratories are approved on test-specific bases for the tests they run as laboratory-developed tests, or LDTs, by the New York State Department of Health, or NYDOH. Other states may adopt similar licensure requirements in the future, which may require us to modify, delay or stop our operations in such jurisdictions. We may also be subject to regulation in foreign jurisdictions as we seek to expand international utilization of our tests or such jurisdictions adopt new licensure requirements, which may require review of our tests in order to offer them or may have other limitations such as restrictions on the transport of samples necessary for us to perform our tests that may limit our ability to make our tests available outside of the United States. Complying with licensure requirements in new jurisdictions may be expensive, time-consuming, and subject us to significant and unanticipated delays.

Failure to comply with applicable clinical laboratory licensure requirements or standards may result in a range of enforcement actions, including license suspension, limitation, or revocation, directed plan of action, onsite monitoring, civil monetary penalties, criminal sanctions, and cancellation of the laboratory's approval to receive Medicare and Medicaid payment for our services, as well as significant adverse publicity. Any sanction imposed under CLIA, its implementing regulations, or state or foreign laws or regulations governing clinical laboratory licensure, or our failure to renew our CLIA certifications, a state or foreign license, or accreditation, could have a material adverse effect on our business, financial condition and results of operations. Even if we were able to bring our laboratory back into compliance, we could incur significant expenses and potentially lose revenue in doing so.

The College of American Pathologists, or CAP, maintains a clinical laboratory accreditation program. CAP asserts that its program is "designed to go well beyond regulatory compliance" and helps laboratories achieve the highest standards of excellence to positively impact patient care. While not required to operate a CLIA-certified laboratory, many private insurers require CAP accreditation as a condition to contracting with clinical laboratories to cover their tests. In addition, some countries outside the United States require CAP accreditation as a condition to permitting clinical laboratories to test samples taken from their citizens. We have CAP accreditations for our

laboratories. Failure to maintain CAP accreditation could have a material adverse effect on the sales of our tests and the results of our operations.

Risks Related to Our Business Model

We rely on highly skilled personnel in a broad array of disciplines and, if we are unable to hire, retain or motivate these individuals, or maintain our corporate culture, we may not be able to maintain the quality of our services or grow effectively.

Our performance, including our research and development programs and laboratory operations, largely depends on our continuing ability to identify, hire, develop, motivate and retain highly skilled personnel for all areas of our organization, including software developers, geneticists, biostatisticians, bioinformaticians, data scientists, certified laboratory directors and technicians and other scientific and technical personnel to process and interpret our tests and related data. In addition, we may need to continue to expand our sales force with qualified and experienced personnel. Competition in our industry for qualified employees is intense, and we may not be able to attract or retain qualified personnel in the future due to the competition for qualified personnel among life science and technology businesses as well as universities and public and private research institutions, particularly in the New York City and the tristate area. Further, we may be unable to obtain the necessary visas for foreign personnel to work in the United States. In addition, our compensation arrangements, such as our equity award programs, may not always be successful in attracting new employees and retaining and motivating our existing employees. If we are not able to attract and retain the necessary personnel to accomplish our business objectives, we may experience constraints that could adversely affect our ability to scale our business, support our research and development efforts and our clinical laboratories. We believe that our corporate culture fosters innovation, creativity and teamwork. However, as our organization grows, we may find it increasingly difficult to maintain the beneficial aspects of our corporate culture. This could negatively impact our ability to retain and attract employees and our future success.

The loss of any member or change in structure of our senior management team could adversely affect our business.

Our success depends in large part upon the skills, experience and performance of members of our executive management team and others in key leadership positions. The efforts of these persons will be critical to us as we continue to develop our technologies and test processes and focus on scaling our business. If we were to lose one or more key executives, including our founder and CEO, Eric Schadt, we may experience difficulties in competing effectively, developing our tests and technologies and implementing our business strategy. Only certain of our executives have employment contracts, and the majority of our employees are at-will, which means that either we or any employee may terminate their employment at any time or in the notice period set forth in an executive's contract. We do not carry key person insurance for any of our executives or employees. In addition, we do not have a long-term retention agreement in place with our CEO. Furthermore, we compete against other leading companies in the diagnostics, health information, and data sciences markets for top talent. If such competitors offer better compensation or opportunities, there is no guarantee that we would be able to retain our key executives.

Our founder and CEO, Eric Schadt, and certain other of our employees have performed, and will continue to perform, duties for or on behalf of Mount Sinai.

Our founder CEO, Eric Schadt, and certain of our other employees continue to perform duties for or on behalf of the Mount Sinai Health System, which refer to together with our related entities as Mount Sinai. In the case of Dr. Schadt, in addition to serving as our CEO and as a director, Dr. Schadt also serves as the Dean for Precision Medicine and a professor at Icahn School of Medicine at Mount Sinai, or ISMMS. We expect Dr. Schadt to continue to devote a substantial amount of time to the obligations of managing a public company while maintaining certain duties for Mount Sinai. Though we do not expect Dr. Schadt's role as a CEO and a director to conflict with his roles at Mount Sinai, there can be no guarantee that such conflicts will not occur in the future.

We may not be able to manage our future growth effectively, which could make it difficult to execute our business strategy.

Our expected future growth could create a strain on our organizational, administrative and operational infrastructure, including data and laboratory operations, quality control, customer service, marketing and sales, and management. We may not be able to maintain the quality of or expected turnaround times for our products or services, or satisfy customer demand as it grows. We may need to continue expanding our sales force to facilitate our growth, and it may have difficulties locating, recruiting, training and retaining sales personnel. Our ability to manage our growth effectively will require us to continue to improve our operational, financial and management controls, as well as our reporting systems and procedures. As we grow, any failure of our controls or interruption of our facilities or systems could have a negative impact on our business and financial operations. We plan to develop and launch new versions of our Centrellis and Traversa platforms and our core diagnostic products, which will affect a broad range of business processes and functional areas. The time and resources required to implement these new systems is uncertain, and failure to complete these activities in a timely and efficient manner could adversely affect our operations. Future growth in our business could also make it difficult for it to maintain our corporate culture. If we are unable to manage our growth effectively, it may be difficult for us to execute our business strategy and our business could be harmed.

We need to scale our infrastructure in advance of demand for our products and services, and our failure to generate sufficient demand for our products and services would have a negative impact on our business and our ability to attain profitability.

Our success depends in large part on our ability to extend our market position, to provide customers with high-quality health reports and health information and data science services in a manner that differentiates us from our competitors, and to deploy technologies and achieve sufficient volumes to realize economies of scale. In order to execute our business model, we intend to continue to invest heavily in order to significantly scale our infrastructure, including our lab infrastructure and testing capacity and our information and computing systems, expand our commercial operations, customer service, billing and systems processes and enhance our internal quality assurance program. We will also need to enhance our capacity for data privacy management as we scale our infrastructure. We expect that much of this growth will be in advance of both demand for our products and services as well as our ability to diversify our offerings, including services related to Centrellis and Traversa and the databases we manage and to which we have access, and our ability to find appropriate partners through collaborations and acquisitions. Our current and future expense levels are to a large extent fixed and are largely based on our investment plans and our estimates of future revenue. Because the timing and amount of revenue from our products and services are difficult to forecast, when revenue does not meet our expectations, we may not be able to adjust our spending promptly or reduce our spending to levels commensurate with our revenue. Even if we are able to successfully scale our infrastructure and operations while successfully diversifying our offering, we cannot assure you that demand for our products and services, including our Centrellis platform, will increase at levels consistent with the growth of our infrastructure. If we fail to generate demand commensurate with this growth or if we fail to scale our infrastructure sufficiently in advance of demand to successfully meet such demand, our business, prospects, financi

International expansion of our business could expose us to business, regulatory, political, operational, financial and economic risks associated with doing business outside of the United States.

When cleared, authorized or approved, we and our collaborators may market, sell, and distribute our products and services outside of the United States, and our business would be subject to risks associated with doing business outside of the United States, including an increase in our expenses and diversion of our management's attention from the development of future products and services. Accordingly, our business and financial results in the future could be adversely affected due to a variety of factors, including:

multiple, conflicting and changing laws and regulations such as privacy, security and data use regulations, tax laws, export and import restrictions, economic sanctions and embargoes, employment laws, anticorruption laws, regulatory requirements, reimbursement or payer regimes and other governmental;

- approvals, permits and licenses;
- failure by us, our collaborators or our distributors to obtain regulatory clearance, authorization or approval for the use of our products and services in various countries;
- additional potentially relevant third-party patent rights;
- · complexities and difficulties in obtaining intellectual property protection and enforcing our intellectual property;
- difficulties in staffing and managing foreign operations;
- complexities associated with managing multiple payer reimbursement regimes, government payers or patient self-pay systems;
- difficulties in negotiating favorable reimbursement negotiations with governmental authorities;
- · logistics and regulations associated with shipping samples, including infrastructure conditions and transportation delays;
- limits in our ability to penetrate international markets if we are not able to conduct our clinical diagnostic services locally;
- financial risks, such as longer payment cycles, difficulty collecting accounts receivable, the impact of local and regional financial crises on demand and payment for our products and services and exposure to foreign currency exchange rate fluctuations;
- · natural disasters, political and economic instability, including wars, terrorism and political unrest, and outbreak of disease;
- · boycotts, curtailment of trade and other business restrictions; and
- regulatory and compliance risks that relate to maintaining accurate information and control over sales and distributors' activities that may fall within the purview of the Foreign Corrupt Practices Act of 1977, or FCPA, its books and records provisions, or its anti-bribery provisions or laws similar to the FCPA in other jurisdictions in which we may in the future operate, such as the United Kingdom's Bribery Act of 2010 and anti-bribery requirements of member states in the European Union, or EU.

Any of these factors could significantly harm our future international expansion and operations and, consequently, our revenue and results of operations.

Unfavorable U.S. or global economic conditions could adversely affect our business, financial condition or results of operations.

Our results of operations could be adversely affected by general conditions in the global economy and financial markets. A severe or prolonged economic downturn could result in a variety of risks to our business, including weakened demand for our products and services and our ability to raise additional capital when needed on favorable terms, if at all. A weak or declining economy could strain our collaborators and suppliers, possibly resulting in supply disruption, or cause delays in their payments to us. Any of the foregoing could harm our business and we cannot anticipate all of the ways in which the current economic climate and financial market conditions could adversely impact our business.

We rely on a limited number of suppliers or, in some cases, single suppliers, for some of our laboratory instruments and materials and may not be able to find replacements or immediately transition to alternative suppliers or service providers.

We have sourced and will continue to source components of our diagnostic testing workflow, including sequencers and other laboratory equipment, reagents, lab supplies and other laboratory services and materials and related services, from third parties.

Our failure to maintain a continued supply of our sequencers and other laboratory equipment, reagents, lab supplies and other laboratory services and materials, along with the right to use certain hardware and software and related services, would adversely impact our business, financial condition, and results of operations. In particular, while we are seeking to validate our tests on additional sequencing platforms we have not, to date, validated viable alternative sequencing platform on which our testing could be run in a commercially viable manner. These efforts will require significant resources, expenditures and time and attention of management, and there is no guarantee that we will be successful in implementing any such sequencing platforms in a commercially sustainable way. We also cannot guarantee that we will appropriately prioritize or select alternative sequencing platforms on which to focus our efforts, in particular given our limited product and research and development resources and various business initiatives, which could result in increased costs and delayed timelines or otherwise adversely impact our business and results of operations.

Because we rely on third-party manufacturers, we do not control the manufacture of these components, including whether such components will meet our quality control requirements, nor the ability of our suppliers to comply with applicable legal and regulatory requirements. In many cases, our suppliers are not contractually required to supply these components to the quality or performance standards that we require. If the supply of components we receive does not meet our quality control or performance standards, we may not be able to use the components, or if we use them not knowing that they are of inadequate quality, which occasionally occurs with respect to certain reagents, our tests may not work properly or at all, or may provide erroneous results, and we may be subject to significant delays caused by interruption in production or manufacturing or to lost revenue from such interruption or from spoiled tests. In addition, any natural or other disaster, acts of war or terrorism, shipping embargoes, labor unrest, political instability, outbreak of disease or similar events at our third-party manufacturers' facilities that cause a loss of manufacturing capacity would heighten the risks that it faces.

In the event of any adverse developments with our sole suppliers, or if any of our sole suppliers modifies any of the components they supply to us, our ability to supply our products may be interrupted, and obtaining substitute components could be difficult or require us to re-design or re-validate our products. Our failure to maintain a continued supply of components, or a supply that meets our quality control requirements, or changes to or termination of our agreements or inability to renew our agreements with these parties or enter into new agreements with other suppliers could result in the loss of access to important components of our tests and impact our test performance or affect our ability to perform our tests in a timely manner or at all, which could impair, delay or suspend our commercialization activities. In the event that we transition to a new supplier from any of our sole suppliers, doing so could be time-consuming and expensive, may result in interruptions in our ability to supply our products to the market, could affect the performance of our tests or could require that we re-validate our affected tests using replacement equipment and supplies, which could delay the performance of our tests, impact diagnostic solutions and heath information derived from such tests, and result in increased costs. Any of these occurrences could have a material adverse effect on our business, financial condition and results of operations.

We rely on a limited number of product and service providers for data infrastructure and analytics capabilities, and any disruption of, or interference with, our use of data and workflow services could adversely affect our business, financial condition, and results of operations, and we may not be able to find replacements or immediately transition to alternative products or service providers.

We currently rely upon third-party services for data storage and workflow management, including cloud storage solution providers, such as Amazon Web Services, or AWS, and Google Cloud Platform, or GCP. We rely on each of AWS and GCP features to complete several vital workflows in our health information and data science service delivery. To varying degrees some of those services are proprietary to how each platform performs in connection

with our current usage of the services. Further, we have also built several proprietary workflows with our vendor and partner Command Health where we maintains versions of developed software on such platforms.

Nearly all of our data storage and analytics are conducted on, and the data and content we generate on our platforms are processed through, servers hosted by these providers, particularly AWS and GCP. We also rely on email service providers, bandwidth providers, internet service providers and mobile networks to deliver communications to patients, physicians and partners and to allow patients, physicians and our partners to access various offerings from our platforms. If our third-party vendors are unable or unwilling to provide the services necessary to support our business, or if our agreements with such vendors are terminated, our operations could be significantly disrupted. Some of our vendor agreements may be unilaterally terminated by the licensor for convenience, including with respect to AWS or GCP, and if such agreements are terminated, we may not be able to enter into similar relationships in the future on reasonable terms or at all.

Any damage to, or failure of, our systems or the systems of our third-party data centers or our other third-party providers could result in interruptions to the availability or functionality of database and platforms. As a result, we could lose health information data and miss opportunities to acquire and retain patients, physicians and partners including health systems and pharmaceutical and biotech companies, which could result in decreased revenue. If for any reason our arrangements with our data centers or third-party providers are terminated or interrupted, such termination or interruption could adversely affect our business, financial condition and results of operations. We exercise little control over these providers, which increases our vulnerability to problems with the services they provide. We could incur additional expense in arranging for new or redesigned facilities, technology, services and support. In addition, the failure of our third-party data centers or any other third-party providers to meet our capacity needs or any system failure as a result of reliance on third parties, including network, software or hardware failure, which causes a delay or interruption in our services and products, including our ability to handle existing or increased processing of data on our platforms, could have a material adverse effect on our business, revenues, operating results and financial condition.

Our current and future products and services may never achieve significant commercial market acceptance.

Our success depends on the market's confidence that we can provide data-driven research and diagnostic products and services that improve clinical outcomes, lower healthcare costs and enable better product development by pharmaceutical and biotech, or Biopharma, companies. Failure of our products and services, or those jointly developed with our collaborators, to perform as expected or to be updated to meet market demands could significantly impair our operating results and our reputation. We believe patients, health systems, clinicians, academic institutions and Biopharma companies are likely to be particularly sensitive to defects, errors, inaccuracies and delays with our products and services. Furthermore, inadequate performance of these products or services may result in lower confidence in our Centrellis platform in general.

We and our collaborators may not succeed in achieving significant commercial market acceptance for our current or future products and services due to a number of factors, including:

- Our ability to demonstrate the utility of our platforms including Centrellis and Traversa, and related products and services and their potential advantages over existing clinical AI technology, life sciences research, clinical diagnostic and drug discovery technologies to academic institutions, Biopharma companies and the medical community;
- Our ability, and that of our collaborators, to perform clinical trials or other research to gather adequate evidence and/or to secure and maintain FDA
 and other regulatory clearance authorization or approval for our products or products developed based off our platform;
- the agreement by third-party payors to reimburse our products or services, the scope and extent of which will affect patients' willingness or ability to pay for our products or services and will likely heavily influence physicians' decisions to recommend our products or services;
- the rate of adoption of our platforms and related products and services by academic institutions, clinicians, patients, key opinion leaders, advocacy groups and Biopharma companies; and

· the impact of our investments in product and services, and technological innovation and commercial growth.

Additionally, our customers and collaborators, including Mount Sinai, may decide to decrease or discontinue their use of our products and services due to changes in their research and development plans, failures in their clinical trials, financial constraints, the regulatory environment, negative publicity about our products and services, competing products or the reimbursement landscape, all of which are circumstances outside of our control. We may not be successful in addressing these or other factors that might affect the market acceptance of our products, services and technologies. Failure to achieve widespread market acceptance of our platform and related products and services would materially harm our business, financial condition and results of operations.

Our projections are subject to significant risks, assumptions, estimates and uncertainties, including assumptions regarding adoption of our products and services. As a result, our projected revenues, market share, expenses and profitability may differ materially from our expectations in any given quarter or fiscal year.

We operate in rapidly changing and competitive industries and our projections are subject to the risks and assumptions made by our management with respect to these industries. Operating results are difficult to forecast as they generally depend on our assessment of the timing of adoption of our current and future products and services, which is uncertain. Furthermore, as we invest in the continued development of new businesses that have yet to achieve significant commercial success, whether because of competition or otherwise, we may not recover the often substantial up-front costs of developing and marketing those products and services or recover the opportunity cost of diverting management and financial resources away from other products or services. Additionally, our business may be affected by reductions in customer or partner demand as a result of a number of factors which may be difficult to predict. Similarly, our assumptions and expectations with respect to margins and the pricing of our products and services may not prove to be accurate as a result of competitive pressures or customer or partner demands. This may result in decreased revenue, and we may be unable to adopt measures in a timely manner to compensate for any unexpected shortfall in revenue. This inability could cause our operating results in a given quarter or year to be higher or lower than expected. Any failure to achieve our projected operating results could harm the trading price of our securities and our financial position.

We have estimated the sizes of the markets for our current and future products and services, and these markets may be smaller than we estimate.

Our estimates of the annual addressable markets for our current products and services and those under development are based on a number of internal and third-party estimates, including, without limitation, the number of patients who have developed one or more of a broad range of cancers, the number of individuals who are at a higher risk for developing one or more of a broad range of cancers, the number of individuals who have developed or are at a higher risk of developing certain disorders, the number of individuals with certain infectious diseases. The estimates also depend on whether we or our collaborators are able to engage, diagnose or treat patients through or using our products and services, the number of potential clinical tests utilized per treatment course per patient, the ongoing engagement by patients, physicians and health systems on our platforms, and the assumed prices at which we can sell our current and future products and services for markets that have not been established. While we believe our assumptions and the data underlying our estimates are reasonable, these assumptions and estimates may not be correct and the conditions supporting our assumptions or estimates may change at any time, thereby reducing the predictive accuracy of these underlying factors. As a result, our estimates of the annual addressable market for our current or future products and services may prove to be incorrect. If the actual number of patients who would benefit from our products or services, the price at which we can sell future products and services or the annual addressable market for our products or services is smaller than we have estimated, it may impair our sales growth and have an adverse impact on our business.

Uncertainty in the development and commercialization of our enhanced or new tests or services could materially adversely affect our business, financial condition and results of operations.

Our success will depend in part on our ability to effectively introduce enhanced or new offerings. The focus of our research and development efforts has expanded beyond our current products and services, focused substantially

on women's health and oncology, as we are now also applying our expertise in processing and analyzing new areas, such as rare diseases. In recent years we have developed and/or launched several new products or enhanced versions of existing products, including products leveraging alternative sequencing technologies, and we expect to continue our efforts in all of these areas and more. The development and launch of enhanced or new tests requires the completion of certain clinical development and commercialization activities that are complex, costly, time-intensive and uncertain, and requires us to accurately anticipate patients', clinicians', payors' and other counterparties' attitudes and needs as well as emerging technology and industry trends. This process is conducted in various stages, and each stage presents the risk that we will not achieve our goals.

We have relatively limited experience developing and commercializing products and services outside of the fields of women's health and oncology diagnostics, and we may not be successful in our current or future efforts to do so. We also have limited experience forecasting our future financial performance from our new products and services, and our actual results may fall below our financial guidance or other projections, or the expectations of analysts or investors, which could cause the price of our common stock and warrants to decline. We may experience research and development, regulatory, marketing and other difficulties that could delay or prevent our introduction of enhanced or new tests and result in increased costs and the diversion of management's attention and resources from other business matters, such as from our current product and service offerings, which currently represent the significant majority of our current revenues. For example, any tests that we may enhance or develop may not prove to be clinically effective in clinical trials or commercially, or may not meet our desired target product profile, be offered at acceptable cost and with the sensitivity, specificity and other test performance metrics necessary to address the relevant clinical need or commercial opportunity; our test performance in commercial experience may be inconsistent with our validation or other clinical data; we may not be successful in achieving market awareness and demand, whether through our own sales and marketing operations or through collaborative arrangements; healthcare providers may not order or use, or third-party payors may not reimburse for, any tests that we may enhance or develop; or we may otherwise have to abandon a test or service in which we have invested substantial resources. For example, we are subject to the risk that the biological characteristics of the genetic mutations we seek to target, and upon which our technologies rely, are uncertain and difficult to predict. We may also experience unforese

We cannot assure you that we can successfully complete the development of any new or enhanced product, or that we can establish or maintain the collaborative relationships that may be essential to our collaborators' goals, including clinical development or commercialization efforts. For example, clinical development requires large numbers of patient specimens and, for certain products, may require large, prospective, and controlled clinical trials. We may not be able to identify and help enroll patients or collect a sufficient amount of appropriate health data in a timely manner; or we may experience delays during data analysis process due to slower than anticipated supplies of patient data, or due to changes in study design or inputs, or other unforeseen circumstances; or we or our collaborators may be unable to afford or manage the large-sized clinical trials that some of our planned future products may require. Further, the publication of clinical data in peer-reviewed journals is a crucial step in commercializing and obtaining reimbursement for certain diagnostic solutions such as the ones offered by us, and our inability to control when, if ever, results are published may delay or limit our ability to derive sufficient revenues from any diagnostic solution that is the subject of or component in a study. Peer-reviewed publications regarding our products may be limited by many factors, including delays in the completion of, poor design of, or lack of compelling data from, clinical studies, as well as delays in the review, acceptance and publication process. If our diagnostic solutions or the technology underlying our current and future diagnostic solutions do not receive sufficient favorable exposure in peer-reviewed publications, the rate of clinician adoption of our diagnostic solutions and positive reimbursement coverage determinations for our diagnostic solutions could be negatively affected.

In addition, development of the data necessary to obtain regulatory clearance and approval of tests is time-consuming and carries with it the risk of not yielding the desired results. The performance achieved in published studies may not be repeated in later studies that may be required to obtain premarket clearance or approval from the Food and Drug Administration, or FDA. Limited results from earlier-stage verification studies may not predict results from studies in larger numbers of subjects drawn from more diverse populations over longer periods of time. Unfavorable results from ongoing preclinical and clinical studies may delay, limit or prevent regulatory approvals or clearances or commercialization of our product candidates, or could result in delays, modifications or abandonment

of ongoing analytical or future clinical studies, or abandonment of a product development program, any of which could have a material adverse effect on our business, operating results or financial condition.

These and other factors beyond our control could result in delays or other difficulties in the research and development, approval, production, launch, marketing or distribution of enhanced or new tests and could adversely affect our competitive position and results of operations.

We currently use, and in the future expect to increase our use of, information and rights from customers, strategic partners, and collaborators for several aspects of our operations, and if we cannot maintain current and enter new relationships with these parties with adequate access and authorization to such information, our business will suffer.

Accessing, combining, curating, and analyzing health information, including longitudinal patient medical history data and genetic data, are core features of the Centrellis platform and key elements of our long term business model. The regulatory landscape around the storage, processing and deidentification of genetic data is evolving globally and greatly impacts the ability of us, our strategic partners and collaborators to process and use the data in connection with our products and services.

We have limited resources to conduct our health information services, data analysis, life sciences research, clinical diagnostics and drug discovery operations and have not yet fully established infrastructure for sales, marketing or distribution in connection with our products and services. Accordingly, we have entered into service and collaboration agreements under which our partners, including health systems, have provided, and may in the future provide, funding, data access, and other resources for developing and potentially commercializing our products and services. These collaborations may result in us incurring significant expenses in pursuit of potential products and services, and we may not be successful in identifying, developing or commercializing any potential products or services.

Our future success depends in part on our ability to maintain and grow our existing relationships, including with Mount Sinai, and to establish new relationships. Many factors may impact the success of such collaborations, including our ability to perform our obligations, our collaborators' satisfaction with our products and services, our collaborators' performance of their obligations to us, our collaborators' internal priorities, resource allocation decisions and competitive opportunities, the ability to obtain regulatory approvals, disagreements with collaborators, the costs required of either party to the collaboration and related financing needs, and operating, legal and other risks in any relevant jurisdiction. Our ability to support such collaborations may also depend on factors outside of our control including the willingness of patients to engage with us and share their data, societal perspectives on privacy, and the willingness of health systems to establish collaborations, relationships and programs utilizing their data, all of which may impact the utility of these databases and the insights we will be able to generate from expanding datasets. In addition to reducing our revenue or delaying the development of our future products and services, the loss of one or more of these relationships may reduce our access to research, longitudinal patient health data, clinical trials or computing technologies that facilitate the collection and incorporation of new information into the databases we manage and to which we have access. All of the risks relating to product and service development, regulatory clearance, authorization or approval and commercialization described herein apply to us derivatively through the activities of our collaborators. We engage in conversations with companies regarding potential collaborations on an ongoing basis. These conversations may not result in a commercial agreement. Even if an agreement is reached, the resulting relationship may not be successful, and any products and servi

If our products and services do not perform as expected, we may not realize the expected benefits of such products and services.

The success of our products depends on the market's confidence that we can provide reliable products and services that enable high quality diagnostic testing and health information services with high sensitivity and

specificity and short turnaround times. There is no guarantee that the accuracy and reproducibility we have demonstrated to date will continue as our product deliveries increase and our product and service portfolio expands.

Our products and services use a number of complex and sophisticated biochemical and bioinformatics processes, many of which are highly sensitive to external factors. An operational, technological or other failure in one of these complex processes or fluctuations in external variables may result in sensitivity or specificity rates that are lower than we anticipate or result in longer than expected turnaround times. In addition, labs are required to validate their processes before using our products for clinical purposes. These validations are outside of our control. If our products do not perform, or are perceived to not have performed, as expected or favorably in it to competitive products, our operating results, reputation, and business will suffer, and we may also be subject to legal claims arising from product limitations, errors, or inaccuracies.

If our sales and development or other collaborations and commercial relationships are not successful and we are not able to offset the resulting impact through our own efforts or through agreements with new partners, our commercialization activities may be impaired and our financial results could be adversely affected.

Part of our business strategy is to develop relationships with health systems, biopharma companies, and other partners to utilize our products and to provide access to data. Developing and commercializing products with third parties reduces our control over such development and commercialization efforts and subjects us to the various risks inherent in a joint effort with a third party, such as delays, operational issues, technical difficulties and other contingencies outside of our influence or control. The financial condition of these third parties could weaken, or they could terminate their relationship with us and/or stop sharing data or other information; reduce their marketing efforts relating to our products; develop and commercialize, or otherwise utilize competing products in addition to or in lieu of our tests; merge with or be acquired by a competitor of us or a company that chooses to de-prioritize the efforts to utilize our products or provide us with adequate data; or otherwise breach their agreements with us. Further, we must expend resources to operationalize our existing collaborations with our health system partners, which requires substantial effort in areas such as integrations for testing workflow, EMR, consents, marketing, and billing. To the extent, we are not successful at operationalizing existing collaborations with health partners, we may not be able to further improve or pursue new agreements with additional partners. Furthermore, our partners may misappropriate our trade secrets or use our proprietary information in such a way as to expose us to litigation and potential liability; and our compliance risk may increase to the extent that we are responsible for our partners' activities. Disagreements or disputes with our health systems and other partners, including disagreements over customers, proprietary or other rights or our or their compliance with financial or other contractual obligations, might cause delays or impair the development or commercialization of our products, services, and technologies, lead to additional responsibilities for us with respect to new products, services and technologies, or result in litigation or arbitration, any of which would divert management attention and resources and be time-consuming and expensive. As is typical for companies in our industry, it is continually evaluating and pursuing various strategic or commercial relationships, some of which may involve the sale and issuance of our common stock, which could result in additional dilution of the percentage ownership of our stockholders and could cause the price of our common stock and warrants to decline.

If our relationships are not successful, our ability to develop and improve of products, services and technologies, and to successfully execute our commercial strategy regarding such products, services and technologies, could be compromised.

If we are unable to deploy and maintain effective sales, marketing and medical affairs capabilities, we will have difficulty achieving market awareness and selling our products and services.

To achieve commercial success for our tests and our future products and services, we must continue to develop and grow our sales, marketing and medical affairs organizations to effectively explain to healthcare providers the reliability, effectiveness and benefits of our current and future products and services as compared to alternatives. We may not be able to successfully manage our dispersed or inside sales forces or our sales force may not be effective. Because of the competition for their services, we may be unable to hire, partner with or retain additional qualified sales representatives or marketing or medical affairs personnel, either as our employees or independent contractors or through independent sales or other third-party organizations. Market competition for commercial, marketing and

medical affairs talent is significant, and we may not be able to hire or retain such talent on commercially reasonable terms, if at all.

Establishing and maintaining sales, marketing and medical affairs capabilities will be expensive and time-consuming. Our expenses associated with maintaining our sales force may be disproportionate to the revenues we may be able to generate on sales of the certain tests or any future products or services.

We may never become profitable.

Sema4 has incurred losses since Sema4 was formed and we expect to continue to generate significant operating losses for the foreseeable future. As of December 31, 2020 and March 31, 2021, we have an accumulated deficit of approximately \$330.1 million and \$521.0 million, respectively. We expect to continue investing significantly toward development and commercialization of our health information technology and other products and services. If our revenue does not grow significantly, we will not be profitable. We cannot be certain that the revenue from the sale of any products or services based on our technologies will be sufficient to make us profitable.

Our operating results could be subject to significant fluctuation, which could increase the volatility of our stock and warrant price and cause losses to our stockholders.

Our revenues and results of operations may fluctuate significantly, depending on a variety of factors, including the following:

- our success in marketing and selling, and changes in demand for, our tests, and the level of reimbursement and collection obtained for such tests;
- seasonal and environmental variations affecting healthcare provider recommendations for our tests and patient compliance with healthcare provider recommendations, including without limitation holidays, weather events, and circumstances such as the outbreak of coronavirus or influenza that may limit patient access to medical practices for diagnostic tests and preventive services;
- our success in collecting payments from third-party payors, patients and collaborative partners, variation in the timing of these payments and recognition of these payments as revenues;
- the pricing of our tests, including potential changes in CMS or other reimbursement rates;
- circumstances affecting our ability to provide our tests, including weather events, supply shortages, or regulatory or other circumstances that adversely affect our ability to manufacture our tests or process tests in our clinical laboratories;
- circumstances affecting our ability to provide health information and data science services to biopharma partners, including software or hardware failures, insufficient capacity, regulatory changes or other circumstances that adversely affect the ability of us to deliver these services;
- fluctuations in the amount and timing of our selling and marketing costs and our ability to manage costs and expenses and effectively implement our business;
- our research and development activities, including the timing of clinical trials; and
- our ability to collect, use, and commercialize data in a changing regulatory environment at a time when the public is growing increasingly concerned about privacy.

Our revenue growth rate could decline over time, and it may experience downward pressure on our operating margins in the future.

Our revenue growth rate could decline over time as a result of a number of factors, including increasing competition and the continued expansion of our business into a variety of new fields. Changes in geographic mix and product and service mix and an increasing competition for tests may also affect our revenue growth rate. We

may also experience a decline in our revenue growth rate as our revenues increase to higher levels, if there is a decrease in the rate of adoption of our products, services, and technologies, among other factors.

In addition to a decline in our revenue growth rate, we may also experience downward pressure on our gross operating margins resulting from a variety of factors, such as the continued expansion of our business into new fields, including new products and services, as well as significant investments in new areas, all of which may have margins lower than those that we generate from testing. We may also experience downward pressure on our gross operating margins from increasing competition and increased costs for many aspects of our business. We may also pay increased fees to our partners as well as increased acquisition costs. We may also face an increase in infrastructure costs, supporting other businesses. Additionally, our expenditures to promote new products and services or to distribute certain products and services or increased investment in our innovation efforts across our Centrellis platform may affect our operating margins.

Due to these factors and the evolving nature of our business, our historical projected revenue growth rate and historical gross operating margins may not be indicative of our future performance.

We may need to raise additional capital to fund our existing operations, develop additional products and services, commercialize new products and services or expand our operations.

Sema4 has incurred net losses and negative cash flows from operations since its inception, including net losses of \$241.3 million, \$29.7 million and \$23.9 million for the years ended December 31, 2020, 2019 and 2018, respectively, and net losses of \$191.0 million and \$27.0 million for the three months ended March 31, 2021 and 2020, respectively. As of March 31, 2021, we had an accumulated deficit of \$521.0 million. We expect to continue to generate significant operating losses for the foreseeable future, and we may therefore also seek to sell common or preferred equity or convertible debt securities, enter into a credit facility or another form of third-party funding or seek other debt financing.

We may also consider raising additional capital in the future to expand our business, to pursue strategic investments, to take advantage of financing opportunities or for other reasons, including to:

- · increase our sales and marketing efforts to drive market adoption of our current and future products and services;
- fund development efforts for our current and future products and services;
- expand our products and services into other disease indications and clinical applications;
- · acquire, license or invest in technologies;
- · acquire or invest in complementary businesses or assets; and
- finance capital expenditures and general and administrative expenses.

Our present and future funding requirements will depend on many factors, including:

- · our ability to achieve revenue growth;
- our rate of progress in establishing payer coverage and reimbursement arrangements with commercial third-party payors and government payers;
- · the cost of expanding our laboratory operations and offerings, including our sales and marketing efforts;
- · our rate of progress in, and cost of the sales and marketing activities associated with, establishing adoption of our Centrellis solution;
- our rate of progress in, and cost of research and development activities associated with, products and services in research and early development;

- the effect of competing technological, product and market developments;
- costs related to international expansion; and
- the potential cost of and delays in product development as a result of any regulatory oversight applicable to our products and services.

The various ways we could raise additional capital carry potential risks. If we raise funds by issuing equity securities, dilution to our stockholders could result. Any preferred equity securities issued also could provide for rights, preferences or privileges senior to those of holders of our common stock. If we raise funds by issuing debt securities, those debt securities would have rights, preferences and privileges senior to those of holders of our common stock. The terms of debt securities issued or borrowings pursuant to a credit agreement could impose significant restrictions on our operations. If we raise funds through collaborations and licensing arrangements, we might be required to relinquish significant rights to our technologies or products and services or grant licenses on terms that are not favorable to us.

We expect to make significant investments in our continued research and development of new products and services, which may not be successful.

We are seeking to leverage and deploy our Centrellis and Traversa platforms to develop a pipeline of future disease-specific research, diagnostic and therapeutic products and services. For example, we are attempting to extend current products into additional indications and sample types, and we are developing our population health program, and our pharmacogenomics solutions with a view toward advancing the development of tests designed to identify genetic variants for drug response that are associated with medically actionable and clinically relevant data to make more informed treatment decisions. We expect to incur significant expenses to advance these development efforts, but they may not be successful.

Developing new products and services is a speculative and risky endeavor. Products or services that initially show promise may fail to achieve the desired results or may not achieve acceptable levels of analytical accuracy or clinical utility. We may need to alter our products in development and repeat analysis or clinical studies before we identify a potentially successful product or service. Product development is expensive, may take years to complete and can have uncertain outcomes. Failure can occur at any stage of the development. If, after development, a product or service appears successful, we or our collaborators may, depending on the nature of the product or service, still need to obtain FDA and other regulatory clearances, authorizations or approvals before we can market it. In the case of clinical products, the FDA's clearance, authorization or approval pathways are likely to involve significant time, as well as additional research, development and clinical study expenditures. The FDA may not clear, authorize or approve any future product or service we develop. Even if we develop a product or service that receives regulatory clearance, authorization or approval, or succeeds in initial product testing, we or our collaborators would need to commit substantial resources to commercialize, sell and market it before it could be profitable, and the product or service may never be commercially successful. Additionally, development of any product or service may be disrupted or made less viable by the development of competing products or services.

New potential products and services may fail at any stage of development or recalled after commercialization and if we determine that any of our current or future products or services are unlikely to succeed, we may abandon them without any return on our investment. If we are unsuccessful in developing additional products or services, our potential for growth may be impaired.

We have identified material weaknesses, some of which have a pervasive effect across the organization, and may identify additional material weaknesses or significant deficiencies, in our internal controls over financial reporting. Our failure to remedy these matters could result in a material misstatement of our financial statements.

In the course of preparing Sema4's financial statements for 2020, 2019 and 2018, we identified material weaknesses in our internal control over financial reporting which could, if not remediated, result in material misstatements in our financial statements. A material weakness is a deficiency, or combination of deficiencies, in internal control over financial reporting, such that there is a reasonable possibility that a material misstatement of the annual or interim financial statements will not be prevented or detected on a timely basis. The material weaknesses

identified related to the fact that we did not design and maintain accounting policies, procedures and controls to ensure complete, accurate and timely financial reporting in accordance with U.S. GAAP. Specifically, the material weaknesses identified included the following:

- We did not design and maintain accounting policies, processes and controls to analyze, account for and report our revenue arrangements in accordance with ASC 606, Revenue from Contracts with Customers, and ASC 605, Revenue Recognition.
- We did not design and maintain formal accounting policies, procedures and controls to achieve complete, accurate and timely financial accounting, reporting and disclosures, including controls over the preparation and review of account reconciliations and journal entries; the accounting for cost capitalization policies in accordance with ASC 330, Inventory, and ASC 350-40, Intangibles Goodwill and Other Internal-Use Software; and the application of ASC 840, Leases.
- We had not developed and effectively communicated to our employees our accounting policies and procedures, which resulted in inconsistent
 practices. Since these entity level programs have a pervasive effect across the organization, management has determined that these circumstances
 constitute a material weakness.
- Our accounting and operating systems lacked controls over access, and program change management that are needed to ensure access to financial data is adequately restricted to appropriate personnel.
- We do not have sufficient, qualified finance and accounting staff with the appropriate U.S. GAAP technical accounting expertise to identify, evaluate
 and account for accounting and financial reporting, and effectively design and implement systems and processes that allow for the timely production
 of accurate financial information in accordance with internal financial reporting timelines, commensurate with our size and the nature and complexity
 of our operations. As a result, we did not design and maintain formal accounting policies, processes and controls related to complex transactions
 necessary for an effective financial reporting process.

Our management is in the process of implementing a remediation plan that is expected to include policies and procedures to support internal control over financial reporting for a public company as well as supplementing the accounting and finance function with robust technical accounting and financial reporting experience and training. However, we cannot guarantee that the steps we have taken or may subsequently take have been or will be sufficient to remediate the material weaknesses or ensure that our internal controls are effective. For a discussion of our remediation plan and actions, see the section titled "Management's Discussion and Analysis of Financial Condition and Results of Operations—Internal Controls."

In addition, prior to the consummation of the Business Combination, following the issuance of the SEC Statement (as defined below), on April 12, 2021, after consultation with CMLS's prior independent registered public accounting firm, CMLS's management and CMLS's audit committee concluded that, in light of the SEC Statement, it was appropriate to restate CMLS's previously issued audited financial statements as of and for the period ended December 31, 2020 (the "Restatement"). See "—Risks Related to Our Common Stock and Warrants—Our warrants are accounted for as liabilities and the changes in value of our warrants could have a material effect on our financial results." As part of such process, CMLS identified a material weakness in CMLS's internal controls over financial reporting.

Furthermore, as a public company, we are required to comply with certain rules and requirements related to our disclosure controls and procedures and our internal control over financial reporting. Any failure to develop or maintain effective controls as a public company, or any difficulties encountered in their implementation or improvement, could harm our operating results or cause us to fail to meet our reporting obligations and may result in a restatement of our financial statements for prior periods. For more information, see "<u>Risk Factors—Risks Related to Being a Public Company—Our internal controls over financial reporting may not be effective and our independent registered public accounting firm may not be able to certify as to their effectiveness, which could have a significant and adverse effect on our business and reputation."</u>

Our ability to use our net operating loss carry forwards and certain other tax attributes may be limited.

At December 31, 2020, our total gross deferred tax assets were \$61.4million. Due to our lack of earnings history, future deductible temporary differences related to compensation and uncertainties surrounding our ability to generate future taxable income, our net deferred tax assets have been fully offset by a valuation allowance. The deferred tax assets are primarily comprised of federal and state tax net operating losses and tax credit carryforwards, and tax deductible temporary differences.

Furthermore, under Section 382 of the Internal Revenue Code of 1986, as amended, or the Internal Revenue Code, if a corporation undergoes an "ownership change," the corporation's ability to use its pre-change net operating loss carryforwards, or NOLs, and other pre-change tax attributes (such as research tax credits) to offset its future taxable income may be limited. In general, an "ownership change" occurs if there is a cumulative change in its ownership by "5% shareholders" that exceeds 50 percentage points over a rolling three-year period. Our existing NOLs and tax credit carryovers may be subject to limitations arising from previous ownership changes, and if we undergo one or more ownership changes in connection with completed acquisitions, including the Business Combination, or future transactions in our stock, our ability to utilize NOLs and tax credit carryovers could be further limited by Section 382 of the Internal Revenue Code. As a result, if we earn future taxable income, our ability to use our pre-change net operating loss and tax credit carryforwards to offset U.S. federal taxable income may be subject to limitations, which could potentially result in increased future tax liability to us. In addition, the Tax Cuts and Jobs Act limits the deduction for NOLs to 80% of current year taxable income and eliminates NOL carrybacks. Further, there may also be periods during which the use of NOLs is suspended or otherwise limited, which could accelerate or permanently increase state liability.

Risks Related to Our Key Relationships

We rely on third-party laboratories to perform certain elements of our service offerings.

A limited but meaningful portion of our genomic analysis services is performed by third-party laboratories and service providers, while the remaining portion is performed in our laboratories. The third-party laboratories are subject to contractual obligations to perform these services for us, but are not otherwise under our control. We therefore do not control the capacity and quality control efforts of these third-party laboratories other than through our ability to enforce contractual obligations on volume and quality systems, and we have no control over such laboratories' compliance with applicable legal and regulatory requirements. We also have no control over the timeliness of such laboratories' performance of their obligations to us, and the third-party laboratories that we have contracted with have in the past had, and occasionally continue to have, issues with delivering results to us or resolving issues with us within the time frames we expected or established in our contracts with them, which sometimes results in longer than expected turnaround times for, or negatively impacts the performance of, these tests and services. In the event of any adverse developments with these third-party laboratories or their ability to perform their obligations in a timely manner and in accordance with the standards that we and our customers expect, our ability to service customers may be delayed, interrupted or otherwise adversely affected, which could result in a loss of customers and harm to our reputation. Furthermore, when these issues arise, we have had to expend time, management's attention and other resources to address and remedy such issues.

We may not have sufficient alternative backup if one or more of the third-party laboratories that we contract with are unable to satisfy their obligations to us with sufficient performance, quality and timeliness, including as a result of the COVID-19 pandemic. Any natural or other disaster, acts of war or terrorism, shipping embargoes, labor unrest, political instability, outbreaks of disease or similar events at one or more of these third-party laboratories' facilities that causes a loss of capacity would heighten the risks that we face. Changes to or termination of agreements or inability to renew agreements with these third-party laboratories or enter into new agreements with other laboratories that are able to perform such portions of our service offerings could impair, delay or suspend our efforts to market and sell these services. In addition, certain third-party payors, including some state Medicaid payers, that we are under contract with may take the position that sending out testing to third-party laboratories and billing for such tests is contrary to the terms of its provider agreement and may refuse to pay us for the testing. If any of these events occur, our business, financial condition and results of operations could suffer. Further, some state

laws impose anti-markup restrictions that prevent an entity from realizing a profit margin on outsourced testing. If we are unable to markup outsourced testing, our revenues and operating margins may suffer.

We rely on Mount Sinai, a related party, and its clinicians for a portion of our test volume in connection with our diagnostic solutions and for data programs, and we have entered into certain other arrangements with Mount Sinai.

We rely on Mount Sinai, which is a related party, and its clinicians for a portion of our test volumes in connection with our diagnostic solutions and for a significant portion of the de-identified clinical records in our databases. In 2020, orders from Mount Sinai clinicians accounted for 5.5% of our total test volume, down from 12.8% in 2019. In addition, we sublease certain facilities from Mount Sinai, we provide certain research and data services to Mount Sinai, and we and Mount Sinai have entered into certain collaborative and commercial arrangements. Furthermore, we may in the future enter into other contracts for services or other engagements with Mount Sinai. See "Certain Relationships and Related Party Transactions — Related Party Transactions — Sema4".

Mount Sinai is primarily made up of not-for-profit hospitals, a medical and graduate school and employed clinicians. The charitable missions of the Mount Sinai entities include patient care, teaching and research. As such, the Mount Sinai entities are required to deal with us strictly on an arms-length, fair market value basis, and the interests of Mount Sinai may not necessarily be aligned with our interests or those of our other stockholders.

We are subject to risks as a result of our reliance on Mount Sinai, and if our transactions and relationship with Mount Sinai were to cease, our business could be disrupted and it could have a material adverse effect on our business, research, financial condition and results of operations.

In addition, ISMMS is one of our significant stockholders. Following the expiration of the lock-up period under the ISMMS Lock-Up Agreement, ISMMS may choose to dispose of some or all of the shares of our common stock held by it. Any disposal of shares of common stock by ISMMS, or the perception that these sales could occur, could cause the market price of our stock or warrants to decline.

We rely on commercial courier delivery services to transport samples to our facilities in a timely and cost-efficient manner and if these delivery services are disrupted, our business could be harmed.

Our core business depends on our ability to quickly and reliably deliver test results to our customers. We typically receive blood, saliva, or tissue samples for analysis at our laboratory facilities within days of collection from the patient. Disruptions and errors in these delivery service and accessioning errors and breaches, whether due to error by the courier service, labor disruptions, bad weather, natural disaster, terrorist acts or threats, outbreaks of disease or for other reasons, could adversely affect specimen integrity, our ability to process or store samples in a timely manner and to service our customers, and ultimately our reputation and our business. In addition, if we are unable to continue to obtain expedited delivery services on commercially reasonable terms, our operating results may be adversely affected.

Risks Related to Legal, Regulatory and Compliance

We may be subject to increased compliance risks as a result of our rapid growth, including our dependence on our sales, marketing and billing efforts.

We have had to expand our training and compliance efforts in line with our increasing reliance on personnel in our sales, marketing and billing functions, and our expansion of these functions in line with the overall growth in our business. We continue to monitor our personnel, but we have in the past experienced, and may in the future experience, situations in which employees fail to strictly adhere to our policies. In addition, sales and marketing activities in the healthcare space are subject to various rules and regulations. Moreover, our billing and marketing messaging can be complex and nuanced, and there may be errors or misunderstandings in our employees' communication of such messaging. Furthermore, we utilize text messaging, email, phone calls and other similar methods to communicate with patients who are existing or potential users of our products for various business purposes. These activities subject us to laws and regulations relating to communications with consumers, such as the CAN-SPAM Act and the Telephone Consumer Protection Act, violations of which could subject us to claims by

consumers, who may seek actual or statutory damages, which could be material in the aggregate. As we continues to scale up our sales and marketing efforts in line with the growth in our business, in particular our increased pace of product launches as well as further geographical expansion, we face an increased need to continuously monitor and improve our policies, processes and procedures to maintain compliance with a growing number and variety of laws and regulations, including with respect to consumer marketing. To the extent that there is any violation, whether actual, perceived or alleged, of our policies or applicable laws and regulations, we may incur additional training and compliance costs, may receive inquiries from third-party payors or other third parties, or be held liable or otherwise responsible for such acts of non-compliance. Any of the foregoing could adversely affect our cash flow and financial condition.

If we use hazardous materials in a manner that causes injury, we could be liable for resulting damages.

Our activities currently require the use of hazardous chemicals and biological material. We cannot eliminate the risk of accidental contamination or injury to employees or third parties from the use, storage, handling or disposal of these materials. In the event of contamination or injury, we could be held liable for any resulting damages, and any liability could exceed our resources or any applicable insurance coverage we may have. Additionally, we are subject on an ongoing basis to federal, state and local laws and regulations governing the use, storage, handling and disposal of these materials and specified waste products. The cost of compliance with these laws and regulations may become significant, and our failure to comply may result in substantial fines or other consequences, and either could negatively affect our operating results.

We and our partners will have to maintain compliance with FDA requirements for research, products and services and failure to maintain compliance with FDA requirements may prevent or delay the marketing of our products and services.

Even if we have obtained marketing authorization, we will have to comply with the scope of that clearance, authorization or approval. Failure to secure and to comply with clearance, authorization or approval or the additional, extensive and ongoing post-marketing obligations imposed by the FDA or other regulatory requirements of other regulatory agencies could result in unanticipated compliance expenditures, a range of administrative enforcement actions, injunctions and criminal prosecution. FDA post-market obligations include, among other things, compliance with the FDA QSR, establishing registration and device listings, labeling requirements, reporting of certain adverse events and malfunctions, and reporting of certain recalls. In addition, circumstances may arise that cause us to recall equipment used in connection with our research, products and services. Such recalls could have an adverse effect on our ability to provide those products and services, which in turn would adversely affect our financial condition. our collaborators will also be required to maintain FDA clearance, authorization or approval for the products and services that we jointly develop. Any failure by us or our collaborators to maintain such clearance, authorization or approval could impair or cause a delay in our ability to profit from these collaborations.

Future changes in FDA enforcement discretion for LDTs could subject our operations to much more significant regulatory requirements.

We currently offer a laboratory-develop test, or LDT, version of certain tests. The FDA has a policy of enforcement discretion with respect to, or LDTs, whereby the FDA does not actively enforce its medical device regulatory requirements for such tests. However, in October 2014, the FDA issued two draft guidance documents stating that the FDA intended to modify its policy of enforcement discretion with respect to LDTs in a risk-based manner consistent with the existing classification of medical devices. Although the FDA halted finalization of the guidance in November 2016 to allow for further public discussion on an appropriate oversight approach to LDTs and to give Congressional authorizing committees the opportunity to develop a legislative solution, it is unclear if Congress or the FDA will modify the current approach to the regulation of LDTs in a way that would subject our current or future services marketed as LDTs to the enforcement of FDA regulatory requirements. The FDA Commissioner and the Director of the Center for Devices and Radiological Health, or CDRH, have expressed significant concerns regarding disparities between some LDTs and *in vitro* diagnostics that have been reviewed, cleared, authorized or approved by the FDA. If the FDA were to determine that certain tests offered by us as LDTs are not within the policy for LDTs for any reason, including new rules, policies or guidance, or due to changes in statute, our tests may become subject to extensive FDA requirements or our business may otherwise be adversely

affected. If the FDA were to disagree with our LDT status or modify our approach to regulating LDTs, we could experience reduced revenue or increased costs, which could adversely affect our business, prospects, results of operations and financial condition. If required, the regulatory marketing authorization process required to bring our current or future LDTs into compliance may involve, among other things, successfully completing additional clinical validations and submitting to and obtaining clearance from the FDA for a premarket clearance (510(k)) submission or authorization for a *de novo* or approval of a PMA. Furthermore, pending legislative proposals, if passed, such as the VALID Act, could create new or different regulatory and compliance burdens on us and could have a negative effect on our ability to keep products on the market or develop new products, which could have a material effect on our business. In the event that the FDA requires marketing authorization of our LDTs in the future, the FDA may not ultimately grant any clearance, authorization or approval requested by us in a timely manner, or at all. In addition, if the FDA inspects our laboratory in relation to the marketing of any FDA-authorized test, any enforcement action the FDA takes might not be limited to the FDA-authorized test carried by us and could encompass our other testing services.

Recently, the FDA has also taken a more active role in certain diagnostic areas, including the oversight of pharmacogenetic, or PGx, and COVID-19 tests. In 2019, the FDA contacted several laboratories to demand changes to PGx test reports and marketing materials. In February 2020, the FDA issued a statement indicating that it continues to have concerns about the claims that certain clinical laboratories make with respect to their PGx tests, and published tables that list PGx associations for which the FDA has determined that the data support therapeutic management recommendations, a potential impact on safety or response, or a potential impact on pharmacokinetic properties only, respectively. To date, however, the FDA has not provided any general guidance on the types of claims or other characteristics that will cause a PGx test to fall outside FDA's enforcement discretion. As such, the extent to which the FDA will allow any laboratory to offer PGx tests in their current form without meeting FDA regulatory requirements for medical devices is unclear at this time.

For each product and service we are developing that may require FDA premarket review prior to marketing, the FDA may not grant clearance, authorization or premarket approval and failure to obtain necessary approvals for our future products and services would adversely affect our ability to grow our business.

Before we begin to manufacture, label and market additional clinical diagnostic products for commercial diagnostic use in the United States, we may be required to obtain either clearance, marketing authorization or approval from the FDA, unless an exemption applies or the FDA exercises its enforcement discretion and refrains from enforcing its requirements. For example, the FDA currently has a policy of refraining from enforcing its medical device requirements with respect to LDTs, which the FDA considers to be a type of *in vitro* diagnostic test that is designed, manufactured and used within a single properly licensed laboratory.

The process of obtaining PMA is much more rigorous, costly, lengthy and uncertain than the 510(k) clearance process. In the PMA approval process, the FDA must determine that a proposed device is safe and effective for its intended use based, in part, on extensive data, including, but not limited to, technical, preclinical, clinical trial, manufacturing and labeling data. Conversely, in the 510(k) clearance process, the FDA must determine that a proposed device is "substantially equivalent" to a legally marketed "predicate" device in order for the product to be cleared for marketing. To be "substantially equivalent," the proposed device must have the same intended use as the predicate device, and either have the same technological characteristics or if it has different technological characteristics as the predicate device, the proposed device must be as safe and effective as, and not raise different questions of safety or effectiveness than, the predicate device. Clinical data is sometimes required to support substantial equivalence. For lower-risk devices that would otherwise automatically be placed into Class III, which require a PMA because no predicate device is available and the devices do not fall within an existing 510(k)-exempt classification, an applicant may submit a *de novo* request to down classify the device into Class II or Class I, which would not require a PMA. In the *de novo* process, the FDA must determine that general and special controls are sufficient to provide reasonable assurance of the safety and effectiveness of a device, which is low to moderate risk and has no predicate. In other words, the applicant must justify the "down-classification" to Class I or II for a new product type that would otherwise automatically be placed into Class III, but is lower risk. Clinical data may be required. For laboratory tests for which FDA clearance, authorization or approval is required, the FDA may also require data to support analytical and clinical validity.

The 510(k), *de novo* and PMA processes can be expensive and lengthy and require the payment of significant fees, unless an exemption applies. The FDA's 510(k) clearance pathway usually takes from three to nine months from submission, but it can take longer for a novel type of product. The FDA's *de novo* classification pathway usually takes from six to 12 months, but for many applicants can take up to 18 months or more.

The process of obtaining a PMA generally takes from one to three years, or even longer, from the time the PMA is submitted to the FDA until an approval is obtained. Any delay or failure to obtain necessary regulatory clearances, authorizations or approvals would have a material adverse effect on our business, financial condition and prospects.

The FDA can delay, limit or deny clearance, authorization or approval of a device for many reasons, including:

- the inability to demonstrate to the satisfaction of the FDA that the products are safe or effective for their intended uses;
- the disagreement of the FDA with the design, conduct or implementation of the clinical trials or the analysis or interpretation of data from preclinical studies, analytical studies or clinical trials;
- serious and unexpected adverse device effects experienced by participants in clinical trials;
- the data from preclinical studies, analytical studies and clinical trials may be insufficient to support clearance, authorization or approval, where required;
- the inability to demonstrate that the clinical and other benefits of the device outweigh the risks;
- an advisory committee, if convened by the FDA, may recommend against approval of a PMA or other application or may recommend that the FDA require, as a condition of approval, additional preclinical studies or clinical trials, limitations on approved labeling or distribution and use restrictions, or even if an advisory committee makes a favorable recommendation, the FDA may still not approve the product;
- the FDA may identify deficiencies in our marketing application;
- the FDA may identify deficiencies in our or our collaborators' manufacturing processes, facilities or analytical methods;
- the potential for policies or regulations of the FDA or applicable foreign regulatory bodies to change significantly in a manner rendering clinical data or regulatory filings insufficient for clearance, authorization or approval; and
- the FDA or foreign regulatory authorities may audit clinical trial data and conclude that the data is not sufficiently reliable to support a PMA.

There are numerous FDA personnel assigned to review different aspects of marketing submissions, which can present uncertainties based on their ability to exercise judgment and discretion during the review process. During the course of review, the FDA may request or require additional data and information, and the development and provision of these data and information may be time-consuming and expensive. The process of obtaining regulatory clearances, authorizations or approvals to market a medical device can be costly and time-consuming, and we may not be able to obtain these clearances, authorizations or approvals on a timely basis, or at all for our products in development. If we are unable to obtain clearance, authorization or approval for any products for which it plans to seek clearance, authorization or approval, our business may be harmed.

Modifications to our products with FDA marketing authorization may require new FDA clearances, authorizations or approvals, or may require it to cease marketing or recall the modified clinical diagnostic products or future clinical products until clearances are obtained.

Any modification to a 510(k)-cleared device that significantly affects its safety or effectiveness, or that constitutes a major change in its intended use, could require a new 510(k) clearance, a new *de novo* authorization or approval of a PMA. The FDA requires every manufacturer to make this determination in the first instance, but the

FDA may review any manufacturer's decision. The FDA may not agree with our decisions regarding whether new clearances, authorizations or approvals are necessary.

For any product approved pursuant to a PMA, we would be required to seek supplemental approval for many types of modifications to the approved product. The FDA requires manufacturers in the first instance to determine whether a PMA supplement or other regulatory filing is needed or whether the change may be reported via the PMA Annual Report, but may disagree with a company's assessment.

If the FDA disagrees with our determination, which it may not review until we submit an annual report or the FDA conducts an inspection or other inquiry, and requires us to seek new clearances, authorizations or approvals for modifications to its previously cleared, authorized or approved clinical diagnostic products for which we have concluded new clearances, authorizations or approvals are unnecessary, we may be required to cease marketing or distribution of these clinical diagnostic products or to recall the modified products until we obtain clearance, authorization or approval. We may also be subject to enforcement action, including, among other things, significant regulatory fines or penalties.

In addition, for example, we plan to match our test reports for certain indications to identified mutations with FDA-approved targeted therapies or relevant clinical trials of targeted therapies. If a patient or physician who orders a test using one of our products is unable to obtain, or be reimbursed for the use of, targeted therapies because they are not indicated in the FDA-approved label for treatment, the patient is unable to enroll in an identified clinical trial due to the enrollment criteria of the trial, or some other reason, the ordering physician may conclude the test report does not contain actionable information. If physicians do not believe our products consistently generate actionable information about their patients' disease or condition, they may be less likely to use our products.

Furthermore, we cannot provide assurance that customers will always use these products in the manner in which they are intended. Any intentional or unintentional misuse of these products by customers could lead to substantial civil and criminal monetary and non-monetary penalties, and could result in significant legal and investigatory fees.

Our business is subject to various complex laws and regulations applicable to clinical diagnostics. We could be subject to significant fines and penalties if we or our partners fail to comply with these laws and regulations.

As a provider of clinical diagnostic products and services, we and our partners are subject to extensive and frequently changing federal, state, local and foreign laws and regulations governing various aspects of our business.

In particular, the clinical laboratory and healthcare industry is subject to significant governmental certification and licensing regulations, as well as federal, state and foreign laws regarding:

- test ordering and billing practices;
- marketing, sales and pricing practices;
- health information privacy and security, including HIPAA and comparable state laws;
- · insurance;
- anti-markup legislation;
- · fraud and abuse; and
- · consumer protection.

We are also required to comply with FDA regulations, including with respect to its labeling and promotion activities. In addition, advertising and marketing of its clinical products are subject to regulation by the Federal Trade Commission, or FTC, and advertising of laboratory services is regulated by certain state laws. Violation of any FDA requirement could result in enforcement actions, such as seizures, injunctions, civil penalties and criminal prosecutions, and violation of any FTC or state law requirement could result in injunctions and other remedies, all of which could have a material adverse effect on our business. Most states also have similar regulatory and

enforcement authority for devices. Additionally, most foreign countries have authorities comparable to the FDA and processes for obtaining marketing approvals. Obtaining and maintaining these approvals, and complying with all laws and regulations, may subject us to similar risks and delays as thosewe could experience under FDA, FTC and state regulation. We incur various costs in complying and overseeing compliance with these laws and regulations. The growth of our business and sales organization, the acquisition of additional businesses or products and services and our expansion outside of the U.S. may increase the potential of violating these laws, regulations or our internal policies and procedures.

Healthcare policy has been a subject of extensive discussion in the executive and legislative branches of the federal and many state governments and healthcare laws and regulations are subject to change. Development of the existing commercialization strategy for our tests and planned development of products in our pipeline has been based on existing healthcare policies. We cannot predict what additional changes, if any, will be proposed or adopted or the effect that such proposals or adoption may have on our business, financial condition and results of operations.

If we or our partners, fail to comply with these laws and regulations, it could incur significant fines and penalties and our reputation and prospects could suffer. Additionally, any such partners could be forced to cease offering our products and services in certain jurisdictions, which could materially disrupt our business. An adverse outcome could include us being required to pay treble damages, incur civil and criminal penalties, paying attorneys' fees, entering into a corporate integrity agreement, being excluded from participation in government healthcare programs, including Medicare and Medicaid, and other adverse actions that could materially and adversely affect our business, financial condition and results of operations.

Compliance with the HIPAA security, privacy and breach notification regulations may increase our costs.

The HIPAA privacy, security and breach notification regulations, including the expanded requirements under HITECH, establish comprehensive federal standards with respect to the uses and disclosures of protected health information, or PHI, by health plans, healthcare providers and healthcare clearinghouses, in addition to setting standards to protect the confidentiality, integrity and security of PHI. The regulations establish a complex regulatory framework on a variety of subjects, including:

- the circumstances under which uses and disclosures of PHI are permitted or required without a specific authorization by the patient, including but not limited to treatment purposes, activities to obtain payments for our services, and our healthcare operations activities;
- a patient's rights to access, amend and receive an accounting of certain disclosures of PHI;
- requirements to notify individuals if there is a breach of their PHI;
- the contents of notices of privacy practices for PHI;
- · administrative, technical and physical safeguards required of entities that use or receive PHI;
- · deidentification of PHI; and
- · the protection of computing systems maintaining electronic PHI.

We have implemented practices intended to meet the requirements of the HIPAA privacy, security and breach notification regulations, as required by law. We are required to comply with federal privacy, security and breach notification regulations as well as varying state privacy, security and breach notification laws and regulations, which may be more stringent than federal HIPAA requirements. In addition, for healthcare data transfers from other countries relating to citizens of those countries, we must comply with the laws of those countries. The federal privacy regulations under HIPAA restrict our ability to use or disclose patient identifiable data, without patient authorization, for purposes other than payment, treatment, healthcare operations and certain other specified disclosures such as public health and governmental oversight of the healthcare industry.

HIPAA provides for significant fines and other penalties for wrongful use or disclosure of PHI, including potential civil and criminal fines and penalties. Computer networks are always vulnerable to breach and unauthorized persons may in the future be able to exploit weaknesses in the security systems of our computer networks and gain access to PHI. Additionally, we share PHI with third-parties who are legally obligated to safeguard and maintain the confidentiality of PHI. Unauthorized persons may be able to gain access to PHI stored in such third-parties computer networks. Any wrongful use or disclosure of PHI by us or such third-parties, including disclosure due to data theft or unauthorized access to us or our third-parties computer networks, could subject it to fines or penalties that could adversely affect our business and results of operations. Although the HIPAA statute and regulations do not expressly provide for a private right of damages, we could also be liable for damages under state laws to private parties for the wrongful use or disclosure of confidential health information or other private personal information.

Some of our activities may subject it to risks under federal and state laws prohibiting 'kickbacks' and false or fraudulent claims.

In addition to FDA marketing and promotion restrictions, several other types of state and federal healthcare fraud and abuse laws have been applied in recent years to restrict certain marketing practices in the healthcare product and service industry and to regulate billing practices and financial relationships with healthcare providers, hospitals and other healthcare providers. These laws include a federal law commonly known as the Medicare/Medicaid anti-kickback law, and several similar state laws, which prohibit payments intended to induce healthcare providers or others either to refer patients or to acquire or arrange for or recommend the acquisition of healthcare products or services. While the federal law applies only to referrals, products or services for which payment may be made by a federal healthcare program, state laws often apply regardless of whether federal funds may be involved. These laws constrain the sales, marketing and other promotional activities of manufacturers of medical devices and providers of laboratory services by limiting the kinds of financial arrangements, including sales programs, that may be used with hospitals, healthcare providers, laboratories and other potential purchasers or prescribers of medical devices and laboratory services. Other federal and state laws generally prohibit individuals or entities from knowingly presenting, or causing to be presented, claims for payment from Medicare, Medicaid, or other third-party payors that are false or fraudulent, or are for items or services that were not provided as claimed.

In 2018, Congress passed EKRA as part of the Substance Use-Disorder Prevention that Promotes Opioid Recovery and Treatment for Patients and Communities Act. Similar to the Medicare/Medicaid anti-kickback law, EKRA imposes criminal penalties for knowing or willful payment or offer, or solicitation or receipt, of any remuneration, whether directly or indirectly, overtly or covertly, in cash or in kind, in exchange for the referral or inducement of laboratory testing (among other healthcare services) unless a specific exception applies. However, unlike the Medicare/Medicaid anti-kickback law, EKRA is not limited to services covered by federal or state healthcare programs but applies more broadly to services covered by "healthcare benefit programs," including commercial insurers. As currently drafted, EKRA potentially expands the universe of arrangements that could be subject to government enforcement under federal fraud and abuse laws. In addition, while the Medicare/Medicaid anti-kickback law includes certain exceptions that are widely relied upon in the healthcare industry, not all of those same exceptions apply under EKRA. Because EKRA is a relatively new law, there is no agency guidance or court precedent to indicate how and to what extent it will be applied and enforced. We cannot assure you that our relationships with healthcare providers, hospitals, customers, our own sales representatives, or any other party will not be subject to scrutiny or will survive regulatory challenge under EKRA.

Additionally, to avoid liability under federal false claims laws, we or our partners must carefully and accurately code claims for reimbursement, proactively monitor the accuracy and appropriateness of claims and payments received, diligently investigate any credible information indicating that it may have received an overpayment, and promptly return any overpayments. Medicare payments are subject to audit, including through the Comprehensive Error Rate Testing, or CERT, program, and payments may be recouped by CMS if it is determined that they were improperly made. Currently, a small percentage of our revenues are generated by payments from Medicare. The federal anti-kickback statute and certain state-level false claims laws prescribe civil and criminal penalties (including fines) for noncompliance that can be substantial. In addition, various states have enacted false claim laws analogous to the federal laws that apply where a claim is submitted to any third-party payor and not only a governmental payer program. While we continually strive to comply with these complex requirements, interpretations of the applicability

of these laws to marketing and billing practices are constantly evolving and even an unsuccessful challenge could cause adverse publicity and be costly to respond to, and thus could harm our business and prospects. Our failure to comply with applicable laws could result in various adverse consequences that could have a material adverse effect upon our business, including the exclusion of our products and services from government programs and the imposition of civil or criminal sanctions.

Our business could be harmed by the loss, suspension or other restriction on a license, certification or accreditation, or by the imposition of a fine or penalties, under CLIA, our implementing regulations or other state, federal and foreign laws and regulations affecting licensure or certification, or by future changes in these laws or regulations.

Federal law requires virtually all clinical laboratories to comply with CLIA, which generally involves becoming certified by the federal and state government for the testing that will be performed and complying with various operational, personnel, facilities administration, quality and proficiency testing requirements intended to ensure that testing services are accurate and reliable. CLIA certification is also a prerequisite to be eligible to bill state and federal healthcare programs, as well as many private third-party payors, for laboratory research and clinical diagnostic testing services. For example, as a condition of our CLIA certification, a laboratory may be subject to survey and inspection every other year, additional random inspections and surprise inspections based on complaints received by state or federal regulators. The biennial survey and inspection is conducted by CMS, a CMS agent or, if the laboratory holds a CLIA certificate of accreditation, a CMS-approved accreditation organization, such as CAP. Sanctions for failure to comply with CLIA requirements, including proficiency testing violations, may include suspension, revocation or limitation of a laboratory's CLIA certificate, which is necessary to conduct business, as well as the imposition of significant civil, administrative or criminal sanctions against the lab, its owners and other individuals. In addition, we are subject to regulation under certain state laws and regulations governing laboratory licensure. Some states have enacted laboratory licensure and compliance laws that are more stringent than CLIA. Changes in state licensure laws that affect our ability to offer and provide research and diagnostic products and services across state or foreign country lines could materially and adversely affect our business. In addition, state and foreign requirements for laboratory certification may be costly or difficult to meet and could affect our ability to receive specimens from certain states or foreign countries.

Any sanction imposed under CLIA, its implementing regulations or state or foreign laws or regulations governing licensure, or our failure to renew a CLIA certificate, a state or foreign license or accreditation, could have a material adverse effect on our business.

We may never obtain approval in the EU or in any other foreign country for any of our products or services and, even if we do, we or our partners and collaborators may never be able to commercialize them in another jurisdiction, which would limit our ability to realize their full market potential.

In order to eventually market any of our current or future products and services in any particular foreign jurisdiction, we must establish compliance with numerous and varying regulatory requirements on a jurisdiction-by-jurisdiction basis regarding quality, safety, performance, privacy and efficacy. In addition, clinical trials or clinical investigations conducted in one country may not be accepted by regulatory authorities in other countries, and regulatory clearance, authorization or approval in one country does not guarantee regulatory clearance, authorization or approval in any other country. Approval processes vary among countries and can involve additional product testing and validation and additional administrative review periods.

Seeking foreign regulatory clearance, authorization or approval could result in difficulties and costs for us and our collaborators and require additional preclinical studies, clinical trials or clinical investigations which could be costly and time-consuming. Regulatory requirements and ethical approval obligations can vary widely from country to country and could delay or prevent the introduction of our products and services in those countries. The foreign regulatory clearance, authorization or approval process involves all of the risks and uncertainties associated with FDA clearance, authorization or approval. We currently have limited experience in obtaining regulatory clearance, authorization or approval in international markets. If we or our collaborators fail to comply with regulatory requirements in international markets or to obtain and maintain required regulatory clearances, authorizations or

approvals in international markets, or if those approvals are delayed, our target market will be reduced and our ability to realize the full market potential of our products and services will be unrealized.

Complying with numerous statutes and regulations pertaining to our business is an expensive and time-consuming process, and any failure to comply could result in substantial penalties.

Our operations are subject to other extensive federal, state, local and foreign laws and regulations, all of which are subject to change. These laws and regulations currently include, among others:

- HIPAA, which establishes comprehensive federal standards with respect to the privacy and security of protected health information and requirements for the use of certain standardized electronic transactions;
- amendments to HIPAA under HITECH, which strengthen and expand HIPAA privacy and security compliance requirements, increase penalties for violators and expand vicarious liability, extend enforcement authority to state attorneys general, and impose requirements for breach notification;
- the General Data Protection Regulation, or GDPR, which imposes strict privacy and security requirements on controllers and processors of European personal data, including enhanced protections for "special categories" of personal data, including sensitive information such as health and genetic information of data subjects;
- the CCPA, which, among other things, regulates how subject businesses may collect, use, disclose and/or sell the personal information of consumers who reside in California, affords rights to consumers that they may exercise against businesses that collect their information, and requires implementation of reasonable security measures to safeguard personal information of California consumers;
- the federal Anti-Kickback Statute, which prohibits knowingly and willfully offering, paying, soliciting or receiving remuneration, directly or
 indirectly, overtly or covertly, in cash or in kind, to induce or in return for the referral of an individual, for the furnishing of or arrangement for the
 furnishing of any item or service for which payment may be made in whole or in part by a federal healthcare program, or the purchasing, leasing,
 ordering, arranging for, or recommend purchasing, leasing or ordering, any good, facility, item or service for which payment may be made, in whole
 or in part, under a federal healthcare program;
- EKRA, which prohibits payments for referrals to recovery homes, clinical treatment facilities, and laboratories and reaches beyond federal health care programs, to include private insurance;
- the federal physician self-referral law, known as the Stark Law, which prohibits a physician from making a referral to an entity for certain designated health services covered by the Medicare program, including laboratory and pathology services, if the physician or an immediate family member has a financial relationship with the entity unless an exception applies, and prohibits an entity from billing for designated health services furnished pursuant to a prohibited referral;
- the federal false claims law, which imposes liability on any person or entity that, among other things, knowingly presents, or causes to be presented, a false or fraudulent claim for payment to the federal government;
- the federal Civil Monetary Penalties Law, which prohibits, among other things, the offering or transfer of remuneration to a Medicare or state healthcare program beneficiary if the person knows or should know it is likely to influence the beneficiary's selection of a particular provider, practitioner or supplier of services reimbursable by Medicare or a state healthcare program, unless an exception applies;
- the HIPAA fraud and abuse provisions, which create new federal criminal statutes that prohibit, among other things, defrauding health care benefit programs, willfully obstructing a criminal investigation of a healthcare offense and falsifying or concealing a material fact or making any materially false statements in connection with the payment for healthcare benefits, items or services;

- other federal and state fraud and abuse laws, such as anti-kickback laws, prohibitions on self-referral, fee-splitting restrictions, insurance fraud laws, anti-markup laws, prohibitions on the provision of tests at no or discounted cost to induce physician or patient adoption, and false claims acts, which may extend to services reimbursable by any third-party payer, including private insurers;
- the 21st Century Cures Act information blocking prohibition, which prohibits covered actors from engaging in certain practices that are likely to interfere with the access, exchange, or use of electronic health information;
- the Physician Payments Sunshine Act and similar state laws that require reporting of certain payments and other transfers of value made by
 applicable manufacturers, directly or indirectly, to or on behalf of covered recipients including physicians (defined to include doctors, dentists,
 optometrists, podiatrists and chiropractors) and teaching hospitals as well as ownership and investment interests held by physicians and their
 immediate family members.
- Beginning in 2022, applicable manufacturers also will be required to report such information regarding its relationships with physician assistants, nurse practitioners, clinical nurse specialists, certified registered nurse anesthetists and certified nurse midwives during the previous year;
- state laws that limit or prohibit the provision of certain payments and other transfers of value to certain covered healthcare providers;
- the prohibition on reassignment of Medicare claims, which, subject to certain exceptions, precludes the reassignment of Medicare claims to any other party;
- state laws that prohibit other specified practices, such as billing clinicians for testing that they order; waiving coinsurance, copayments, deductibles and other amounts owed by patients; billing a state Medicaid program at a price that is higher than what is charged to one or more other payers;
- · similar foreign laws and regulations that may apply to it in the countries in which we operate or may operate in the future; and
- laws that relate to maintaining accurate information and control over activities that may fall within the purview of the U.S. Foreign Corrupt Practices Act, its books and records provisions, or anti-bribery provisions.

We have adopted policies and procedures designed to comply with these laws and regulations. In the ordinary course of our business, we conduct internal reviews of our compliance with these laws. Our compliance may also be subject to governmental review. The growth of our business and our expansion outside of the United States may increase the potential of violating these laws or our internal policies and procedures. The risk of us being found in violation of these or other laws and regulations is further increased by the fact that many have not been fully interpreted by the regulatory authorities or the courts, and their provisions are open to a variety of interpretations. Any action brought against us for violation of these or other laws or regulations, even if it successfully defends against it, could cause it to incur significant legal expenses and divert our management's attention from the operation of our business. If our operations are found to be in violation of any of these laws and regulations, it may be subject to any applicable penalty associated with the violation, including significant administrative, civil and criminal penalties, damages, fines, imprisonment, exclusion from participation in Federal healthcare programs, refunding of payments received by it and curtailment or cessation of our operations, which may impact existing contracts with key payors, collaborators, health systems, and commercial partners. Any of the foregoing consequences could seriously harm our business and our financial results.

We face uncertainty related to healthcare reform, pricing, coverage and reimbursement, which could reduce our revenue.

Healthcare reform laws, including the Patient Protection and Affordable Care Act, ACA, and the Protecting Access to Medicare Act of 2014, or PAMA, are significantly affecting the U.S. healthcare and medical services

industry. Existing legislation, and possible future legal and regulatory changes, including potential repeal or modification of the ACA, elimination of penalties regarding the individual mandate for coverage, or approval of health plans that allow lower levels of coverage for preventive services, could materially change the structure and finances of the health insurance system and the methodology for reimbursing medical services, drugs and devices, including our current and future products and services. The ACA has also been the subject of various legal challenges and in December 2018, a federal district court in Texas found that the ACA's "individual mandate" was unconstitutional such that the whole of the ACA is invalid. The decision was appealed, and in December 2019, the Fifth Circuit Court of Appeals affirmed certain portions of the district court's decision but remanded to the district court to determine if any portions of the ACA may still be valid. If the plaintiffs in this case, or in any other case challenging the ACA, are ultimately successful, insurance coverage for our tests could be materially and adversely affected. Any change in reimbursement policy could result in a change in patient cost-sharing, which could adversely affect a provider's willingness to prescribe and patient's willingness and ability to use our tests and any other product or service we may develop. Healthcare reforms, which may intend to reduce healthcare costs, may have the effect of discouraging third-party payors from covering certain kinds of medical products and services, particularly newly developed technologies, or other products or tests we may develop in the future. We cannot predict whether future healthcare reform initiatives will be implemented at the federal or state level or the effect any such future legislation or regulation will have on it. The taxes imposed by new legislation, cost reduction measures and the expansion in the government's role in the U.S. healthcare industry may result in decreased profits to u

PAMA presents significant uncertainty for future CMS reimbursement rates for our tests. Because Medicare currently covers a significant number of patients, any reduction in the CMS reimbursement rate for our tests would negatively affect our revenues and our business prospects. Under PAMA, CMS reimbursement rates for clinical diagnostic laboratory tests are updated every three years, or annually for clinical laboratory tests that are considered "advanced diagnostic laboratory tests". The CMS reimbursement rates for clinical diagnostic laboratory tests are updated based on the volume-weighted median of private payer rates for each clinical diagnostic laboratory test based on data submitted by certain applicable laboratories. Further, laboratories that fail to report or erroneously report required payment information may be subject to substantial civil money penalties. There can be no assurance under PAMA that adequate CMS reimbursement rates will continue to be assigned to our tests. Congress could modify or repeal PAMA in the future or CMS could modify regulations under PAMA, and any such action could have the effect of reducing the CMS reimbursement rate for our tests. Further, it is possible that Medicare or other federal payers that provide reimbursement for our tests may suspend, revoke or discontinue coverage at any time, may require co-payments from patients, or may reduce the reimbursement rates payable to it. Any such action could have a negative impact on our revenues.

Coverage of our screening products that it may develop may also depend, in whole or in part, on whether payers determine, or courts and/or regulatory authorities determine, coverage is required under applicable federal or state laws mandating coverage of certain cancer screening services.

Several states have laws mandating coverage for preventive services, such as certain cancer screening services, applicable to certain health insurers. However, not all of these laws apply to our current tests and not all of these laws presently mandate coverage for patients within the certain age ranges. We and payers may disagree about how these mandates apply to our tests and we may find the mandates difficult to enforce. Further, if the ACA is repealed, replaced or overturned, or even if it is not, states may decide to modify their laws, which may include repeal of those coverage mandates that we believe currently apply to our oncology tests.

Outside of the U.S., we would largely depend on public or government-controlled payers for coverage of our oncology tests. As compared to many more routine diagnostic tests, our oncology tests are more complicated, expensive and are performed in a central, specialized lab. In order to accommodate the unique characteristics of our diagnostic products, public payers in certain non-U.S. markets have designed reimbursement frameworks specifically for each test type. These payers could decide to modify or discontinue these special frameworks, potentially leading to lower reimbursement prices or the impossibility of providing the test in the market. These changes could also impose additional administrative burdens on us, if it were to ever sell our tests in foreign jurisdictions, including complex public tendering procedures, or on ordering physicians, which could adversely affect the number of payers covering the test or the number of orders placed. Public payers could condition

reimbursement of our tests upon performance of our tests locally or, even in laboratories owned or operated by the payers. Any such change would adversely affect our ability to continue to serve those patients through our labs. We may develop future oncologic tests that could be performed locally by laboratory partners and in hospitals around the world, however those developments efforts may be unsuccessful and any such tests that we may develop may not be approved by regulators or accepted by payers or patients.

Product and professional liability suits against us could result in expensive and time-consuming litigation, payment of substantial damages and increases in our insurance rates.

The sale and use of our solutions, products and services could lead to product or professional liability claims, including class action lawsuits. We may also be subject to liability for errors in the test results including health information it provides to healthcare providers or patients or for a misunderstanding of, or inappropriate reliance upon, the information it provides. Claims could also arise out of clinical studies we may conduct or any of our other activities. A product or professional liability claim could result in substantial damages, be costly and time consuming to defend, and cause material harm to our business, reputation or financial condition. We cannot assure you that our liability insurance would protect our assets from the financial impact of defending a product or professional liability claim. Any claim brought against us, with or without merit, could increase our liability insurance rates or prevent it from securing insurance coverage in the future.

Errors, defects, or mistakes in our products or services, and operations could harm our reputation, decrease market acceptance of our products or services.

We are creating new products and services, many of which are initially based on largely untested technologies. As all of our products and services progress, we or others may determine that it made product or service-level scientific or technological mistakes. The diagnostic and testing processes utilize a number of complex and sophisticated molecular, biochemical, informatics, and mechanical processes, many of which are highly sensitive to external factors. An operational or technological failure in one of these complex processes or fluctuations in external factors may result in less efficient processing or variation between testing runs. Refinements to our processes may initially result in unanticipated issues that reduce the efficiency or increase variability. In particular, sequencing, which is a key component of these processes, could be inefficient with higher than expected variability thereby increasing total sequencing costs and reducing the number of samples we can process in a given time period. Therefore, inefficient or variable processes can cause variability in our operating results and damage our reputation.

In addition, our laboratory operations could result in any number of errors or defects. our quality assurance system may fail to prevent it from inadvertent problems with samples, sample quality, lab processes including sequencing, software, data upload or analysis, raw materials, reagent manufacturing, assay quality or design, or other components or processes. In addition, our assays may have quality or design errors, and it may have inadequate procedures or instrumentation to process samples, assemble our proprietary primer mixes and commercial materials, upload and analyze data, or otherwise conduct our laboratory operations. If we provide products or services with undiscovered errors to our customers, our clinical diagnostics may falsely indicate a patient has a disease or genetic variant, fail to assess a patient's risk of getting a disease or having a child with a disease, or fail to detect disease or variant in a patient who requires or could benefit from treatment or intervention. We believe our customers are likely to be particularly sensitive to product and service defects, errors and delays, including if our products and services fail to indicate the presence of residual disease with high accuracy from clinical specimens or if we fail to list or inaccurately indicate the presence or absence of disease in our test report or analysis. In drug discovery, such errors may interfere with our collaborators' clinical studies or result in adverse safety or efficacy profiles for their products in development. This may harm our customers' businesses and may cause it to incur significant costs, divert the attention of key personnel, encourage regulatory enforcement action against it, create a significant customer relations problem for us and cause our reputation to suffer. We may also be subject to warranty and liability claims for damages related to errors or defects in our products or services. Any of these developments could harm our business and operating results.

We are subject to increasingly complex taxation rules and practices, which may affect how it conducts our business and our results of operations.

As our business grows, we are required to comply with increasingly complex taxation rules and practices. We are subject to tax in multiple U.S. tax jurisdictions and may be subject to foreign tax jurisdictions in the future. The development of our tax strategies requires additional expertise and may impact how it conducts our business. Our future effective tax rates could be unfavorably affected by changes in, or interpretations of, tax rules and regulations in the jurisdictions in which we do business or by changes in the valuation of our deferred tax assets and liabilities. Furthermore, we provide for certain tax liabilities that involve significant judgment. We are and may be subject to the examination of our tax returns by federal, state and foreign tax authorities. If our tax strategies are ineffective or it is not in compliance with domestic and international tax laws, as applicable, our financial position, operating results and cash flows could be adversely affected.

Risks Related to Our Intellectual Property and Trade Secrets

Our inability to effectively protect our proprietary products, processes, and technologies, including the confidentiality of our trade secrets, could harm our competitive position.

We currently rely upon trade secret protection and copyright, as well as non-disclosure agreements and invention assignment agreements with our employees, consultants and third parties, and to a limited extent patent protection, to protect our confidential and proprietary information. Although our competitors have utilized and are expected to continue utilizing similar methods and have aggregated and are expected to continue to aggregate similar databases of genetic testing information, our success will depend upon our ability to develop proprietary methods and databases and to defend any advantages afforded to is by our methods and databases relative to our competitors. If we do not protect our intellectual property adequately, competitors may be able to use our methods and databases and thereby erode any competitive advantages we may have.

We will be able to protect our proprietary rights from unauthorized use by third parties only to the extent that our proprietary technologies are covered by valid and enforceable patents or are effectively maintained as trade secrets. In this regard, we have applied, and we intend to continue applying, for patents covering such aspects of our technologies as it deems appropriate. However, we expect that potential patent coverage it may obtain will not be sufficient to prevent substantial competition. In this regard, we believe it is probable that others will independently develop similar or alternative technologies or design around those technologies for which we may obtain patent protection. In addition, any patent applications we file may be challenged and may not result in issued patents or may be invalidated or narrowed in scope after they are issued. Questions as to inventorship or ownership may also arise. Any finding that our patents or applications are unenforceable could harm our ability to prevent others from practicing the related technology, and a finding that others have inventorship or ownership rights to our patents and applications could require it to obtain certain rights to practice related technologies, which may not be available on favorable terms, if at all. If we initiate lawsuits to protect or enforce our patents, or litigate against third-party claims, which would be expensive, and we lose, it may lose some of our intellectual property rights. Furthermore, these lawsuits may divert the attention of our management and technical personnel.

We expect to rely substantially upon trade secrets and proprietary know-how protection for our confidential and proprietary information, and we have taken security measures to protect this information. These measures, however, may not provide adequate protection for our trade secrets, know-how or other confidential information. Among other things, we seek to protect our trade secrets and confidential information by entering into confidentiality agreements with employees and consultants. There can be no assurance that any confidentiality agreements that we have with our employees and consultants will provide meaningful protection for our trade secrets and confidential information or will provide adequate remedies in the event of unauthorized use or disclosure of such information. Accordingly, there also can be no assurance that our trade secrets will not otherwise become known or be independently developed by competitors. Enforcing a claim that a party illegally disclosed or misappropriated a trade secret can be difficult, expensive and time-consuming, and the outcome is unpredictable. In addition, trade secrets may be independently developed by others in a manner that could prevent legal recourse by us. If any of our confidential or proprietary information, such as our trade secrets, were to be disclosed or misappropriated, or if any such information was independently developed by a competitor, our competitive position could be harmed.

Any inability to effectively protect our proprietary technologies under certain jurisdictions and legal regimes could harm our competitive position.

Our success and ability to compete in certain jurisdictions and under certain legal regimes depend to a large extent on our ability to develop proprietary products and technologies and to maintain adequate protection of our intellectual property in the United States and other countries; this becomes increasingly important as we expand our operations and enter into strategic collaborations with partners to develop and commercialize products. The laws of some foreign countries do not protect proprietary rights to the same extent as the laws of the United States, and we may encounter difficulties in establishing and enforcing its proprietary rights outside of the United States. In addition, the proprietary positions of companies developing and commercializing tools for molecular diagnostics, including our own, generally are uncertain and involve complex legal and factual questions. This uncertainty may materially affect our ability to defend or obtain patents or to address the patents and patent applications owned or controlled by our collaborators and licensors.

Any of these factors could adversely affect our ability to obtain commercially relevant or competitively advantageous patent protection for our products.

If patent regulations or standards are modified, such changes could have a negative impact on our business.

From time to time, the U.S. Supreme Court, other federal courts, the U.S. Congress or the USPTO may change the standards of patentability and validity of patents within the cancer screening and diagnostics space, and any such changes could have a negative impact on our business.

There have been several cases involving "gene patents" and diagnostic claims that have been considered by the U.S. Supreme Court. In March 2012, the Supreme Court in Mayo Collaborative Services v. Prometheus Laboratories, Inc, found a patented diagnostic method claim unpatentable because the relationship between a metabolite concentration and optimized dosage was a patent-ineligible "law of nature." In June 2013, the Supreme Court ruled in ACLU v. Myriad Genetics, Inc, that an isolated genomic DNA sequence is not patent eligible while cDNA is eligible. The Prometheus and Myriad decisions, as well as subsequent case law, affect the legal concept of subject matter eligibility by seemingly narrowing the scope of the statute defining patentable inventions.

In December 2014 and again in 2019, the USPTO published revised guidelines for patent examiners to apply when examining process claims for patent eligibility in view of several recent Supreme Court decisions, including *Mayo*, *Association for Molecular Pathology v. Myriad Genetics, Inc.*, and *Alice Corporation Pty. Ltd. v. CLS Bank International*, and others. The guidance indicates that claims directed to a law of nature, a natural phenomenon, or an abstract idea that do not meet the eligibility requirements should be rejected as non-statutory, patent ineligible subject matter. While these guidelines may be subject to review and modification by the USPTO over time, we cannot assure you that our intellectual property strategy or patent portfolio will not be negatively impacted by the decisions described above, rulings in other cases or changes in guidance or procedures issued by the USPTO.

Additional substantive changes to patent law, whether new or associated with the America Invents Act — which substantially revised the U.S. patent system — may affect our ability to obtain, enforce or defend our patents. Accordingly, it is not clear what, if any, impact these substantive changes will ultimately have on the cost of prosecuting our patent applications, our ability to obtain patents based on our discoveries and our ability to enforce or defend our issued patents, all of which could have a material adverse effect on our business.

If we are not able to adequately protect our trade secrets and other proprietary information, including the databases it manages and to which it has access, the value of our technology and products could be significantly diminished.

We rely on trade secret and proprietary know-how protection for our confidential and proprietary information and have taken security measures to protect this information. These measures, however, may not provide adequate protection. For example, we have a policy of requiring our consultants, advisors and collaborators, including, for example, our strategic collaborators with whom we seek to develop and commercialize products, to enter into confidentiality agreements and our employees to enter into invention, non-disclosure and in certain cases non-compete agreements. However, breaches of our physical or electronic security systems, or breaches caused by our

employees who failing to abide by their confidentiality obligations during or upon termination of their employment with us, could compromise these protection efforts. Any action we take to enforce our rights may be time-consuming, expensive, and possibly unsuccessful. Even if successful, the resulting remedy may not adequately compensate us for the harm caused by the breach. These risks are heightened in countries where laws or law enforcement practices may not protect proprietary rights as fully as in the United States or Europe. Any unauthorized use or disclosure of, or access to, our trade secrets, know-how or other proprietary information, whether accidentally or through willful misconduct, could have a material adverse effect on our programs and our strategy, and on our ability to compete effectively.

If our trademarks and trade names are not adequately protected, it may not be able to build name recognition in our markets of interest, and our business may be adversely affected.

Failure to maintain our trademark registrations, or to obtain new trademark registrations in the future, could limit our ability to protect our trademarks and impede our marketing efforts in the countries in which we operate. We may not be able to protect our rights to trademarks and trade names which we may need to build name recognition with potential partners or customers in our markets of interest. As a means to enforce our trademark rights and prevent infringement, we may be required to file trademark claims against third parties or initiate trademark opposition proceedings. This can be expensive and time-consuming, and possibly unsuccessful. our registered or unregistered trademarks or trade names may be challenged, infringed, circumvented, declared generic or determined to infringe on other marks.

Our pending trademark applications in the United States and in other foreign jurisdictions where we may file may not be successful. Even if these applications result in registered trademarks, third parties may challenge these trademarks in the future. Over the long term, if we are unable to establish name recognition based on our trademarks and trade names, then it may not be able to compete effectively, and our business may be adversely affected.

Litigation or other proceedings resulting from either third-party claims of patent infringement, or asserting infringement by third parties of our technology, could be costly, time-consuming, and could limit our ability to commercialize our products or services.

Our success depends in part on our non-infringement of the patents or intellectual property rights of third parties, and our ability to successfully prevent third parties from infringing our intellectual property. We operate in a crowded technology area in which there has been substantial litigation and other proceedings regarding patent and other intellectual property rights in the genetic diagnostics industry. Third parties, including our competitors, have asserted and may in the future assert that we are infringing their intellectual property rights. We may also become subject to and/or initiate future intellectual property litigation as our product portfolio and the level of competition in our industry grow.

Because the U.S. Patent & Trademark Office, or USPTO, maintains patent applications in secrecy until a patent application publishes or the patent is issued, we have no way of knowing if others may have filed patent applications covering technologies used by it or our partners. Additionally, there may be third-party patents, patent applications and other intellectual property relevant to our technologies that may block or compete with our technologies. From time-to-time we have received correspondence from third parties alleging to hold intellectual property rights that could block our development or commercialization of products. While none of these inquiries to date have had any material effect on it, we may receive inquiries in the future that could have a material effect on our business. Even if third-party claims are without merit, defending a lawsuit may result in substantial expense to us and may divert the attention of management and key personnel. In addition, we cannot provide assurance that it would prevail in any such suits to the extent necessary to conduct our business according to our strategic plan or that the damages or other remedies, if any, awarded against it would not be substantial. Claims of intellectual property infringement may require that we, or our strategic partners, enter into unsustainably high royalty or license agreements with third parties that may only be available on unacceptable terms, if at all. In addition, we could experience delays in product introductions or sales growth while we attempt to develop non-infringing alternatives. These claims could also result in injunctions against the further development and commercial sale of services or products containing our technologies, which would have a material adverse effect on our business, financial condition and results of operations.

Further, patents and patent applications owned by us may become the subject of interference proceedings in the USPTO to determine priority of invention, which could result in substantial cost to us as well as a possible adverse decision as to the priority of invention of the patent or patent application involved. An adverse decision in an interference proceeding may result in the loss of rights under a patent or patent application subject to such a proceeding. We cannot predict whether, or offer any assurance that, the patent infringement claims may initiate in the future will be successful. We are and may become subject to counterclaims by patent infringement defendants. Our patents may be declared invalid or unenforceable, or narrowed in scope. Even if we prevail in an infringement action, we cannot assure you that it would be adequately compensated for the harm to our business. If we are unable to enjoin third-party infringement, our revenues may be adversely impacted and it may lose market share; and such third-party product may continue to exist in the market, but fail to meet our regulatory or safety standards, thereby causing irreparable harm to our reputation as a provider of quality products, which in turn could result in loss of market share and have a material adverse effect on our business, financial condition and our results of operations.

In addition, our agreements with some of our customers, suppliers, and other entities with whom we do business require us to defend or indemnify these parties to the extent they become involved in patent infringement claims, including the types of claims described in this risk factor. We have agreed, and may in the future agree, to defend or indemnify third parties if we determine it to be in the best interests of our business relationships. If we are required or agree to defend or indemnify third parties in connection with any infringement claims, we could incur significant costs and expenses that could adversely affect our business, financial condition and results of operations.

Our use of open-source software could subject it to possible litigation or cause us to subject our platform to unwanted open-source license conditions that could negatively impact our sales.

A limited but meaningful portion of our platforms and products incorporate open-source software, and it will incorporate open-source software into other offerings or products in the future. Such open-source software is generally licensed by its authors or other third parties under open-source licenses. There is little legal precedent governing the interpretation of certain terms of these licenses, and therefore the potential impact of these terms on our business is unknown and may result in unanticipated obligations regarding our products and technologies. If an author or other third party that distributes such open-source software were to allege that we had not complied with the conditions of one or more of these licenses, we could be required to incur significant legal expenses defending against such allegations. In addition, if we combine our proprietary software with open-source software in a certain manner, under some open-source licenses, we could be required to release the source code of our proprietary software, which could substantially help our competitors develop products that are similar to or better than our products.

We rely on strategic collaborative and licensing arrangements with third parties to develop critical intellectual property. We may not be able to successfully establish and maintain such intellectual property.

The development and commercialization of our products and services rely, directly or indirectly, upon strategic collaborations and licensing agreements with third parties. Such arrangements provide us with intellectual property and other business rights crucial to our product development and commercialization. We have incorporated licensed technology into our tests. Our dependence on licensing, collaboration and other similar agreements with third parties may subject it to a number of risks. There can be no assurance that any current contractual arrangements between us and third parties or between our strategic partners and other third parties will be continued on materially similar terms and will not be breached or terminated early. Any failure to obtain or retain the rights to necessary technologies on acceptable commercial terms could require us to re-configure our products and services, which could negatively impact their commercial sale or increase the associated costs, either of which could materially harm our business and adversely affect our future revenues and ability to achieve sustained profitability.

We expect to continue and expand our reliance on collaborative and licensing arrangements. Establishing new strategic collaborations and licensing arrangements is difficult and time-consuming. Discussions with potential collaborators or licensors may not lead to the establishment of collaborations on favorable terms, if at all. To the extent we agree to work exclusively with one collaborator in a given area, our opportunities to collaborate with other entities could be limited. Potential collaborators or licensors may reject collaborations with it based upon their assessment of our financial, regulatory or intellectual property position or other factors. Even if we successfully

establish new collaborations, these relationships may never result in the successful commercialization of any product or service. In addition, the success of the projects that require collaboration with third parties will be dependent on the continued success of such collaborators. There is no guarantee that our collaborators will continue to be successful and, as a result, we may expend considerable time and resources developing products or services that will not ultimately be commercialized.

Risks Related to Cybersecurity, Privacy and Information Technology

Interruption, interference with, or failure of our information technology and communications systems could hurt our ability to effectively provide our products and services, which could harm our reputation, financial condition, and operating results.

The availability of our products and services and fulfillment of our customer contracts depend on the continuing operation of our information technology and communications systems. Our systems are vulnerable to damage, interference, or interruption from terrorist attacks, natural disasters, the effects of climate change (such as sea level rise, drought, flooding, wildfires, and increased storm severity), power loss, telecommunications failures, computer viruses, ransomware attacks, computer denial of service attacks, phishing schemes, or other attempts to harm or access our systems. Some of our data centers are located in areas with a high risk of major earthquakes or other natural disasters. Our data centers are also subject to break-ins, sabotage, and intentional acts of vandalism, and, in some cases, to potential disruptions resulting from problems experienced by facility operators. Some of our systems are not fully redundant, and disaster recovery planning cannot account for all eventualities.

The occurrence of a natural disaster, closure of a facility, or other unanticipated problems at our data centers could result in lengthy interruptions in our service. In addition, our products and services are highly technical and complex and may contain errors or vulnerabilities, which could result in interruptions in or failure of our services or systems.

Security breaches, privacy issues, loss of data and other incidents could compromise sensitive, protected, or personal information related to our business, could prevent it from accessing critical information, and could expose it to regulatory liability, which could adversely affect our business.

In the ordinary course of our business, we collect and store sensitive data, including PHI, personally identifiable information, genetic information, credit card information, intellectual property and proprietary business information owned or controlled by us or our customers, payers and other parties. We manage and maintain our applications and data utilizing a combination of on-site systems, managed data center systems and cloud-based systems. We also communicate PHI and other sensitive patient data through our various customer tools and platforms. In addition to storing and transmitting sensitive data that is subject to multiple legal protections, these applications and data encompass a wide variety of business-critical information including research and development information, commercial information, and business and financial information. We face a number of risks relative to protecting this critical information, including loss of access risk, inappropriate disclosure, inappropriate modification, and the risk of our being unable to adequately monitor and modify our controls over our critical information. Any technical problems that may arise in connection with the data that we access and our systems, including those that are hosted by third-party providers, could result in interruptions to our business and operations or exposure to security vulnerabilities. These types of problems may be caused by a variety of factors, including infrastructure changes, intentional or accidental human actions or omissions, software errors, malware, viruses, security attacks, fraud, spikes in customer usage and denial of service issues. From time to time, large third-party web hosting providers have experienced outages or other problems that have resulted in their systems being offline and inaccessible. Such outages could materially impact our business and operations.

The secure processing, storage, maintenance and transmission of this critical information are vital to our operations and business strategy, and it devotes significant resources to protecting such information. Although we take what we believe to be reasonable and appropriate measures, including a formal, dedicated enterprise security program, to protect sensitive information from various compromises (including unauthorized access, disclosure, or modification or lack of availability), our information technology and infrastructure may be vulnerable to attacks by hackers or viruses or breached due to employee error, malfeasance or other disruptions. Any such breach or

interruption could compromise our networks and the information stored therein could be accessed by unauthorized parties, altered, publicly disclosed, lost or stolen.

Further, our some of customer tools and platforms are currently accessible through a portal and there is no guarantee that we can protect our portal from a security breach. Unauthorized access, loss or dissemination could also disrupt our operations (including our ability to conduct our analyses, provide test results, bill payers or patients, process claims and appeals, provide customer assistance, conduct research and development activities, collect, process and prepare company financial information, provide information about our tests and other patient and physician education and outreach efforts through our website, and manage the administrative aspects of our business) and damage our reputation, any of which could adversely affect our business. In addition to data security risks, we also face privacy risks. Should we actually violate, or be perceived to have violated, any privacy promises it makes to patients or consumers, it could be subject to a complaint from an affected individual or interested privacy regulator, such as the FTC, a state Attorney General, an EU Member State Data Protection Authority, or a data protection authority in another international jurisdiction. This risk is heightened given the sensitivity of the data we collect.

Any security compromise that causes an apparent privacy violation could also result in legal claims or proceedings; liability under federal, state, foreign, or multinational laws that regulate the privacy, security, or breach of personal information, such as but not limited to the HIPAA, HITECH, state data security and data breach notification laws, the EU's GDPR, the UK Data Protection Act of 2018; and related regulatory penalties. Penalties for failure to comply with a requirement of HIPAA or HITECH vary significantly, and, depending on the knowledge and culpability of the HIPAA-regulated entity, may include civil monetary penalties of up to \$1.5 million per calendar year for each provision of HIPAA that is violated. A person who knowingly obtains or discloses individually identifiable health information in violation of HIPAA may face a criminal penalty of up to \$50,000 and up to one-year imprisonment. The criminal penalties increase if the wrongful conduct involves false pretenses or the intent to sell, transfer or use identifiable health information for commercial advantage, personal gain or malicious harm. Penalties for unfair or deceptive acts or practices under the FTC Act or state Unfair and Deceptive Acts and Practices, or UDAP, statutes may also vary significantly.

There has been unprecedented activity in the development of data protection regulation around the world. As a result, the interpretation and application of consumer, health-related and data protection laws in the United States, Europe and elsewhere are often uncertain, contradictory and in flux. The GDPR took effect on May 25, 2018. The GDPR took effect on May 25, 2018. The GDPR applies to any entity established in the EU as well as extraterritorially to any entity outside the EU that offers goods or services to, or monitors the behavior of, individuals who are located in the EU. The GDPR imposes strict requirements on controllers and processors of personal data, including enhanced protections for "special categories" of personal data, which includes sensitive information such as health and genetic information of data subjects. The GDPR also grants individuals various rights in relation to their personal data, including the rights of access, rectification, objection to certain processing and deletion. The GDPR provides an individual with an express right to seek legal remedies if the individual believes his or her rights have been violated. Failure to comply with the requirements of the GDPR or the related national data protection laws of the member states of the EU, which may deviate from or be more restrictive than the GDPR, may result in significant administrative fines issued by EU regulators. Maximum penalties for violations of the GDPR are capped at 20M euros or 4% of an organization's annual global revenue, whichever is greater.

Further, the United Kingdom's decision to leave the EU, often referred to as Brexit, has created uncertainty with regard to data protection regulation in the United Kingdom. In particular, it is still unclear whether the transfer of personal information from the EU to the United Kingdom will in the future remain lawful under the GDPR. The United Kingdom-EU post-Brexit trade deal provides that transfers of personal information to the United Kingdom will not be treated as restricted transfers to a non-EU country for a period of up to six months from January 1, 2021. However, unless the EU Commission makes an "adequacy finding" with respect to the United Kingdom before the end of that transition period, from that date the United Kingdom will be a "third country" under the GDPR and transfers of personal information from the EU to the United Kingdom will require an "adequacy mechanism," such as the SCCs.

Additionally, the implementation of GDPR has led other jurisdictions to either amend or propose legislation to amend their existing data privacy and cybersecurity laws to resemble the requirements of GDPR. For example, on June 28, 2018, California adopted the CCPA. The CCPA regulates how certain for-profit businesses that meet one or more CCPA applicability thresholds collect, use, and disclose the personal information of consumers who reside in California. Among other things, the CCPA confers to California consumers the right to receive notice of the categories of personal information that will be collected by a business, how the business will use and share the personal information, and the third parties who will receive the personal information; the CCPA also confers rights to access, delete, or transfer personal information; and the right to receive equal service and pricing from a business after exercising a consumer right granted by the CCPA. In addition, the CCPA allows California consumers the right to opt out of the "sale" of their personal information, which the CCPA defines broadly as any disclosure of personal information to a third party in exchange for monetary or other valuable consideration. The CCPA also requires a business to implement reasonable security procedures to safeguard personal information against unauthorized access, use, or disclosure. California amended the law in September 2018 to exempt all PHI collected by certain parties subject to HIPAA, and further amended the law in September 2020 to clarify that de-identified data as defined under HIPAA will also be exempt from the CCPA. The California Attorney General's final regulations implementing the CCPA took effect on August 14, 2020. The CCPA provides for civil penalties for violations, as well as a private right of action for data breaches resulting from a business's failure to implement and maintain reasonable data security procedures that is expected to increase data breach litigation. In addition, California voters recently approved the California Privacy Rights Act of 2020, or CPRA, that is scheduled to go into effect on January 1, 2023. The CPRA would, among other things, amend the CCPA to give California residents the ability to limit the use of their sensitive information, provide for penalties for CPRA violations concerning California residents under the age of 16, and establish a new California Privacy Protection Agency to implement and enforce the law. Other jurisdictions in the United States are beginning to propose laws similar to CCPA. Some observers have noted that the CCPA could mark the beginning of a trend toward more stringent privacy legislation, which could increase our potential liability and adversely affect our business, results of operations, and financial condition.

It is possible the GDPR, CCPA and other emerging United States and international data protection laws may be interpreted and applied in manner that is inconsistent with our practices. If so, this could result in government-imposed fines or orders requiring that we change our practices, which could adversely affect our business. In addition, these privacy laws and regulations may differ from country to country and state to state, and our obligations under these laws and regulations vary based on the nature of our activities in the particular jurisdiction, such as whether we collect samples from individuals in the local jurisdiction, perform testing in the local jurisdiction, or process personal information regarding employees or other individuals in the local jurisdiction. Complying with these various laws and regulations could cause us to incur substantial costs or require it to change our business practices and compliance procedures in a manner adverse to our business. We can provide no assurance that it is or will remain in compliance with diverse privacy and data security requirements in all of the jurisdictions in which it does business. Failure to comply with privacy and data security requirements could result in a variety of consequences, or damage to our reputation, any of which could have a material adverse effect on our business.

Data privacy and security concerns relating to our technology and our practices could damage our reputation, subject it to significant legal and financial exposure, and deter current and potential users or customers from using our products and services. Software bugs or defects, security breaches, and attacks on our systems could result in the improper disclosure and use of user data and interference with our users and customers' ability to use our products and services, harming our business operations and reputation.

Concerns about our practices with regard to the collection, use, disclosure, or security of personal information or other data-privacy-related matters, even if unfounded, could harm our reputation, financial condition, and operating results. Our policies and practices may change over time as expectations regarding privacy and data change.

Our products and services involve the storage and transmission of protected health information and other personal information, proprietary information, and bugs, theft, misuse, defects, vulnerabilities in our products and services, and security breaches expose it to a risk of loss of this information, improper use and disclosure of such information, litigation, and other potential liability. Systems and control failures, security breaches, failure to comply with our privacy policies, and/or inadvertent disclosure of user data could result in government and legal

exposure, seriously harm our reputation and brand and, therefore, our business, and impair our ability to attract and retain users or customers. We expect to continue to expend significant resources to maintain security protections that shield against bugs, theft, misuse, or security vulnerabilities or breaches.

We experience cyber-attacks and other attempts to gain unauthorized access to our systems on a regular basis. We may experience future security issues, whether due to employee error or malfeasance or system errors or vulnerabilities in our or other parties' systems, which could result in significant legal and financial exposure. Government inquiries and enforcement actions, litigation, and adverse press coverage could harm our business. We may be unable to anticipate or detect attacks or vulnerabilities or implement adequate preventative measures. Attacks and security issues could also compromise trade secrets and other sensitive information, harming our business.

While we have dedicated significant resources to privacy and security incident response capabilities, including dedicated worldwide incident response teams, our response process may not be adequate, may fail to accurately assess the severity of an incident, may not respond quickly enough, or may fail to sufficiently remediate an incident. As a result, we may suffer significant legal, reputational, or financial exposure, which could harm our business, financial condition, and operating results.

We depend on our scientific computing and information technology and management systems and any failure of these systems could harm our business.

We depend on scientific computing and information technology and management systems, including third-party cloud computing infrastructure, operating systems and artificial intelligence platforms, for significant elements of our operations, including our laboratory information management system, clinical database, analytical platform, laboratory workflow tools, customer and collaborator reporting and related functions. We also depend on our proprietary workflow software to support new product and service launches and regulatory compliance.

We use complex software processes and bioinformatic pipelines to manage samples and evaluate sequencing result data. These are subject to initial design or ongoing modifications which may result in unanticipated issues that could cause variability in patient results, leading to service disruptions or errors, resulting in liability.

We have installed, and expects to expand, a number of enterprise software systems that affect a broad range of business processes and functional areas, including systems laboratory operations, handling human resources, financial controls and reporting, contract management, regulatory compliance and other infrastructure operations, and patient consent and information management. In addition to these business systems, we have installed, and intends to extend, the capabilities of both our preventative and detective security controls by augmenting the monitoring and alerting functions, the network design and the automatic countermeasure operations of our technical systems. These information technology and telecommunications systems support a variety of functions, including laboratory operations, test validation, sample tracking, quality control, customer service support, billing and reimbursement, research and development activities, scientific and medical curation and general administrative activities. In addition, our third-party billing and collections provider depends upon technology and telecommunications systems provided by outside vendors.

Information technology and telecommunications systems are vulnerable to damage from a variety of sources, including telecommunications or network failures, malicious internal or external human acts and natural disasters. Moreover, despite network security and back-up measures, some of our servers are potentially vulnerable to physical or electronic break-ins, computer viruses and similar disruptive problems. Despite the precautionary measures we have taken to prevent unanticipated problems that could affect our information technology and telecommunications systems, failures or significant downtime of these systems or those used by our collaborators or subcontractors could prevent it from conducting our comprehensive screening analysis, clinical diagnostics and drug discovery, preparing and providing reports to researchers, clinicians and our collaborators, billing payers, handling physician inquiries, conducting research and development activities and managing the administrative aspects of our business. Any disruption or loss of information technology or telecommunications systems on which critical aspects of our operations depend could have an adverse effect on our business and our reputation, and we may be unable to regain or repair our reputation in the future.

Risks Related to Being a Public Company

We will incur increased costs and demands on management as a result of compliance with laws and regulations applicable to public companies, which could harm our operating results.

Prior to the Business Combination, Sema4 had never been a public company. We could incur significant legal, accounting and other expenses, including costs associated with public company reporting requirements. In addition, the Sarbanes-Oxley Act of 2002, or the Sarbanes-Oxley Act, as well as rules implemented by the SEC and Nasdaq, impose a number of requirements on public companies, including with respect to corporate governance practices. The SEC and other regulators have continued to adopt new rules and regulations and make additional changes to existing regulations that require the company's compliance. In addition, the Dodd-Frank Wall Street Reform and Consumer Protection Act, or the Dodd-Frank Act, enacted in 2010, includes significant corporate governance and executive-compensation-related provisions. Our management and other personnel will need to devote a substantial amount of time to these compliance and disclosure obligations. If these requirements divert the attention of our management and personnel from other aspects of our business concerns, they could have a material adverse effect on our business, financial condition and results of operations. Moreover, these rules and regulations applicable to public companies substantially could increase our legal, accounting and financial compliance costs, require that we hire additional personnel and make some activities more time consuming and costly. It may also be more expensive for us to obtain director and officer liability insurance as a public company.

A market for our securities may not continue, which would adversely affect the liquidity and price of our securities.

The price of our securities may fluctuate significantly due to general market and economic conditions. An active trading market for our securities following the Business Combination may never develop or, if developed, it may not be sustained. In addition, the price of our securities can vary due to general economic conditions and forecasts, our general business condition and the release of our financial reports.

If the Business Combination's benefits do not meet the expectations of investors, stockholders or financial analysts, the market price of our securities may decline.

If the benefits of the Business Combination do not meet the expectations of investors or securities analysts, the market price of our securities may decline. In addition, fluctuations in the price of our securities could contribute to the loss of all or part of your investment. Prior to the Business Combination, there had not been a public market for Sema4's stock and trading in the shares of Sema4's common stock had not been active. Accordingly, the valuation ascribed to Sema4 and its common stock in the Business Combination may not be indicative of the trading price of our securities following the Business Combination. If an active market for our securities develops and continues, the trading price of our securities following the Business Combination could be volatile and subject to wide fluctuations in response to various factors, some of which are beyond our control. Any of the factors listed below could have a material adverse effect on your investment in our securities and our securities may trade at prices significantly below the price you paid for them. In such circumstances, the trading price of our securities may not recover and may experience a further decline.

Factors affecting the trading price of our securities may include:

- · actual or anticipated fluctuations in our quarterly financial results or the quarterly financial results of companies perceived to be similar to us;
- changes in the market's expectations about our operating results;
- the public's reaction to our press releases, our other public announcements and our filings with the SEC;
- speculation in the press or investment community;
- announcements of technological innovation, new products, acquisitions, strategic alliances, significant agreements by us or competitors;

- · success of competitors;
- our operating results falling below our financial guidance or other projections or failing to meet the expectation of securities analysts or investors in a particular period;
- · changes in financial estimates and recommendations by securities analysts concerning us or the market in general;
- · operating and stock price performance of other companies that investors deem comparable to us;
- our ability to market new and enhanced products on a timely basis;
- changes in laws and regulations affecting our business;
- commencement of, or involvement in, litigation involving us;
- · changes in our capital structure, such as future issuances of securities or the incurrence of additional debt;
- the volume of shares of our common stock available for public sale;
- any major change in our Board or management;
- · sales of substantial amounts of common stock by our directors, officers or significant stockholders or the perception that such sales could occur;
- the expiration of the market stand-off or contractual lock-up agreements;
- the realization of any of the risk factors presented in this prospectus;
- additions or departures of key personnel;
- failure to comply with the requirements of Nasdaq;
- failure to comply with SOX or other laws or regulations;
- actual, potential or perceived control, accounting or reporting problems;
- · changes in accounting principles, policies and guidelines; and
- general economic and political conditions such as recessions, interest rates, fuel prices, international currency fluctuations and acts of war or terrorism.

Broad market and industry factors may materially harm the market price of our securities irrespective of our operating performance. The stock market in general and Nasdaq have experienced price and volume fluctuations that have often been unrelated or disproportionate to the operating performance of the particular companies affected. The trading prices and valuations of these stocks, and of our securities, may not be predictable. A loss of investor confidence in the market for the stocks of other companies which investors perceive to be similar to us could depress our stock price regardless of our business, prospects, financial conditions or results of operations. A decline in the market price of our securities also could adversely affect our ability to issue additional securities and our ability to obtain additional financing in the future.

In the past, securities class action litigation has often been initiated against companies following periods of volatility in their stock price. This type of litigation could result in substantial costs and divert our management's attention and resources, and could also require us to make substantial payments to satisfy judgments or to settle litigation.

If securities or industry analysts do not publish or cease publishing research or reports about us, our business, or our market, or if they change their recommendations regarding our common stock adversely, then the price and trading volume of our common could decline.

The trading market for our common stock will be influenced by the research and reports that industry or securities analysts may publish about us, our business, our market, or our competitors. Securities and industry analysts do not currently, and may never, publish securities or industry analysts commence coverage of us, our stock price and trading volume would likely be negatively impacted. If any of the analysts who may cover us change their recommendation regarding our stock adversely, or provide more favorable relative recommendations about our competitors, the price of our common stock would likely decline. If any analyst who may cover us were to cease coverage of us or fail to regularly publish reports on it, we could lose visibility in the financial markets, which could cause our stock price or trading volume to decline.

Changes in laws, regulations or rules, or a failure to comply with any laws, regulations or rules, may adversely affect our business, investments and results of operations.

We are subject to laws, regulations and rules enacted by national, regional and local governments and Nasdaq. In particular, we are required to comply with certain SEC, Nasdaq and other legal or regulatory requirements. Compliance with, and monitoring of, applicable laws, regulations and rules may be difficult, time consuming and costly. Those laws, regulations or rules and their interpretation and application may also change from time to time and those changes could have a material adverse effect on our business, investments and results of operations. In addition, a failure to comply with applicable laws, regulations or rules, as interpreted and applied, could have a material adverse effect on our business and results of operations.

Anti-takeover provisions contained in our Amended and Restated Certificate of Incorporation and Bylaws, as well as provisions of Delaware law, could impair a takeover attempt.

Our Amended and Restated Certificate of Incorporation contains provisions that may discourage unsolicited takeover proposals that stockholders may consider to be in their best interests. We are also subject to anti-takeover provisions under Delaware law, which could delay or prevent a change of control. Together, these provisions may make more difficult the removal of management and may discourage transactions that otherwise could involve payment of a premium over prevailing market prices for our securities. These provisions will include:

- no cumulative voting in the election of directors, which limits the ability of minority stockholders to elect director candidates;
- a classified board of directors with three-year staggered terms, which could delay the ability of stockholders to change the membership of a majority
 of the Board:
- the requirement that directors may only be removed from the Board for cause;
- the right of our Board to elect a director to fill a vacancy created by the expansion of our Board or the resignation, death or removal of a director in certain circumstances, which prevents stockholders from being able to fill vacancies on our Board;
- a prohibition on stockholder action by written consent, which forces stockholder action to be taken at an annual or special meeting of our stockholders;
- a prohibition on stockholders calling a special meeting and the requirement that a meeting of stockholders may only be called by a majority of the board, our chairman of the board or our chief executive officer and may not be called by any other person, which may delay the ability of our stockholders to force consideration of a proposal or to take action, including the removal of directors;
- the requirement that changes or amendments to certain provisions of our Amended and Restated Certificate of Incorporation must be approved by holders of at least two-thirds of our common stock; and

advance notice procedures that stockholders must comply with in order to nominate candidates to our Board or to propose matters to be acted upon at
a meeting of stockholders, which may discourage or deter a potential acquirer from conducting a solicitation of proxies to elect the acquirer's own
slate of directors or otherwise attempting to obtain control of us.

The JOBS Act permits "emerging growth companies" like us to take advantage of certain exemptions from various reporting requirements applicable to other public companies that are not emerging growth companies.

We currently qualify as an "emerging growth company" as defined in Section 2(a)(19) of the Securities Act, as modified by the JOBS Act. As such, we take advantage of certain exemptions from various reporting requirements applicable to other public companies that are not emerging growth companies for as long as we continue to be an emerging growth company, including: (i) the exemption from the auditor attestation requirements with respect to internal control over financial reporting under Section 404 of SOX; (ii) the exemptions from say-on-pay, say-on-frequency and say-on-golden parachute voting requirements; and (iii) reduced disclosure obligations regarding executive compensation in our periodic reports and prospectus. As a result, our stockholders may not have access to certain information they deem important. We will remain an emerging growth company until the earliest of (i) the last day of the fiscal year: (a) following September 1, 2025, the fifth anniversary of our IPO; (b) in which we have total annual gross revenue of at least \$1.07 billion; or (c) in which we are deemed to be a large accelerated filer, which means the market value of our common stock that is held by non-affiliates exceeds \$700.0 million as of the prior June 30th, and (ii) the date on which we have issued more than \$1.0 billion in non-convertible debt during the prior three-year period.

In addition, Section 107 of the JOBS Act also provides that an emerging growth company can take advantage of the exemption from complying with new or revised accounting standards provided in Section 7(a)(2)(B) of the Securities Act as long as we are an emerging growth company. An emerging growth company can therefore delay the adoption of certain accounting standards until those standards would otherwise apply to private companies. The JOBS Act provides that a company can elect to opt out of the extended transition period and comply with the requirements that apply to non-emerging growth companies, but any such election to opt out is irrevocable. We have elected to avail ourselves of such extended transition period, which means that when a standard is issued or revised and it has different application dates for public or private companies, we, as an emerging growth company, can adopt the new or revised standard at the time private companies adopt the new or revised standard. This may make comparison of our financial statements with another public company that is neither an emerging growth company nor an emerging growth company that has opted out of using the extended transition period difficult or impossible because of the potential differences in accounting standards used.

Additionally, we are a "smaller reporting company" as defined in Item 10(f)(1) of Regulation S-K. Smaller reporting companies may take advantage of certain reduced disclosure obligations, including, among other things, providing only two years of audited financial statements. We will remain a smaller reporting company until the last day of the fiscal year in which (i) the market value of our common stock held by non-affiliates exceeds \$250 million as of the prior June 30, or (ii) our annual revenues exceeded \$100 million during such completed fiscal year and the market value of our common stock held by non-affiliates exceeds \$700 million as of the prior June 30.

We cannot predict if investors will find our common stock less attractive because we rely on these exemptions. If some investors find our common stock less attractive as a result, there may be a less active trading market for our common stock and our stock price may be more volatile.

Our internal controls over financial reporting may not be effective and our independent registered public accounting firm may not be able to certify as to their effectiveness, which could have a significant and adverse effect on our business and reputation.

As a public company, we are required to comply with the SEC's rules implementing Sections 302 and 404 of SOX, which require management to certify financial and other information in our quarterly and annual reports and provide an annual management report on the effectiveness of internal control over financial reporting. To comply with the requirements of being a public company, we will be required to provide management's assessment on internal controls, and we may need to undertake various actions, such as implementing additional internal controls

and procedures and hiring additional accounting or internal audit staff. The standards required for a public company under Section 404 of SOX are significantly more stringent than those required of us as a privately-held company. Further, as an emerging growth company, our independent registered public accounting firm is not required to formally attest to the effectiveness of our internal controls over financial reporting pursuant to Section 404 until the date we are no longer an emerging growth company. At such time, our independent registered public accounting firm may issue a report that is adverse in the event that it is not satisfied with the level at which the controls of the company are documented, designed or operating.

Testing and maintaining these controls can divert our management's attention from other matters that are important to the operation of our business. If we identify material weaknesses in the internal control over financial reporting of the company or are unable to comply with the requirements of Section 404 or assert that our internal control over financial reporting is effective, or if our independent registered public accounting firm is unable to express an opinion as to the effectiveness of our internal controls over financial reporting when we no longer qualify as an emerging growth company, investors may lose confidence in the accuracy and completeness of our financial reports and the market price of our common stock could be negatively affected, and we could become subject to investigations by the SEC or other regulatory authorities, which could require additional financial and management resources.

The Amended and Restated Certificate of Incorporation designates the Court of Chancery of the State of Delaware and federal court within the State of Delaware as the exclusive forum for certain types of actions and proceedings that the our stockholders may initiate, which could limit a stockholder's ability to obtain a favorable judicial forum for disputes with us or our directors, officers or employees.

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The Amended and Restated Certificate of Incorporation provides that, subject to limited exceptions, the Court of Chancery of the State of Delaware and federal court within the State of Delaware will be exclusive forums for any:

- derivative action or proceeding brought on our behalf;
- action asserting a claim of breach of a fiduciary duty owed by, or other wrongdoing by, any of our directors, officers, stockholders, employees or agents to us or our stockholders;
- action asserting a claim against the us or any of our directors, officers, stockholders, employees or agents arising pursuant to any provision of the General Corporation Law, the Company's Amended and Restated Certificate of Incorporation or Bylaws or as to which the General Corporation Law confers jurisdiction on the Court of Chancery of the State of Delaware:
- · action to interpret, apply, enforce or determine the validity of the Amended and Restated Certificate of Incorporation or the Bylaws; or
- other action asserting a claim against us or any of our directors, officers, stockholders, employees or agents that is governed by the internal affairs doctrine.

This choice of forum provision does not apply to actions brought to enforce a duty or liability created under the Exchange Act or any other claim for which federal courts have jurisdiction. Furthermore, in accordance with our Bylaws, unless we consent in writing to the selection of an alternative forum, the federal district courts of the United States will be, to the fullest extent permitted by law, the exclusive forum for the resolution of any complaint asserting a cause of action arising under the Securities Act. Any person or entity purchasing or otherwise acquiring or holding any interest in any of our securities shall be deemed to have notice of and consented to our exclusive forum provision in the Bylaws and the choice of forum provision in the Amended and Restated Certificate of Incorporation.

These provisions may limit a stockholder's ability to bring a claim in a judicial forum that it finds favorable for disputes with us or any of our directors, officers, or other employees, which may discourage lawsuits with respect to such claims. Alternatively, if a court were to find the choice of forum provisions contained in our restated certificate of incorporation to be inapplicable or unenforceable in an action, it may incur additional costs associated with resolving such action in other jurisdictions, which could harm our business, results of operations and financial condition.

The stockholders will not be deemed to have waived our compliance with the federal securities laws and the regulations promulgated thereunder.

Any person or entity purchasing or otherwise acquiring or holding any interest in any of our securities shall be deemed to have notice of and consented to its exclusive forum provisions, including the choice of forum provision. These provisions may limit a stockholders' ability to bring a claim, and may result in increased costs for a stockholder to bring a claim in a judicial forum of their choosing for disputes with us or our directors, officers, or other employees, which may discourage lawsuits against us and our directors, officers, and other employees.

Risks Related to Our Common Stock and Warrants

We may amend the terms of the public warrants in a manner that may be adverse to holders with the approval by the holders of at least 50% of the thenoutstanding public warrants. As a result, the exercise price of a holder's public warrants could be increased, the exercise period could be shortened and the number of shares of our common stock purchasable upon exercise of a public warrant could be decreased, all without the approval of that warrant holder.

Our public warrants were issued in registered form under a warrant agreement between Continental Stock Transfer & Trust Company, as warrant agent, and us. The warrant agreement provides that the terms of the public warrants may be amended without the consent of any holder to cure any ambiguity or correct any defective provision, but requires the approval by the holders of at least 50% of the then-outstanding public warrants to make any change that adversely affects the interests of the registered holders. Accordingly, we may amend the terms of the public warrants in a manner adverse to a holder if holders of at least 50% of the then-outstanding public warrants approve of such amendment. Although our ability to amend the terms of the public warrants with the consent of at least 50% of the then-outstanding public warrants is unlimited, examples of such amendments could be amendments to, among other things, increase the exercise price of the public warrants, convert the warrants into cash or stock, shorten the exercise period or decrease the number of shares of common stock purchasable upon exercise of a public warrant.

We may redeem unexpired public warrants prior to their exercise at a time that is disadvantageous to warrant holders, thereby making their public warrants worthless.

We have the ability to redeem outstanding public warrants at any time after they become exercisable and prior to their expiration, at a price of \$0.01 per public warrant; provided that the last reported sales price of our common stock equals or exceeds \$18.00 per share (as adjusted for stock splits, stock dividends, reorganizations, recapitalizations and the like) for any 20 trading days within a 30 trading-day period ending on the third trading day prior to the date on which we give notice of such redemption to the warrant holders. If and when the public warrants become redeemable by us, we may exercise our redemption right even if we are unable to register or qualify the underlying securities for sale under all applicable state securities laws. We will use our best efforts to register or qualify such shares of common stock under the blue sky laws of the state of residence in those states in which the warrants were offered by us. Redemption of the outstanding public warrants could force the warrant holders: (i) to exercise their public warrants and pay the exercise price therefor at a time when it may be disadvantageous for them to do so; (ii) to sell their public warrants at the then-current market price when they might otherwise wish to hold their public warrants; or (iii) to accept the nominal redemption price which, at the time the outstanding public warrants are called for redemption, is likely to be substantially less than the market value of their public warrants. None of the private placement warrants will be redeemable by us so long as they are held by the Sponsor or its permitted transferees.

Our warrants are exercisable for our common stock, which will increase the number of shares eligible for future resale in the public market and result in dilution to our stockholders.

Our public warrants are exercisable for 14,758,333 shares of common stock at \$11.50 per share. Our private warrants are exercisable for 7,236,667 shares of common stock at \$11.50 per share. The additional shares of our common stock issuable upon exercise of our warrants will result in dilution to the then existing holders of our common stock and increase the number of shares eligible for resale in the public market. Sales of substantial numbers of such shares in the public market could adversely affect the market price of our common stock.

The unaudited pro forma financial information included elsewhere in this prospectus may not be indicative of our future operating results or financial position.

The pro forma financial information included in this prospectus is presented for informational purposes only and is it indicative of our future operating results or financial position. The pro forma statement of operations does not reflect future nonrecurring charges resulting from the Business Combination. The unaudited pro forma financial information does not reflect future events that may occur after the Business Combination and does not consider potential impacts of future market conditions on revenues or expenses. The pro forma financial information included in the section entitled "Unaudited Pro Forma Condensed Combined Financial Information" has been derived from CMLS's and our historical financial statements and certain adjustments and assumptions have been made regarding our company after giving effect to the Business Combination. There may be differences between preliminary estimates in the pro forma financial information and the final acquisition accounting, which could result in material differences from the pro forma information presented in this prospectus in respect of our estimated financial position and results of operations.

In addition, the assumptions used in preparing the proforma financial information may not prove to be accurate and other factors may affect our financial condition or results of operations. Any potential decline in our financial condition or results of operations may cause significant variations in our stock price.

Our warrants are accounted for as liabilities and the changes in value of our warrants could have a material effect on our financial results.

On April 12, 2021, the Acting Director of the Division of Corporation Finance and Acting Chief Accountant of the SEC together issued a statement regarding the accounting and reporting considerations for warrants issued by special purpose acquisition companies entitled "Staff Statement on Accounting and Reporting Considerations for Warrants Issued by Special Purpose Acquisition Companies ("SPACs")" (the "SEC Statement"). Specifically, the SEC Statement focused on certain settlement terms and provisions related to certain tender offers following a business combination, which terms are similar to those contained in the warrant agreement governing our warrants. As a result of the SEC Statement, we reevaluated the accounting treatment of our 14,758,333 public warrants and 7,236,667 private placement warrants, and determined to classify the warrants as derivative liabilities measured at fair value, with changes in fair value each period reported in earnings.

As a result, included on CMLS's balance sheet as of December 31, 2020 contained elsewhere in prospectus are derivative liabilities related to our warrants. Accounting Standards Codification 815, Derivatives and Hedging ("ASC 815"), provides for the remeasurement of the fair value of such derivatives at each balance sheet date, with a resulting non-cash gain or loss related to the change in the fair value being recognized in earnings in the statement of operations. As a result of the recurring fair value measurement, our financial statements and results of operations may fluctuate quarterly, based on factors, which are outside of our control. Due to the recurring fair value measurement, we expect that we will recognize non-cash gains or losses on our warrants each reporting period and that the amount of such gains or losses could be material.

The price of our common stock and warrants may be volatile.

The price of our common stock and warrants may fluctuate due to a variety of factors, including:

• changes in the industries in which we and our customers operate;

- variations in our operating performance and the performance of our competitors in general;
- material and adverse impact of the COVID-19 pandemic on the markets and the broader global economy;
- actual or anticipated fluctuations in our quarterly or annual operating results;
- · the public's reaction to our press releases, our other public announcements and our filings with the SEC;
- our failure or the failure of our competitors to meet analysts' projections or guidance that we or our competitors may give to the market;
- additions and departures of key personnel;
- changes in laws and regulations affecting our business;
- commencement of, or involvement in, litigation involving us;
- · changes in our capital structure, such as future issuances of securities or the incurrence of additional debt;
- publication of research reports by securities analysts about us or our competitors or our industry;
- sales of shares of our common stock by the PIPE Investors;
- · the volume of shares of our common stock available for public sale; and
- general economic and political conditions such as recessions, interest rates, social, political and economic risks and acts of war or terrorism.

These market and industry factors may materially reduce the market price of our common stock and warrants regardless of our operating performance.

A significant portion of our total outstanding shares are restricted from immediate resale but may be sold into the market in the near future. This could cause the market price of our common stock to drop significantly, even if our business is doing well.

Sales of a substantial number of shares of our common stock in the public market could occur at any time. These sales, or the perception in the market that the holders of a large number of shares intend to sell shares, could reduce the market price of our common stock.

Immediately after Closing: (i) holders of former Sema4 common stock owned approximately 64.89% of our total outstanding common stock, (ii) holders of public shares owned 18.43% of our total outstanding common stock, (iii) holders of the Founder Shares owned 4.61% of our total outstanding common stock and (iv) the PIPE Investors owned approximately 12.07% of our total outstanding shares of common stock.

Although the Sponsor and certain of our stockholders are subject to certain lock-up restrictions regarding the transfer of our common stock, these shares may be sold after the expiration or early termination of the respective applicable lock-ups. This prospectus relates to the offer and sale from time to time by the Selling Securityholders named in this prospectus up to 236,223,522 shares of common stock and 7,236,667 warrants. As restrictions on resale end and the registration statement is available for use, the market price of our common stock could decline if the holders of currently restricted shares sell them or are perceived by the market as intending to sell them.

Even though we consummated the Business Combination, there is no guarantee that the public warrants will ever be in the money, and they may expire worthless and the terms of our public warrants may be amended.

The exercise price for the public warrants is \$11.50 per share of common stock. There is no guarantee that the public warrants will ever be in the money prior to their expiration, and as such, the public warrants may expire worthless.

USE OF PROCEEDS

All of the securities offered by the Selling Securityholders pursuant to this prospectus will be sold by the Selling Securityholders for their respective accounts. We will not receive any of the proceeds from these sales.

Assuming the exercise of all outstanding warrants for cash, we will receive an aggregate of approximately \$252.9 million, but will not receive any proceeds from the sale of the shares of common stock issuable upon such exercise. We expect to use the net proceeds from the exercise of the warrants, if any, for investment in growth, and general corporate purposes. We will have broad discretion over the use of any proceeds from the exercise of the warrants. There is no assurance that the holders of the warrants will elect to exercise for cash any or all of such warrants. To the extent that any warrants are exercised on a "cashless basis," the amount of cash we would receive from the exercise of the warrants will decrease.

The Selling Securityholders will pay any underwriting discounts and commissions and expenses incurred by the Selling Securityholders for brokerage, accounting, tax or legal services or any other expenses incurred by the Selling Securityholders in disposing of the securities. We will bear the costs, fees and expenses incurred in effecting the registration of the securities covered by this prospectus, including all registration and filing fees, Nasdaq listing fees and fees and expenses of our counsel and our independent registered public accounting firm.

DETERMINATION OF OFFERING PRICE

The offering price of the shares of common stock t	underlying the public warrants	s and the private placement	warrants offered hereby	s determined by
reference to the exercise price of the warrants of \$11.50 p	er share. The public warrants a	are listed on the Nasdaq unde	er the symbol "SMFRW."	

MARKET INFORMATION FOR COMMON STOCK AND DIVIDEND POLICY

Market Information

Our common stock and public warrants are listed on the Nasdaq under the symbols "SMFR" and "SMFRW," respectively. Prior to the Closing, CMLS's units, Class A common stock and public warrants were listed on the Nasdaq under the symbols, "CMLFU", "CMLF" and "CMLFW" respectively. On August 2, 2021, the closing sale price of our common stock was \$11.33 per share and the closing price of the public warrants was \$3.20 per warrant. As of July 28, 2021, there were approximately 119 holders of record of our common stock and 1 holder of record of the public warrants. Such numbers do not include beneficial owners holding our securities through nominee names.

Dividend Policy

We have never declared or paid any cash dividends on our capital stock, and we do not currently intend to pay any cash dividends for the foreseeable future. We expect to retain future earnings, if any, to fund the development and growth of our business. Any future determination to pay dividends on our common stock will be at the discretion of our board of directors and will depend upon, among other factors, our financial condition, operating results, current and anticipated cash needs, plans for expansion and other factors that our board of directors may deem relevant.

SELECTED HISTORICAL FINANCIAL INFORMATION OF THE COMPANY

The following table contains summary historical financial data for CMLS as of and for the period ended December 31, 2020 and as of and for the three months ended March 31, 2021. Such data as of and for the period ended and as of December 31, 2020 have been derived from the audited financial statements of CMLS, and such data as of for the three months ended March 31, 2021 have been derived from the unaudited financial statements of CMLS, which financial statements are included elsewhere in this prospectus. The information is only a summary and should be read in conjunction with CMLS's financial statements and related notes contained elsewhere in this prospectus. CMLS's historical results are not necessarily indicative of future results, and the results for any interim period are not necessarily indicative of the results that may be expected for a full fiscal year.

Statement of Operations Data		For the three months ended March 31, 2021		For the Period from July 10, 2020 (Inception) Through December 31, 2020	
General and administrative expenses	\$	1,845,158	\$	206,195	
Loss from operations		(1,845,158)		(206,195)	
Other income:					
Interest earned on investments held in Trust Account		10,919		13,951	
Change in fair value of warrant liability		(56,637,684)		(38,510,584)	
Transaction Costs				(1,204,771)	
Loss before provision for income taxes		(58,471,923)		(39,907,599)	
Provision for income taxes		<u> </u>		_	
Net loss	\$	(58,471,923)	\$	(39,907,599)	
Weighted average shares outstanding of Class A redeemable common stock		44,275,000		44,275,000	
Basic and diluted income per share, Class A redeemable common stock		_	\$	_	
Weighted average shares outstanding of Class B non-redeemable common stock		11,068,750		10,633,062	
Basic and diluted net loss per share, Class B non-redeemable common stock		(5.28)		(3.75)	

Balance Sheet Data	March 31 2021 (Unaudited)		For the Period from July 10, 2020 (Inception) Through December 31, 2020	
ASSETS				
Current Assets				
Cash	\$	627,415	\$	1,094,681
Prepaid expenses		293,754		277,031
Total Current Assets		921,169		1,371,712
Cash and marketable securities held in trust account		442,774,870		442,763,951
Total Assets	\$	443,696,039	\$	444,135,663
LIABILITIES AND STOCKHOLDERS' EQUITY				
Current liabilities				
Accounts payable and accrued expenses	\$	1,491,735	\$	97,120
Total Current Liabilities		1,491,735		97,120
Warrant liability		126,960,100		70,322,418
Deferred underwriting fee payable		15,496,250		15,496,250
Total Liabilities	\$	143,948,085		85,915,788
Commitments and Contingencies				
Class A common stock subject to possible redemption, 29,474,795 and 35,321,987 shares at \$10.00 per share as of March 31, 2021 and December 31, 2020, respectively		294,747,950		353,219,870
Stockholders' Equity				
Preferred stock, \$0.0001 par value; 1,000,000 shares authorized; none issued or outstanding		_		_
Class A common stock, \$0.0001 par value; 380,000,000 shares authorized; 14,800,205 and 8,953,013 shares issued and outstanding (excluding 29,474,795 and 35,321,987 shares subject to possible redemption) as of March 31, 2021 and December 31, 2020, respectively		1,480		895
Class B common stock, \$0.00001 par value; 20,000,000 shares authorized; 11,068,750 shares issued and outstanding as of March 31, 2021 and December 31, 2020		1,107		1,107
Additional paid-in capital		103,376,938		44,905,602
Accumulated deficit		(98,379,521)		(39,907,599)
Total Stockholders' Equity		5,000,004		5,000,005
TOTAL LIABILITIES AND STOCKHOLDERS' EQUITY	\$	443,696,039	\$	444,135,663

Cash Flow Data	the three months ed March 31, 2021	10	ough December 31, 2020
Cash Flows from Operating Activities:			
Net Loss	\$ (58,471,923)	\$	(39,907,599)
Adjustments to reconcile net loss to net cash used in operating activities:			
Interest earned on investments held in Trust Account	(10,919)		(13,951)
Change in fair value of warrant liability	56,637,684		38,510,584
Transaction costs			1,204,771
Changes in operating assets and liabilities:			
Prepaid expenses	(16,723)		(277,031)
Accrued expenses	 1,394,615		97,120
Net cash used in operating activities	 (467,266)		(386,106)
Cash Flows from Investing Activities:			
Investment of cash into Trust Account			(442,750,000)
Net cash used in investing activities			(442,750,000)
Cash Flows from Financing Activities:			
Proceeds from sale of Units, net of underwriting discounts paid			433,895,000
Proceeds from sale of Private Placement Warrants			10,855,000
Proceeds from promissory note – related party			112,837
Repayment of promissory note – related party			(165,081)
Payment of offering costs			(466,969)
Net cash provided by financing activities			444,230,787
Net Change in Cash	(467,266)		1,094,681
Cash – Beginning of period	1,094,681		
Cash – End of period	\$ 627,415	\$	1,094,681
Non-Cash financing activities:		Φ.	200 200 002
Initial classification of common stock subject to possible redemption	 	\$	380,268,982
Change in value of common stock subject to possible redemption	 \$ (58,471,923)	\$	(27,049,112)
Initial classification of warrant liabilities		\$	31,811,834
Deferred underwriting fee payable	 	\$	15,496,250
Offering costs paid directly by Sponsor in consideration for the issuance of Class B common stock		\$	25,000
Payment of offering costs through promissory note — related party	 	\$	52,244

For the Period from July

SELECTED HISTORICAL FINANCIAL INFORMATION OF SEMA4

The selected historical statements of operations data of Sema4 for the years ended December 31, 2020, 2019 and 2018 and the historical balance sheet data as of December 31, 2020 and 2019 are derived from Sema4's audited financial statements included elsewhere in this prospectus. The selected statements of operations data for the three months ended March 31, 2021 and 2020 and the selected balance sheet data as of March 31, 2021 are derived from Sema4's unaudited interim condensed financial statements included elsewhere in this prospectus. Sema4's historical results are not necessarily indicative of the results that may be expected in the future. You should read the following selected historical financial data together with "Management's Discussion and Analysis of Financial Conditions and Results of Operations" and Sema4 financial statements and related notes included elsewhere in this prospectus.

The following tables set forth Sema4's historical financial information as of, and for the periods ended on, the dates indicated.

	Three months e	ended March 31,	Y	ear Ended December	31,
	2021	2020	2020	2019	2018
		(in thousa	nds, except per share a	amounts)	
Revenue					
Diagnostic test revenue (including related party revenue of \$33 and \$61 for the three months ended March 31, 2021 and 2020, respectively; and of \$285, \$0 and \$0 for the years ended December 31, 2020, 2019, and 2018, respectively) ⁽¹⁾	\$ 62,760	\$ 46,070	\$ 175,351	\$ 191,667	\$ 132,970
Other revenue (including related party revenue of \$27 and \$0 for the three months ended March 31, 2021 and 2020, respectively; and of \$3, \$1,180 and \$254 for the years ended December 31, 2020, 2019 and 2018, respectively)	1,591	585	3,971	4,507	371
Total revenue	64,351	46,655	179,322	196,174	133,341
Cost of services (including related party expenses of \$278 and \$574 for the three months ended March 31, 2021 and 2020, respectively; and of \$2,189, \$1,859 and \$4,122 for the years ended December 31, 2020, 2019 and 2018, respectively) ⁽¹⁾	71,812	39,239	184,648	119,623	92,093
Gross (loss) profit	(7,461)	7,416	(5,326)	76,551	41,248
Research and development	53,131	13,096	72,700	34.910	21,383
Selling and marketing	31,569	11,733	53,831	33,118	19,947
General and administrative	101,917	7.164	100.742	29,484	19,449
Related party expenses	1,797	2,195	9,395	9,452	9,132
Loss from operations	(195,875)	(26,772)	(241,994)	(30,413)	(28,663)
	(1 3) 1	(', ')		(-1)	(-))
Other income (expense):					
Interest income	21	334	506	988	_
Interest expense	(723)	(574)	(2,474)	(783)	(248)
Gain on extinguishment of debt	_	_	_	_	4,500
Other income, net	5,584	22	2,622	504	539
Total other income, net	4,882	(218)	654	709	4,791
Loss before income taxes	(190,993)	(26,990)	(241,340)	(29,704)	(23,872)

Income tax provision			<u> </u>	_		<u> </u>	<u> </u>
Net loss and comprehensive loss	\$ (190	993) \$	(26,990)	\$ (241,34	0) \$	(29,704)	\$ (23,872)
Redeemable convertible preferred stock dividends		_	_	-	_	3,039	2,951
Net loss attributable to common stockholders	\$ (190	993) \$	(26,990)	\$ (241,34	0) \$	(32,743)	\$ (26,823)
Weighted average shares outstanding of Class A common stock		1	1		1	1	1
Basic and diluted net loss per share, Class A common stock	\$	(43) \$	(26,990)	\$ (5,82	4) \$	(32,743)	\$ (26,823)
Weighted average shares outstanding of Class B common stock	443	,864	_	4,04	4	_	_
Basic and diluted net loss per share, Class B common stock	\$	_ \$		\$ (5	8) \$	<u> </u>	\$ _

(1) Includes stock-based compensation expense as follows:

	Three mon	hs end	led March 31,		Year E	anded December 31,	
	2021		2020	2020		2019	2018
				(in thousands)			
Cost of services	\$ 19,7	32 \$	120	\$ 13,947	\$	710	\$ 748
Research and development	38,1	37	234	26,650		1,281	1,135
Selling and marketing	17,3	31	126	10,750		650	416
General and administrative	89,6	12	335	68,884		2,841	3,306
Total stock-based compensation expense	\$ 164,9	52 \$	815	\$ 120,231	\$	5,482	\$ 5,605

	A	As of March 31,		As of Decen	mber (r 31,	
		2021		2020		2019	
				(in thousands)			
Consolidated Balance Sheet Data:							
Cash and cash equivalents	\$	58,652	\$	108,132	\$	115,006	
Total assets		219,586		251,642		203,839	
Total liabilities		406,191		247,254		75,435	
Redeemable convertible preferred stock		334,439		334,439		217,115	
Total stockholders' deficit		(521,044)		(330,051)		(88,711)	

UNAUDITED PRO FORMA CONDENSED COMBINED FINANCIAL INFORMATION

Defined terms included below have the same meaning as terms defined and included elsewhere in the prospectus. Unless otherwise indicated or the context otherwise requires, references in this section to (i) "we," "us," "our," "Sema4 Holdings" and the "Company" refer to Sema4 Holdings Corp., a Delaware corporation (f/k/a CM Life Sciences, Inc., a Delaware corporation), and its consolidated subsidiary following the Closing, (ii) "CMLS" refer to CM Life Sciences, Inc., a Delaware corporation, prior to the Closing, and (iii) "Sema4" refer to Mount Sinai Genomics, Inc. d/b/a Sema4, a Delaware corporation, prior to the Closing.

The following selected unaudited pro forma condensed combined financial data is derived from the unaudited pro forma condensed combined balance sheet and unaudited pro forma condensed combined statements of operations included elsewhere in this prospectus.

The unaudited pro forma condensed combined financial statements are based on CMLS's and Sema4's historical financial statements as adjusted to give effect to the Business Combination and the PIPE Investment. The unaudited pro forma condensed combined balance sheet gives pro forma effect to the Business Combination, treated as a reverse recapitalization for accounting purposes, and the PIPE Investment as if they had been consummated on March 31, 2021. The unaudited pro forma condensed combined statements of operations for the three months ended March 31, 2021 and for the year ended December 31, 2020, give effect to the Business Combination and the PIPE Investment as if they had occurred on January 1, 2020, the beginning of the earliest period presented.

The unaudited pro forma condensed combined financial statements were prepared in accordance with Article 11 of SEC Regulation S-X, as amended by the final rule, Release No. 33-10786 "Amendments to Financial Disclosures about Acquired and Disposed Businesses." Release No. 33-10786 replaces the existing pro forma adjustment criteria with simplified requirements to depict the accounting for the transaction ("Transaction Accounting Adjustments") and present the reasonably estimable synergies and other transaction effects that have occurred or reasonably expected to occur ("Management's Adjustments"). We have elected not to present Management's Adjustments and will only be presenting Transaction Accounting Adjustments in the unaudited pro forma condensed combined financial statements. The adjustments presented in the unaudited pro forma condensed combined financial statements have been identified and presented to provide relevant information necessary for an understanding of our company upon consummation of the Business Combination and the PIPE Investment.

The unaudited pro forma condensed combined financial statements are for illustrative purposes only. The financial results may have been different had the companies always been combined. You should not rely on the unaudited pro forma condensed combined financial information as being indicative of the historical results that would have been achieved had the companies always been combined or the future results that we will experience. CMLS and Sema4 had not had any historical relationship prior to the Business Combination. Accordingly, no pro forma adjustments were required to eliminate activities between the companies.

This information should be read together with CMLS's and Sema4's historical financial statements and related notes, "Unaudited Pro Forma Condensed Combined Financial Information," "Management's Discussion and Analysis of Financial Condition and Results of Operations," and other financial information relating to CMLS and Sema4 included elsewhere in this prospectus.

The unaudited pro forma condensed combined financial statements have been derived from and should be read in conjunction with:

- the accompanying notes to the unaudited pro forma condensed combined financial statements;
- the (i) audited historical financial statements of CMLS as of December 31, 2020 and for the period from July 10, 2020 (inception) through December 31, 2020 and (ii) unaudited historical condensed financial statements of CMLS as of and for the three months ended March 31, 2021 and the related notes, in each case, included elsewhere in this prospectus;

- the (i) audited historical financial statements of Sema4 as of and for the year ended December 31, 2020 and (ii) unaudited historical condensed financial statements of Sema4 as of and for the three months ended March 31, 2021 and the related notes, in each case, included elsewhere in this prospectus; and
- the sections of the Proxy Statement entitled "Management's Discussion and Analysis of Financial Condition and Results of Operations" and the other financial information included elsewhere in this prospectus.

The unaudited pro forma condensed combined financial statements are for illustrative purposes only and are not necessarily indicative of what the actual results of operations and financial position would have been had the Business Combination and the PIPE Investment taken place on the dates indicated, nor are they indicative of the future consolidated results of operations or financial position of Sema4 Holdings.

UNAUDITED PRO FORMA CONDENSED COMBINED BALANCE SHEET

AS OF MARCH 31, 2021

(in thousands, except share and per share amounts)

	Histo	orical	I		Actual Redemptions			
	5(A) CMLS		5(B) Sema4	1	Transaction Accounting Adjustments		Pro Forma Ilance Sheet	
ASSETS								
Current assets:								
Cash and cash equivalents	\$ 627	\$	58,652		497,393	5(a) \$	556,672	
Accounts receivable	_		33,490		_		33,490	
Due from related parties	_		349		_		349	
Inventory	_		32,969		_		32,969	
Prepaid expenses and other current assets	294		15,070		(5,482)	5(b)	9,882	
Total current assets	921		140,530		491,911		633,362	
Property and equipment, net	_		64,632		_		64,632	
Restricted cash	_		10,828		_		10,828	
Other assets	_		3,596		_		3,596	
Cash and marketable securities held in trust account	442,775		_		(442,775)	5(c)	_	
Total assets	\$ 443,696	\$	219,586	\$	49,136	\$	712,418	
LIABILITIES, REDEEMABLE CONVERTIBLE PREFERRED STOCK AND STOCKHOLDERS' DEFICIT								
Current liabilities:								
Accounts payable and accrued expenses	\$ 1,492	\$	41,609	\$	1,683	5(d)\$	44,784	
Due to related parties	_		797		_		797	
Current contract liabilities	_		2,810		_		2,810	
Other current liabilities	_		22,991		(1,846)	5(e)	21,145	
Total current liabilities	1,492		68,207		(163)		69,536	
Long-term debt, net of current portion	_		18,502		(7,502)	5(e)	11,000	
Stock-based compensation liabilities	_		296,952		_		296,952	
Other liabilities	_		22,530		_		22,530	
Earn-out liability	_		_		199,962	5(f)	199,962	
Warrant liability	126,960		_		_		126,960	
Deferred underwriting fee payable	15,496		_		(15,496)	5(g)	_	
Total liabilities	143,948		406,191		176,801		726,940	
COMMITMENTS AND CONTINGENCIES								
Redeemable convertible preferred stock:								
Sema4 Series A-1 redeemable convertible preferred stock, \$0.00001 par value	_		51,811		(51,811)	5(h)	_	
Sema4 Series A-2 redeemable convertible preferred stock, \$0.00001 par value	_		46,480		(46,480)	5(h)	_	
Sema4 Series B redeemable convertible preferred stock, \$0.00001 par value	_		118,824		(118,824)	5(h)	_	
Sema4 Series C redeemable convertible preferred stock, \$0.00001 par value	_		117,324		(117,324)	5(h)	_	
Redeemable convertible preferred stock	_		334,439		(334,439)	5(h)	_	
CMLS Class A Common stock subject to possible redemption	294,748		_		(294,748)	5(i)	_	

See accompanying notes to the unaudited pro forma condensed combined financial information.

STOCKHOLDERS' EQUITY (DEFICIT)

Sema4 Class A common stock, \$0.00001 par value	_	_	_		_
Sema4 Class B convertible common stock, \$0.00001 par value	_	_	_		_
CMLS Preferred stock, \$0.0001 par value	_	_	_		_
CMLS Class A common stock, \$0.0001 par value	1	_	8	5(j)	9
CMLS Class B common stock, \$0.0001 par value	1	_	(1)	5(j)	_
Additional paid-in capital	103,378	_	412,617	5(j)	515,082
Accumulated deficit	(98,380)	(521,044)	88,898	5(j)	(529,613)
Total stockholders' equity (deficit)	5,000	(521,044)	501,522	5(j)	(14,522)
Total liabilities, redeemable convertible preferred stock and stockholders' deficit	\$ 443,696	\$ 219,586	\$ 49,136	9	5 712,418

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See accompanying notes to the unaudited pro forma condensed combined financial information.

UNAUDITED PRO FORMA CONDENSED COMBINED STATEMENT OF OPERATIONS

FOR THE THREE MONTHS ENDED MARCH 31, 2021

(Dollars in thousands, except share and per share amounts)

	1	Iisto	orical		Actual Redempti	
	6(A) CMLS			6(B) Sema4	Transaction Accounting Adjustments	Pro Forma Statement of Operations
Revenue:						_
Diagnostic test revenue	\$ -	_	\$	62,760	\$ _	\$ 62,760
Other revenue		_		1,591	 <u> </u>	 1,591
Total revenue	-	_		64,351	_	64,351
Cost of services			_	71,812	<u> </u>	 71,812
Total gross profit	-			(7,461)	_	(7,461)
Operating expenses:						
Research and development	-	_		53,131	_	53,131
Selling and marketing	-	_		31,569	_	31,569
General and administrative	1,84	45		101,917	_	103,762
Related party expenses	<u> </u>	_		1,797	<u> </u>	1,797
Total operating expenses	1,84	45		188,414	<u> </u>	190,259
Loss from operations	(1,84	1 5)		(195,875)	_	 (197,720)
Other income (expense):						
Interest income	-	_		21	_	21
Interest expense	-	_		(723)	_	(723)
Other income, net	-	_		5,584	_	5,584
Interest earned on marketable securities held in Trust Account		11		_	(11) 6(c)	_
Change in fair value of warrant liability	(56,63	38)		_	_	(56,638)
Total other income, net	(56,62	27)		4,882	(11)	(51,756)
Net loss before income taxes	(58,47	72)		(190,993)	 (11)	(249,476)
Provision for income taxes	-			_	<u> </u>	_
Net loss	\$ (58,47	72)	\$	(190,993)	\$ (11)	\$ (249,476)
Weighted average shares outstanding, basic and diluted	11,068,75	50		1		240,190,402 6(d)
Basic and diluted net loss per share	\$ (5.2	28)	\$	(43,000.00)		\$ (1.04) 6(d)

UNAUDITED PRO FORMA CONDENSED COMBINED STATEMENT OF OPERATIONS

FOR THE YEAR ENDED DECEMBER 31, 2020

(in thousands, except share and per share amounts)

Actual

Redemptions Historical Transaction Accounting Adjustments Pro Forma Statement of Operations 6(A) CMLS 6(B) **Sema4** Revenue: \$ \$ 175,351 \$ \$ 175,351 Diagnostic test revenue Other revenue 3,971 3,971 179,322 179,322 Total revenue Cost of services 184,648 184,648 Total gross profit (5,326)(5,326)Operating expenses: 72,700 72,700 Research and development Selling and marketing 53,831 53,831 General and administrative 206 100,742 9,160 6(a) 110,108 Related party expenses 9,395 9,395 Total operating expenses 206 236,668 9,160 246,034 Loss from operations (206)(241,994)(9,160)(251,360)Other income (expense): 506 506 Interest income (2,474)Interest expense (322) 6(b) (2,796)Other income, net 2,622 2,622 Interest earned on marketable securities held in Trust Account 14 (14) 6(c) Change in fair value of warrant liability (38,511)(38,511)Transaction costs (1,205)(1,205)Total other income, net (39,702)654 (336)(39,384)(241,340) Net loss before income taxes (39,908)(9,496)(290,744) Provision for income taxes \$ (39,908) (241,340) (9,496)(290,744) \$ \$ Net loss Weighted average shares outstanding, basic and diluted 240,190,402 6(d) 10,633,062 \$ (3.75)(5,824,000.00)(1.21) 6(d) Basic and diluted net loss per share \$

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See accompanying notes to the unaudited pro forma condensed combined financial information.

NOTES TO UNAUDITED PRO FORMA CONDENSED COMBINED FINANCIAL INFORMATION

1. Description of the Transactions

The Business Combination

On February 9, 2021, CMLS and its wholly owned subsidiary, S-IV Sub, Inc. ("Merger Sub"), entered into an Agreement and Plan of Merger with Sema4 (the "Merger Agreement"). Pursuant to the Merger Agreement, Merger Sub merged with and into Sema4, with Sema4 surviving the merger as a wholly owned subsidiary of CMLS. Upon the consummation of the transactions contemplated by the Merger Agreement (the "Business Combination"), CMLS changed its name to Sema4 Holdings Corp.

Subject to the terms and conditions of the Merger Agreement, each share of Sema4 Class B common stock issued and outstanding immediately prior to the effective time was converted into 1/100th of a share of Sema4 Class A common stock as set forth in the Merger Agreement. Immediately thereafter, each share of each class of Sema4 common stock ("Sema4 Common Stock") and each class of Sema4 preferred stock ("Sema4 Preferred Stock") (other than Excluded Shares and Dissenting Shares (each as defined in the Merger Agreement)) issued and outstanding immediately prior to the effective time was cancelled and automatically deemed for all purposes to represent the right to receive a portion of the merger consideration, with each holder of Sema4 Common Stock or Sema4 Preferred Stock (each, a "Sema4 Stockholder") receiving (collectively, clauses (i) through (iii), the "merger consideration") (i) its pro rata share of the Closing Available Cash (as defined in the Merger Agreement) if such Sema4 Stockholder made an election to receive cash, and, if so elected, such Sema4 Stockholder's pro rata share excess amount of any closing available excess cash, provided that in no event would the Sema4 Stockholder's cash payment exceed an amount equal to the product of such Sema4 Stockholder's total outstanding shares multiplied by the Per Share Amount (as defined in the Merger Agreement); (ii) a number of shares of Company Class A common stock equal to the quotient of: (A)(1) the product of such Sema4 Stockholder's total outstanding shares multiplied by the Per Share Amount minus (2) such Sema4 Stockholder's stockholder cash payment amount divided by (B) \$10.00; and (iii) its pro rata share of any earn out shares to which such Sema4 Stockholder is entitled pursuant to the terms of the Merger Agreement (the "Earnout"), including the Earn Out RSUs (as defined in the Merger Agreement), which Earn Out RSUs are subject to vesting and will not be legally issued and outstanding shares of Company Class A common stock at the closing of the Business Combination (the "Closing"), in each case of clauses (i), (ii) and (iii), without interest, upon surrender of stock certificates representing all of such Sema4 Stockholder's Sema4 Common Stock and Sema4 Preferred Stock and delivery of the other documents required pursuant to the Merger Agreement. As of the effective time, each Sema4 Stockholder ceased to have any other rights in and to Sema4 securities and each certificate relating to ownership of shares of Sema4 Common Stock and Sema4 Preferred Stock (other than Excluded Shares) represented the right to receive the applicable portion of the merger consideration.

Following the Closing, within five Business Days (as defined in the Merger Agreement) after the occurrence of a Triggering Event, the Company shall issue or cause to be issued to the Sema4 Stockholders (other than holders of Dissenting Shares and Excluded Shares) and the Earn-Out Service Providers (as defined in the Merger Agreement), the following shares of Company Class A common stock (which shall be equitably adjusted for stock splits, reverse stock splits, stock dividends, reorganizations, recapitalizations, reclassifications, combination, exchange of shares or other like change or transaction with respect to Company Class A common stock occurring on or after the Closing, the "Earn-Out Shares"), upon the terms and subject to the conditions set forth in the Merger Agreement and other related agreements: (i) upon the occurrence of Triggering Event I (as defined in the Merger Agreement), a one-time issuance of a number of Earn-Out Shares equal to 3.66% of the Earn-Out Total Outstanding Shares (as defined in the Merger Agreement); (ii) upon the occurrence of Triggering Event II (as defined in the Merger Agreement), a one-time issuance of a number of Earn-Out Shares; and (iii) upon the occurrence of Triggering Event III (as defined in the Merger Agreement), a one-time issuance of a number of Earn-Out Shares equal to 3.67% of the Earn-Out Total Outstanding Shares. Upon the last day of any calendar year, the Company shall issue or cause to be issued to each Sema4 Stockholder (other than holders of Dissenting Shares) and Earn-Out Service Provider (in accordance with its respective Earn-Out Pro Rata Share and, in the case of the Earn-Out Service Providers, in accordance with the terms of the applicable Earn-Out Award Agreement (as defined in the Merger Agreement)) the Earn-Out Shares that (i) are in the Forfeiture Pool (as defined in the Merger

Agreement) as in effect as of such date and (ii) would have been issuable to Sema4 Stockholders pursuant to the Merger Agreement as a result of the occurrence of a Triggering Event had they not been made subject to an award of Earn Out RSUs.

Sema4 Stockholders and the Earn-Out Service Providers shall be entitled to receive Earn-Out Shares upon each Triggering Event, provided, however that each Triggering Event may only occur once, if at all, and in no event shall the Sema4 Stockholders and Earn-Out Service Providers, in the aggregate, be entitled to receive an aggregate number of Earn-Out Shares equal to more than 11% of the Earn-Out Total Outstanding Shares. Earn-Out Shares will be issued from the Forfeiture Pool only if the applicable Triggering Event occurs.

The Earn-Out Shares issuable to Sema4 Stockholders are accounted for as contingent consideration in accordance with ASC 805, *Business Combinations*. The contingent consideration is not considered indexed to the Company's own stock and is therefore classified as a liability in the unaudited pro forma condensed combined balance sheet and will be remeasured to fair value at each reporting date (see Note 5(c)). The Earn-Out Shares issuable to Earn-Out Service Providers are accounted for as equity-classified, share-based compensation in accordance with ASC 718, *Compensation–Stock Compensation*, as the shares are subject to additional vesting conditions and continued employment.

The PIPE Investment

On February 9, 2021, concurrently with the execution of the Merger Agreement, CMLS entered into subscription agreements (collectively, the "Subscription Agreements") with certain investors (collectively, the "PIPE Investors" which include certain existing Sema4 equity holders), pursuant to which the PIPE Investors have collectively subscribed for 35,000,000 shares of Company Class A common stock for an aggregate purchase price equal to \$350,000,000 (the "PIPE Investment"). The PIPE Investment was consummated immediately prior to the closing of the Business Combination.

2. Basis of Presentation

The unaudited pro forma condensed combined financial statements were prepared in accordance with Article 11 of SEC Regulation S-X as amended by the final rule, Release No. 33-10786 "Amendments to Financial Disclosures about Acquired and Disposed Businesses." Release No. 33-10786 replaces the existing pro forma adjustment criteria with simplified requirements to depict the accounting for the transaction ("Transaction Accounting Adjustments") and present the reasonably estimable synergies and other transaction effects that have occurred or reasonably expected to occur ("Management's Adjustments"). The Company has elected not to present Management's Adjustments and will only be presenting Transaction Accounting Adjustments in the unaudited pro forma condensed combined financial statements. The adjustments presented in the unaudited pro forma condensed combined financial statements have been identified and presented to provide relevant information necessary for an understanding of Sema4 Holdings upon consummation of the Business Combination and the PIPE Investment.

The unaudited pro forma condensed combined balance sheet as of March 31, 2021 gives effect to the Business Combination and the PIPE Investment as if they occurred on March 31, 2021. The unaudited pro forma condensed combined statements of operations for the three months ended March 31, 2021 and for the year ended December 31, 2020 give effect to the Business Combination and the PIPE Investment as if they occurred on January 1, 2020, the beginning of the earliest period presented.

The pro forma adjustments reflecting the consummation of the Business Combination and the PIPE Investment are based on certain currently available information and certain assumptions and methodologies that the Company believes are reasonable under the circumstances. The Company believes that its assumptions and methodologies provide a reasonable basis for presenting all of the significant effects of the Business Combination and the PIPE Investment based on information available to management at this time and that the pro forma adjustments give appropriate effect to those assumptions and are properly applied in the unaudited pro forma condensed combined financial information.

The unaudited pro forma condensed combined financial statements do not give effect to any anticipated synergies, operating efficiencies, tax savings, or cost savings that may be associated with the Business Combination.

CMLS and Sema4 had not had any historical relationship prior to the Business Combination. Accordingly, no pro forma adjustments were required to eliminate activities between the companies.

The unaudited pro forma condensed combined financial information has been prepared using actual redemptions of 10,188 shares of Company Class A common stock for aggregate redemption payments of \$0.1 million out of the trust account on the closing date of the Business Combination. No other shares of Company common stock were subject to redemption. Additionally, no shares of Class B common stock were forfeited by the Sponsor as a result of the redemptions in accordance with the Sponsor Forfeiture Agreement, dated as of February 9, 2021, between CMLS and the Sponsor (the "Forfeiture Agreement"). Sema4 equity holders received \$230.7 million of merger consideration in cash at Closing.

These unaudited pro forma condensed combined financial statements and related notes have been derived from and should be read in conjunction with:

- the (i) audited historical financial statements of CMLS as of December 31, 2020 and for the period from July 10, 2020 (inception) through December 31, 2020 and (ii) unaudited historical condensed financial statements of CMLS as of and for the three months ended March 31, 2021 and the related notes, in each case, included elsewhere in this prospectus;
- the (i) audited historical financial statements of Sema4 as of and for the year ended December 31, 2020 and (ii) unaudited historical condensed financial statements of Sema4 as of and for the three months ended March 31, 2021 and the related notes, in each case, included elsewhere in this prospectus; and
- the sections of the prospectus entitled "Management's Discussion and Analysis of Financial Condition and Results of Operations" and the other financial information included elsewhere in this prospectus.

The unaudited pro forma condensed combined financial statements are for illustrative purposes only and are not necessarily indicative of what the actual results of operations and financial position would have been had the Business Combination and the PIPE Investment taken place on the dates indicated, nor are they indicative of the future consolidated results of operations or financial position of Sema4 Holdings.

3. Accounting for the Business Combination

The Business Combination will be accounted for as a reverse recapitalization, in accordance with GAAP. Under this method of accounting, although the Company issued shares for outstanding equity interests of Sema4 in the Business Combination, the Company will be treated as the "acquired" company for financial reporting purposes. Accordingly, the Business Combination will be treated as the equivalent of Sema4 issuing stock for the net assets of the Company, accompanied by a recapitalization. The net assets of the Company will be stated at historical cost, with no goodwill or other intangible assets recorded. Operations prior to the Business Combination will be those of Sema4.

Sema4 has been determined to be the accounting acquirer based on the evaluation of the following facts and circumstances:

- The former owners of Sema4 hold the largest portion of voting rights in Sema4 Holdings;
- Sema4 has the right to appoint a majority of the directors in Sema4 Holdings;
- Sema4's existing senior management team will comprise senior management of Sema4 Holdings;
- The operations of Sema4 Holdings represent the operations of Sema4;
- Sema4 Holdings assumed Sema4's name and headquarters.

4. Capitalization

The following summarizes the pro forma ownership of Class A common stock of the Company following the Business Combination and the PIPE Investment:

	Act Reden	tual nptions
Equity Capitalization Summary	Shares	%
Former Sema4 Equity Holders(1)	155,856,840	64.9 %
Public Stockholders(2)	44,264,812	18.4 %
Sponsor(3)	11,068,750	4.6 %
New PIPE Investors(4)	29,000,000	12.1 %
Total Class A common stock	240,190,402	100.0 %

⁽¹⁾ Includes stock consideration of 149,856,840 shares of Class A common stock and cash consideration of \$230.7 million received by Sema4 equity holders in connection with the Business Combination, as well as 6,000,000 shares of Class A common stock purchased by existing Sema4 equity holders in connection with the PIPE Investment.

5. Adjustments to Unaudited Pro Forma Condensed Combined Balance Sheet as of March 31, 2021

The pro forma notes and adjustments are as follows:

Pro forma notes

- (A) Derived from the unaudited condensed balance sheet of CMLS as of March 31, 2021.
- (B) Derived from the unaudited condensed balance sheet of Sema4 as of March 31, 2021.

Pro forma adjustments

(1) To reflect the net change in cash and cash equivalents as a result of extinguishment of certain of our long-term debt obligations occurred prior to the Business Combination and other proceeds/payments occurred in connection with the Business Combination and the PIPE Investment as follows (in thousands):

Release of Trust Account	\$ 44	2,775 5(c)
Proceeds from PIPE Investment	35	60,000 5(j)
Payment of cash consideration	(23	0,665) 5(j)
Payment of transaction expenses	(3	5,649) 5(j)
Payment of CMLS deferred underwriting fee payable	(1	5,496) 5(g)
Settlement of Sema4 stock appreciation rights	(3,800) 5(j)
Repayment of Sema4 long-term debt	(9,348) 5(e)
Payment of early-payment penalties on Sema4 long-term debt		(322) 5(j)
Redemptions by public stockholders		(102) 5(j)
Cash and cash equivalents	\$ 49	7,393
-		

(b) To reflect the reclassification of deferred transaction costs from other assets to additional paid-in capital in connection with the consummation of the reverse recapitalization (see Note 5(j)).

⁽²⁾ Reflects redemptions of 10,188 shares of Class A common stock of the Company for aggregate redemption payments of \$0.1 million using a per-share redemption price of \$10.00.

⁽³⁾ Due to the minimal redemptions by public stockholders, no Sponsor shares of Class B common stock were forfeited pursuant to the Forfeiture Agreement.

(4) Reflects the consummation of the PIPE Investment for aggregate proceeds of \$350.0 million in connection with the issuance of 35,000,000 shares of Class A common stock, with 29,000,000 shares purchased by new PIPE Investors and 6,000,000 shares purchased by existing Sema4 equity holders as noted in (1) above. The shares purchased by new PIPE Investors includes 9,500,000 shares purchased by funds that are advised by affiliates of the Sponsor.

- (c) To reflect the release of \$442.8 million of cash and marketable securities from the Trust Account (see Note 5(b)).
- (d) To reflect the accrual of additional transaction expenses to be paid subsequent to Closing (see Note 5(j)).
- (e) To reflect the repayment of \$9.6 million of Sema4's long-term debt, including \$1.8 million classified as current and \$7.5 million classified as non-current, as well as early-payment penalties of \$0.3 million (see Note 5(a) and Note 5(j)).
- (f) To record an earn-out liability for the estimated fair value of the Earn-Out Shares to be issued to Sema4 equity holders upon the achievement of the Triggering Events, assuming no Earn-Out Forfeitures (as defined in the Merger Agreement) by Earn-Out Service Providers (see Note 5(j)).
- (g) To reflect the settlement of \$15.5 million of deferred underwriting fees incurred during CMLS's IPO that are contractually due upon completion of the Business Combination (see Note 5(a)).
- (h) To reflect the exchange of \$334.4 million of Sema4's redeemable convertible preferred stock as a result of the Business Combination (see Note 5(j)).
- (i) To reflect the redemption of 10,188 shares of Class A common stock of for aggregate redemption payments of \$0.1 million and the transfer of \$294.7 million to permanent equity upon consummation of the Business Combination as no other shares of Class A common stock remain subject to redemption (see Notes 5(a) and 5(j)).
- (j) To reflect the recapitalization of Sema4 Holdings through the exchange of all of the outstanding share capital of Sema4 for Class A common stock of the Company and the following equity transactions (in thousands):

\$ 334,439	5(h)
294,748	5(i)
350,000	5(a)
(230,665)	5(a)
(42,814)	5(a)
(199,962)	5(f)
(3,800)	5(a)
(322)	5(a)
(102)	5(a)
\$ 501,522	
\$	294,748 350,000 (230,665) (42,814) (199,962) (3,800) (322) (102)

6. Adjustments to Unaudited Pro Forma Condensed Combined Statements of Operations for the Three Months Ended March 31, 2021 and the Year Ended December 31, 2020

The pro forma notes and adjustments are as follows:

Pro forma notes

- (A) Derived from the unaudited condensed statement of operations of CMLS for the three months ended March 31, 2021.
- (B) Derived from the unaudited condensed statement of operations of Sema4 for the three months ended March 31, 2021.
- (C) Derived from the audited statement of operations of CMLS for the period from July 10, 2020 (inception) through December 31, 2020.

(D) Derived from the audited statement of operations of Sema4 for the year ended December 31, 2020.

Pro forma adjustments

- (a) To reflect an accrual of \$5.4 million for additional transaction costs which do not qualify for capitalization and the recognition of \$3.8 million of unrecognized compensation expense related to the cash out of Sema4 stock appreciation rights.
- (b) To recognize the payment of early-payment penalties on Sema4's long-term debt to be repaid upon closing of the Business Combination.
- (c) To eliminate interest income earned on the Trust Account which will be released upon closing of the Business Combination.
- (d) The proforma basic and diluted earnings per share amounts presented in the unaudited proforma condensed combined statements of operations are based upon the number of Company shares outstanding at the closing of the Business Combination and the PIPE Investment, assuming the Business Combination and the PIPE Investment occurred on January 1, 2020. As the unaudited proforma condensed combined statements of operations are in a loss position, anti-dilutive instruments were not included in the calculation of diluted weighted average number of shares of common stock outstanding.

SEMA4'S MANAGEMENT'S DISCUSSION AND ANALYSIS OF FINANCIAL CONDITION AND RESULTS OF OPERATIONS

The following discussion and analysis of our financial condition and results of operations should be read in conjunction with our financial statements and related notes and other financial information appearing elsewhere in this prospectus. Some of the information contained in this discussion and analysis or set forth elsewhere in this prospectus, including information with respect to our plans and strategy for our business and related financing, includes forward-looking statements that involve risks and uncertainties. As a result of many factors, including those factors set forth in the "Risk Factors" section of this prospectus, our actual results could differ materially from the results described in or implied by the forward-looking statements contained in the following discussion and analysis.

Overview

We are a patient-centered, health intelligence company with a mission to use artificial intelligence, or AI, and machine learning to enable personalized medicine for all. By leveraging leading data scientists and technology, our platform powers remarkable and unique insights that transform the practice of medicine including how disease is diagnosed, treated, and prevented.

We were established out of the Icahn School of Medicine at Mount Sinai, or ISMMS, and commenced operations in June 2017 as a commercial entity that could effectively engage diverse patient populations and health care institutions at scale. We have since established and deployed our comprehensive and integrated genomic and clinical data platform and established a mature diagnostic testing business.

Currently, we derive the majority of revenue from our diagnostic test solutions. Our diagnostic business generates revenue and engages with patients primarily through our Women's Health and Oncology solutions.

Our Women's Health solutions sequence and analyze an industry-leading number of genes and use interpretive information tools to translate raw sequencing and clinical data efficiently and accurately into digestible clinical reports that guide decision making by patients and physicians. Our Oncology diagnostic solutions feature both somatic tumor profiling and hereditary cancer screenings, along with a foundational whole exome and whole transcriptome sequencing approach. Our Sema4 Signal Hereditary Cancer solution determines if a patient carries an inherited genetic change that increases risk of cancer or informs on cancer treatment. We believe our Signal Whole Exome and Transcriptome is one of the most comprehensive molecular profiling solutions from a commercial entity to receive New York State approval. Beginning in May of 2020, we were also able to expand our diagnostic testing services to include testing for the presence of COVID-19 infection.

We have also expanded beyond diagnostic testing to enter into collaboration service agreements with third parties to provide diagnostic testing, research and related data aggregation reporting services. We have established and continue to seek strategic relationships with pharmaceutical and biotech, or Biopharma, companies to enable innovation across the entire drug lifecycle, from next generation drug discovery and development, to post-market efficacy surveillance, to informing on bioavailability, toxicity, tolerability, and other features critical to drug development.

Factors Affecting Our Performance

We believe there are several important factors that have impacted, and that we expect will continue to impact, our performance and results of operations. While each of these areas presents significant opportunities for us, they also pose significant risks and challenges that we must address. See the section titled "*Risk Factors*" for more information.

Number of accessioned tests

We believe the number of accessioned tests in any period is an important indicator of the growth in our diagnostic testing services and correlates with long-term patient relationships and the size of our genomic database. A test is accessioned when we receive the test at our laboratory, the relevant information about the test is entered into our computer system and the test sample is routed to the appropriate workflow.

Success obtaining and maintaining reimbursement

Our ability to increase the number of billable tests and our revenue therefrom will depend on our success in achieving reimbursement for our tests from third party payors. Reimbursement by a payor may depend on a number of factors, including a payor's determination that a test is appropriate, medically necessary, cost-effective and has received prior authorization. Since each payor makes its own decision as to whether to establish a policy or enter into a contract to provide coverage for our tests, as well as the amount it will reimburse us for a test, seeking these approvals is a time-consuming and costly process.

In cases where we or our partners have established reimbursement rates with third party payors, we face additional challenges in complying with their procedural requirements for reimbursement. These requirements often vary from payor to payor and are reassessed by third party payors on a regular basis, and we have in the past needed additional time and resources to comply with them.

We expect to continue to focus our resources on increasing the adoption of, and expanding coverage and reimbursement for, our current tests and any future tests we may develop or acquire. If we fail to expand and maintain broad adoption of, and coverage and reimbursement for, our tests, our ability to generate revenue could be harmed and our future prospects and its business could suffer.

Ability to lower the costs associated with performing our tests

Reducing the costs associated with performing our diagnostic tests is both a focus and a strategic objective of ours. We source, and will continue to source, components of our diagnostic testing workflows from third parties. We also rely upon third party service providers for data storage and workflow management.

Increasing adoption of our services by existing and new customers

Our performance depends on our ability to retain and broaden adoption of our services with existing customers as well as our ability to attract new customers. Our success in retaining and gaining customers is dependent on the market's confidence in our services and the willingness of customers to continue to seek more comprehensive and integrated genomic and clinical data insights.

Investment in platform innovation to support commercial growth

We are seeking to leverage and deploy our Centrellis and Traversa platforms to develop a pipeline of future disease-specific research and diagnostic and therapeutic products and services. We have limited experience with the development or commercialization of clinical or research products in connection with our database and our Centrellis platform.

We operate in a rapidly evolving and highly competitive industry. Our business faces changing technologies, shifting provider and patient needs, and frequent introductions of rival products and services. To compete successfully, we must accurately anticipate technology developments and deliver innovative, relevant and useful products, services and technologies in a timely manner. As our business evolves, the competitive pressure to innovate will encompass a wider range of products and services. We must continue to invest significant resources in research and development, including investments through acquisitions and partnerships. These investments are critical to the enhancement of our current diagnostics and health information and data science technologies from which existing and new service offerings are derived.

We expect to incur significant expenses to advance these development efforts, but they may not be successful. New potential services may fail at any stage of development and, if we determine that any of our current or future services are unlikely to succeed, we may abandon them without any return on our investment. If we are unsuccessful in developing additional services, our potential for growth may be impaired.

COVID-19 Impact

In March 2020, the World Health Organization declared the recent novel coronavirus, or COVID-19, outbreak a pandemic. COVID-19 has had, and continues to have, an extensive impact on the global health and economic

environments. Many jurisdictions, including those in which we have locations, have implemented measures to combat the outbreak, such as travel restrictions and shelter in place orders. In addition, the healthcare sector generally experienced a decline in discretionary care services at the onset of the pandemic.

Beginning in April 2020, our diagnostic test volumes decreased significantly as compared to the prior year as a result of COVID-19 and the related limitations and priorities across the healthcare system. In response, beginning in May 2020, we entered into several service agreements with state governments and healthcare institutions to provide testing for the presence of COVID-19 infection. COVID-19 test volumes grew significantly from the introduction of the service offering through the remainder of the year. To support the rapid expansion of COVID-19 test volumes, we have increased our workforce through both temporary contractors and employees. In addition, while most of our revenues from genetic testing rely upon reimbursements from third party payors, healthcare institutions, and individuals, the majority of our COVID-19 test revenues rely upon reimbursements from state governments and healthcare institutions. In addition, COVID-19 testing yields lower revenues per tests and incurs lower costs to perform each test. We have also experienced a slowdown in receivable collections since the onset of the pandemic, but do not expect those collection trends to continue.

As part of our response to COVID-19, we have implemented various strategies to mitigate operating risks, reduce costs and improve cash collections. We have made significant advance purchases of test-related inventory in order to reduce the risk of potential business interruptions related to supply chain disruption. We also contracted with third-party vendors to collect and test COVID-19 samples to reduce operating risks related to employee health. Temporary COVID-19 austerity measures included cancellation of the 2020 annual merit compensation increase, temporary salary reductions from May through July 2020 and deferral of the 401(k) employer match from May through December 2020. The employer match was reinstated in January 2021, and the deferred portion was funded on March 9, 2021. To support our sales employees with commission-based compensation structure, we implemented temporary minimum commissions during the second quarter of 2020. No such minimums were in place in any quarter after the second quarter nor are any such minimums expected to be implemented again in the near term. No employee layoffs were implemented as part of these austerity measures.

As conditions begin to improve, we are focused on overhauling our revenue cycle, and as part of transformational activities have hired a Chief Revenue Officer and established a revenue cycle Center of Excellence. As part of our efforts to improve our collection efficiency and overall financial health, we are also undergoing various process transformations within the Order-to-Cash and Procure-to-Pay cycles.

While test volumes have since improved, we continue to experience changes in the mix of tests due to the impact of COVID-19. We anticipate that demand for COVID-19 tests will eventually decrease as vaccines continue to be developed and deployed to the general population. However, no additional decline is expected for our other revenue streams for the remainder of 2021. The full extent to which the COVID-19 pandemic will directly or indirectly impact our business, results of operations and financial condition will depend on future developments that are highly uncertain and cannot be accurately predicted, including new information that may emerge concerning COVID-19, the actions taken to contain it or treat it and the economic impact on local, regional, national and international markets and supply chains. Therefore, COVID-19 could continue to have a material impact on our results of operations, cash flows and financial condition for the foreseeable future.

In March 2020, the Coronavirus Aid, Relief and Economic Security Act, or the CARES Act, was signed into law which was a stimulus bill that, among other things, provided assistance to qualifying businesses and individuals and included funding for the healthcare system. We received \$5.4 million in 2020 as part of the stimulus, comprised of \$2.6 million received under the Provider Relief Fund, or PRF, distribution and \$2.8 million received under the Employee Retention Credit, or ERC, distribution. During 2021, we received an additional \$5.6 million under the PRF distribution.

PRF distributions to healthcare providers are not loans and will not be required to be repaid; however, as a condition to receiving these payments, providers must agree to certain terms and conditions and submit sufficient documentation demonstrating that the funds are being used for healthcare-related expenses or lost revenue attributable to the COVID-19 pandemic. We have concluded it is probable that all terms and conditions associated

with the PRF distribution have been met. As a result, we recorded the PRF distributions in other income (expense), net in the statements of operations and comprehensive loss during the periods in which we received the distributions.

ERC distributions are refundable tax credits for 50% of qualified wages paid to employees during the pandemic. A company is eligible for the ERC if it has not received a Paycheck Protection Program loan under the Cares Act and (1) its operations have been fully or partially suspended because of COVID-19 or (2) its gross receipts in a calendar quarter in 2020 declined by more than 50% from the same period in 2019. At the time of applying for the ERC, we concluded that it was reasonably possible the eligibility requirements would be met; however, due to a change in circumstances, we are re-evaluating our position. As such, we deferred the recognition of the ERC distribution and recorded the proceeds in other liabilities on the balance sheets.

At this time, we are not certain of the availability, extent or impact of any future relief provided under the CARES Act or other stimulus initiatives.

Components of Results of Operations

Revenue

We derive the majority of our revenue from diagnostic testing services, which primarily relate to Women's Health, Oncology and COVID-19. We also recognize revenue from collaboration service agreements with Biopharma companies and other third parties pursuant to which we provide diagnostic testing and related data aggregation reporting services.

Effective January 1, 2019, we adopted the new revenue guidance, Accounting Standards Codification Topic 606, *Revenue from Contracts with Customers* ("ASC 606"), using the modified retrospective approach. Upon the adoption of ASC 606, we recognize revenue when control of the promised goods or services is transferred to the customer in an amount that reflects the consideration which we expect to be entitled to in exchange for those goods or services.

We recognized revenue pursuant to ASC Topic 605 ("ASC 605"), *Revenue Recognition*, for the year ended December 31, 2018 prior to the adoption of ASC 606. Under ASC 605, revenue was recognized when persuasive evidence of a final agreement existed; delivery had occurred or services were rendered; the price of the product or service was fixed or determinable; and collectability from the customer was reasonably assured.

The adoption of ASC 606 did not materially impact our revenue recognition.

Diagnostic Test Revenue

We primarily generate revenue from performing diagnostic testing services for three groups of customers: patients with third-party insurance coverage; patients without third-party insurance coverage or those who elect to self-pay; and institutional clients, such as hospitals, clinics, state governments and reference laboratories. Customers are billed upon delivery of test results. The amount of revenue recognized for diagnostic testing services depends on a number of factors, such as contracted rates with our customers and third-party insurance providers, insurance reimbursement policies, payor mix, historical collection experience, price concessions and other business and economic conditions and trends. To date, the majority of our diagnostic test revenue has been earned from patients with third-party insurance coverage.

In accordance with ASC 606, revenue is recognized at the point in time in which test results are delivered to customers in an amount that reflects what we expect to collect in exchange for our services.

In accordance with ASC 605, revenue is recognized in the period in which test results are delivered to customers if the price is fixed or determinable and collectability from the customer is reasonably assured. For most self-pay customers, we were not able to demonstrate a predictable pattern of collectability and, therefore, we recognized revenue when payment was received.

Our ability to increase our diagnostic test revenue will depend on our ability to increase our market penetration, obtain contracted reimbursement coverage from third-party payers, enter into contracts with institutions, and increase our reimbursement rate for tests performed.

Other Revenue

We generate revenue from providing diagnostic testing and related data aggregation reporting services under both short-term and long-term project-based collaboration service agreements with third parties. The terms of these contracts generally include non-refundable upfront payments, which we record as contract liabilities, and variable payments based upon the achievement of certain milestones during the contract term.

In accordance with ASC 606, we recognize revenue for collaboration service agreements over time based on costs incurred during the contract period. In accordance with ASC 605, we recognized revenues when the contractual obligations were met based on the terms of the respective agreements.

With respect to existing collaboration service agreements, our revenue may fluctuate period to period due to the pattern in which we may deliver our services, our ability to achieve milestones, the timing of costs incurred, changes in estimates of total anticipated costs that we expect to incur during the contract period, and other events that may not be within our control. Our ability to increase our revenue will depend on our ability to enter into contracts with third-party partners.

Cost of Services

Cost of services reflects the aggregate costs incurred in performing diagnostic testing and collaboration services. These costs include expenses for reagents and laboratory supplies, personnel-related expenses (comprising salaries and benefits), stock-based compensation, shipping and handling fees, costs of third-party reference lab testing and third-party providers of genetic counseling and phlebotomy services, amortization of software development costs and equipment and allocated facility costs associated with testing. Allocated facility costs include depreciation of laboratory equipment, facility occupancy and information technology costs. Cost of services are recorded as the services are performed.

We expect cost of services to generally increase in line with the anticipated growth in diagnostic testing volume and services we provide under our collaboration service agreements. However, we expect the cost per test to decrease over the long term due to the efficiencies we may gain from improved utilization of our laboratory capacity, automation and other value engineering initiatives. These expected reductions may be offset by new tests which often have a higher cost per test during the introductory phases before we are able to gain efficiencies. The cost per test may fluctuate from quarter to quarter.

Research and Development Expenses

Research and development expenses represent costs incurred to develop our technology and future test offerings. These costs are principally associated with our efforts to develop the software we use to analyze data and process customer orders. These costs primarily consist of personnel-related expenses (comprising salaries and benefits), stock-based compensation, costs of reagents and laboratory supplies, costs of consultants and third-party services, equipment and related depreciation expenses, non-capitalizable software development costs, and allocated facility and information technology costs associated with genomics medical research. Research and development costs are expensed as incurred.

We generally expect our research and development expenses to continue to increase in absolute dollars as we innovate and expand the application of our platforms. However, we expect research and development expenses to decrease as a percentage of revenue in the long term, although the percentage may fluctuate from period to period due to the timing and extent of our development and commercialization efforts and fluctuations in our compensation-related charges.

Selling and Marketing Expenses

Selling and marketing expenses primarily consist of personnel-related expenses (comprising salaries, and benefits) and stock-based compensation for employees performing commercial sales, account management, marketing, and medical education. Selling and marketing costs are expensed as incurred.

We generally expect our selling and marketing expenses will continue to increase in absolute dollars as we expand our commercial sales and marketing teams and increase marketing activities. However, we expect selling and marketing expenses to decrease as a percentage of revenue in the long term, subject to fluctuations from period to period due to the timing and magnitude of these expenses.

General and Administrative Expenses

General and administrative expenses primarily consist of personnel-related expenses (comprising salaries and benefits) and stock-based compensation for employees in executive leadership, legal, finance and accounting, human resources, information technology, strategy and other administrative functions. In addition, these expenses include office occupancy and information technology costs. General and administrative costs are expensed as incurred.

We generally expect our general and administrative expenses to continue to increase in absolute dollars as we increase headcount and incur costs associated with operating as a public company, including expenses related to legal, accounting, and regulatory matters; maintaining compliance with requirements of the Nasdaq and of the SEC; director and officer insurance premiums and investor relations. We expect these expenses to decrease as a percentage of revenue in the long term as revenue increases, although the percentage may fluctuate from period to period due to fluctuations in our compensation-related charges.

Related Party Expenses

Related party expenses consist of amounts due to ISMMS for expenses incurred pursuant to our transition service agreement, or TSA, and other service agreements and arrangements. Additional information can be found in Sema4's audited financial statements in Note 6, "Related Party Transactions" and Sema4's unaudited condensed financial statements in Note 6, "Related Party Transactions."

We expect related party expenses to decrease as we establish our own internal and external resources to fulfil the administrative and other services we have historically procured from ISMMS.

Interest Income

Interest income consists of interest earned on money market funds.

Interest Expense

Interest expense consists of interest costs related to our capital leases and our long-term debt arrangements.

Gain on Extinguishment of Debt

We recognized a gain on debt extinguishment for the year ended December 31, 2018 related to principal loan forgiveness under one of our loan agreements. Additional information can be found in Sema4's audited financial statements in Note 7, "Long-term debt."

Other Income, Net

Other income, net primarily consists of certain funding received under the CARES Act, sales and use taxes and gains and losses on equipment disposals. We recognized \$2.6 million of the \$5.4 million of funding received under the CARES Act as other income, net on the statements of operations and comprehensive loss during the year ended December 31, 2020 and recognized \$5.6 million of additional funding received under the CARES Act during the three months ended March 31, 2021.

Key Performance Indicators

The principal focus of our commercial operations is to offer our diagnostic tests through both our direct sales force and laboratory distribution partners. Test volume correlates with genomic database size and long-term patient relationships - thus driving database diversity and enabling potential identification of variants of unknown significance and population-specific insights. The number of tests that we accession is a key indicator that we use to assess the operational efficiency of our business. A test is accessioned when we receive the test at our laboratory, the relevant information about the test is entered into our computer system and the test sample is routed into the appropriate workflow.

During the year ended December 31, 2020, we accessioned approximately 520,660 tests in our laboratories, 311,987 tests of which were for COVID-19, compared to December 31, 2019, in which we accessioned approximately 225,863 tests in our laboratories, and December 31, 2018, in which we accessioned approximately 154,151 tests in our laboratories. The 47% increase in volume from 2018 to 2019 represents continuous expansion to a national footprint and expanded test offerings, and the 131% increase from 2019 to 2020 largely resulted from newly entered service agreements for COVID-19 testing, offset by a slowdown in the base diagnostic business during the beginning of the pandemic given that many of our customers, including hospitals and clinics, had suspended non-emergency appointments and services.

During the three months ended March 31, 2021, we accessioned approximately 239,140 tests in our laboratories, 175,944 tests of which were for COVID-19, compared to March 31, 2020, in which we accessioned approximately 54,808 tests in our laboratories, none of which were for COVID-19. This 336% increase in volume from 2020 to 2021 largely resulted from newly entered service agreements for COVID-19 testing as well as an increase in non-COVID-19 institutional testing.

Comparison of the Years Ended December 31, 2020, 2019 and 2018

The following table sets forth our results of operations for the periods presented:

	Year Ended December 31,					
		2020	2019	2018		
			(in thousands)			
Revenue						
Diagnostic test revenue	\$	175,351	\$ 191,667	\$ 132,970		
Other revenue		3,971	4,507	371		
Total revenue		179,322	196,174	133,341		
Cost of services		184,648	119,623	92,093		
Gross (loss) profit		(5,326)	76,551	41,248		
Research and development		72,700	34,910	21,383		
Selling and marketing		53,831	33,118	19,947		
General and administrative		100,742	29,484	19,449		
Related party expenses		9,395	9,452	9,132		
Loss from operations		(241,994)	(30,413)	(28,663)		
Other income (expense):						
Interest income		506	988	_		
Interest expense		(2,474)	(783)	(248)		
Gain on extinguishment of debt		_	_	4,500		
Other income, net		2,622	504	539		
Total other income, net		654	709	4,791		
Loss before income taxes		(241,340)	(29,704)	(23,872)		
Income tax provision		_	_	_		
Net loss and comprehensive loss		(241,340)	(29,704)	(23,872)		
Redeemable convertible preferred stock dividends		_	3,039	2,951		
Net loss attributable to common stockholders	\$	(241,340)	\$ (32,743)	\$ (26,823)		

Revenue

								Cha	inge		
	Yea	ır En	ded December	31,			2019	to 2020		2018 (to 2019
	2020		2019		2018		\$	%		\$	%
						(dol	lars in thousan	ds)			
Diagnostic test revenue	\$ 175,351	\$	191,667	\$	132,970	\$	(16,316)	(9)%	\$	58,697	44 %
Other revenue	3,971		4,507		371		(536)	(12)%		4,136	1115 %
Total revenue	\$ 179,322	\$	196,174	\$	133,341	\$	(16,852)	(9)%	\$	62,833	47 %

Total revenue decreased by \$16.9 million, or 9%, from \$196.2 million for the year ended December 31, 2019 to \$179.3 million for the year ended December 31, 2020.

Diagnostic test revenue decreased by \$16.3 million, or 9%, from \$191.7 million for the year ended December 31, 2019 to \$175.4 million for the year ended December 31, 2020. The decrease was primarily attributable to a change in the mix of tests performed coupled with reduced reimbursement rates. We experienced an increase in volumes of 131%, primarily driven by the introduction of COVID-19 testing in May 2020. Despite these increased volumes, diagnostic test revenue decreased due to lower pricing on COVID-19 testing relative to other diagnostic tests and an overall decrease in average pricing on Women's Health and Oncology testing.

Other revenue decreased by \$0.5 million, or 12%, from \$4.5 million for the year ended December 31, 2019 to \$4.0 million for the year ended December 31, 2020. The decrease was primarily attributable to the completion of one significant third-party contract in 2019 and the completion of one significant contract with ISMMS in early 2020. This decrease was partially offset by growth in collaboration service activities due to the execution of two new third-party contracts in 2020. Other revenues are expected to continue to be driven predominately by services performed pursuant to contracts with third parties.

Total revenue increased by \$62.8 million, or 47%, from \$133.3 million for the year ended December 31, 2018 to \$196.2 million for the year ended December 31, 2019.

Diagnostic test revenue increased by \$58.7 million, or 44%, from \$133.0 million for the year ended December 31, 2018 to \$191.7 million for the year ended December 31, 2019. The increase was primarily attributable to an increase in diagnostic testing volumes of 47%, partially offset by lower reimbursement rates for some diagnostic tests.

Other revenue increased by \$4.1 million, or 1,115%, from \$0.4 million for the year ended December 31, 2018 to \$4.5 million for the year ended December 31, 2019. The increase was primarily attributable to the execution of three new contracts with various third parties in 2019 as well as significant growth in collaboration service activities pursuant to contracts entered into with a third party in March 2019 and with ISMMS in November 2018.

Cost of Services

								Chang	e	
	Yea	ar Endec	l Decembe	r 31,			2019 to	2020	2018 to	2019
	 2020	2	2019		2018		\$	%	\$	%
						(dollar	s in thousands	3)		
Cost of services	\$ 184,648	\$	119,623	\$	92,093	\$	65,025	54 % \$	27,530	30 %

Cost of services increased by \$65.0 million, or 54%, from \$119.6 million for the year ended December 31, 2019 to \$184.6 million for the year ended December 31, 2020. The increase was primarily attributable to the following cost components: a \$17.0 million increase in reagents and laboratory supplies expense due primarily to the 131% increase in accessioned volumes coupled with the lower per test cost of performing COVID-19 tests relative to our other tests; a \$13.2 million increase in stock-based compensation expenses primarily driven by the increase in fair value of the liability-classified awards; an \$11.8 million increase in personnel-related expenses driven by an increase in average headcount, partially offset by COVID-19 austerity measures; a \$6.4 million increase in third party reference laboratory expenses due to an increase in tests performed by such third parties; a \$4.4 million increase in expenses for other services such as genetic counseling, shipping and phlebotomy services; a \$4.3 million increase in depreciation and amortization expenses driven by laboratory sequencing equipment acquired in 2020 and an increase in capitalized software as compared to the prior year; a \$3.7 million increase in outside labor costs driven by temporary hires contracted in 2020 to perform COVID-19 testing activities as well as an increase in consultants supporting collaboration services; a \$1.6 million increase in software expenses due to increased cloud storage and expanded computing capacity requirements for testing data; and a \$1.3 million increase in equipment-related expenses, including maintenance expenses on existing equipment and purchases of minor equipment in 2020.

Cost of services increased by \$27.5 million, or 30%, from \$92.1 million for the year ended December 31, 2018 to \$119.6 million for the year ended December 31, 2019. The increase was primarily attributable to the following cost components: a \$16.4 million increase in reagents and laboratory supplies expense and a \$2.8 million increase in other laboratory services such as genetic counseling, logistics, and phlebotomy services driven by the 47% increase in volume; a \$7.5 million increase in personnel-related expenses due to an increase in average headcount; and a \$4.3 million increase in software expenses due to increased cloud storage and expanded computing capacity requirements for testing data. These increases were partially offset by a \$2.7 million decrease in third party reference laboratory expenses driven by a smaller percentage of tests performed by reference labs as a result of expanded in-house capabilities to perform sequencing activities.

Research and Development

								Change		
	Yea	ar En	ded December	r 31,			2019 to	2020	2018	to 2019
	 2020		2019		2018		\$	%	\$	%
						(dolla	rs in thousands)		
Research and development	\$ 72,700	\$	34,910	\$	21,383	\$	37,790	108 % \$	13,527	63 %

Research and development expense increased by \$37.8 million, or 108%, from \$34.9 million for the year ended December 31, 2019 to \$72.7 million for the year ended December 31, 2020. The increase was primarily attributable to the following cost components: a \$25.4 million increase in stock-based compensation expenses due to an increase in fair value of the liability-classified awards and an increase in the number of outstanding awards; a \$9.3 million increase in personnel-related expenses driven by increased average headcount and retention bonuses offered to employees impacted by the relocation of our New York laboratory in December of 2020, partially offset by COVID-19 austerity measures; a \$1.7 million increase in expenses for reagents, laboratory supplies and laboratory software for research and development use; and a \$1.1 million increase in consulting and outside services, primarily due to an increase in the number of, and required investment in, research and development studies.

Research and development expense increased by \$13.5 million, or 63%, from \$21.4 million for the year ended December 31, 2018 to \$34.9 million for the year ended December 31, 2019. The increase was primarily attributable to a \$9.7 million increase in personnel-related expenses driven by increased average headcount and a \$3.2 million increase in expenses for reagents, laboratory supplies and laboratory software for research and development use due to an increase in the number of, and required investment in, research and development studies.

Selling and Marketing

									Change	e	
		Yea	r Ende	d December	r 31,			2019 to	2020	2018 to	2019
		2020		2019		2018		\$	%	\$	%
	·						(dolla	rs in thousands)		
Selling and marketing	\$	53,831	\$	33,118	\$	19,947	\$	20,713	63 % \$	13,171	66 %

Selling and marketing expense increased by \$20.7 million, or 63%, from \$33.1 million for the year ended December 31, 2019 to \$53.8 million for the year ended December 31, 2020. The increase was primarily attributable to the following cost components: a \$10.6 million increase in personnel-related expenses driven by an increase in average headcount, partially offset by COVID-19 austerity measures; a \$10.1 million increase in stock-based compensation expenses due to an increase in the fair value of the liability-classified awards and an increase in the number of outstanding awards; and a \$1.5 million increase in commissions due to an increase in sales employee headcount and the implementation of temporary minimum commissions offered to sales employees in response to the COVID-19 pandemic. These increases were partially offset by a \$1.8 million decrease in travel and business expenses due to reduced business travel during the COVID-19 pandemic.

Selling and marketing expense increased by \$13.2 million, or 66%, from \$19.9 million for the year ended December 31, 2018 to \$33.1 million for the year ended December 31, 2019. The increase was primarily attributable to the following cost components: an \$8.6 million increase in personnel-related expenses, excluding commissions and a \$1.7 million increase in travel and business expenses driven by increases in average headcount; a \$1.5 million increase in commissions driven by the 47% increase in volume and achievement of sales targets; and a \$0.8 million increase in consultant costs for strategy and go-to-market consulting services.

General and Administrative

								Chang	ge	
	Yea	ır En	ded December	r 31,			2019 to	2020	2018	to 2019
	 2020		2019		2018		\$	%	\$	%
						(dolla	rs in thousand	s)		
General and administrative	\$ 100,742	\$	29,484	\$	19,449	\$	71,258	242 % \$	10,035	52 %

General and administrative expense increased by \$71.3 million, or 242%, from \$29.5 million for the year ended December 31, 2019 to \$100.7 million for the year ended December 31, 2020. The increase was primarily attributable to the following cost components: a \$66.0 million increase in stock-based compensation expenses due to an increase in the fair value of the liability-classified awards and an increase in the number of outstanding awards; a \$1.4 million increase in occupancy expenses due to the execution of additional third party leases; and a \$1.3 million increase in personnel-related expenses due to an increase in general and administrative headcount, partially offset by COVID-19 austerity measures.

General and administrative expense increased by \$10.1 million, or 52%, from \$19.4 million for the year ended December 31, 2018 to \$29.5 million for the year ended December 31, 2019. The increase was primarily attributable to the following cost components: a \$4.4 million increase in personnel-related expenses driven by an increase in average headcount; a \$2.3 million increase in information technology expenses driven by an increase in software costs due to system migration projects, security audits and other information technology activities commencing in 2019; a \$2.0 million increase in consulting and outside service expenses driven by information technology transformation projects commencing in 2019; and increases in miscellaneous other general and administrative expenses.

Related Party Expenses

								Change	e	
	Ye	ar Eı	ided Decembe	r 31,			2019 to 20	20	2018 to	2019
	 2020		2019		2018		\$	%	\$	%
						(dolla	rs in thousands)			
Related party expenses	\$ 9,395	\$	9,452	\$	9,132	\$	(57)	(0.6)% \$	320	4 %

Related party expenses decreased by \$0.1 million, or 0.6%, from \$9.5 million for the year ended December 31, 2019 to \$9.4 million for the year ended December 31, 2020. The decrease was primarily attributable to a \$1.7 million decrease in service fees associated with a reduction of leased ISMMS employees, a \$1.0 million decrease in fees associated with information technology support pursuant to the transition services agreement with ISMMS and decreases in other various services provided by ISMMS pursuant to the TSA and service agreements. These decreases were partially offset by a \$2.0 million increase in rent and facility expenses driven by additional office and lab space leased from ISMMS pursuant to the transition services agreement and a \$0.5 million increase in consultant costs driven by an increase in research and development efforts performed by ISMMS under consulting agreements.

Related party expenses increased by \$0.4 million, or 4%, from \$9.1 million for the year ended December 31, 2018 to \$9.5 million for the year ended December 31, 2019. The increase was primarily attributable to a \$0.7 million increase in fees incurred for information technology support provided by ISMMS for certain transformational projects that occurred in 2019 pursuant to the TSA. These increases were partially offset by a \$0.5 million decrease in service fees associated with a reduction of leased ISMMS employees.

Interest Income

								Change	e	
	Ye	ar Eı	nded Decembe	r 31,			2019 to 20	20	2018 to	2019
	 2020		2019		2018		\$	%	\$	%
						(doll	ars in thousands)			
Interest income	\$ 506	\$	988	\$	_	\$	(482)	(49)% \$	988	100 %

Interest income decreased by \$0.5 million, or 49%, from \$1.0 million for the year ended December 31, 2019 to \$0.5 million for the year ended December 31, 2020. The decrease was due to declines in interest rates on money market deposit accounts and reductions in the average cash balances held throughout the year in these interest-bearing accounts.

Interest income increased by \$1.0 million, or 100%, from \$0 for the year ended December 31, 2018 to \$1.0 million for the year ended December 31, 2019. The increase in interest income was due to interest earned on cash deposited in new money market deposit accounts in 2019.

Interest Expense

								Chang	e	
	Yes	ar End	ed Decembe	r 31,			2019 to 2	020	2018 to	2019
	 2020		2019		2018		\$	%	\$	%
						(doll	ars in thousands)			
Interest expense	\$ 2,474	\$	783	\$	248	\$	1,691	216 % \$	535	216 %

Interest expense increased by \$1.7 million, or 216%, from \$0.8 million for the year ended December 31, 2019 to \$2.5 million for the year ended December 31, 2020. The increase was driven by an increase in capital lease obligations, an increase in our interest-bearing loan balance with the Connecticut Department of Economic and Community Development, or the DECD, and a new interest-bearing bank loan executed in 2020.

Interest expense increased by \$0.6 million, or 216%, from \$0.2 million for the year ended December 31, 2018 to \$0.8 million for the year ended December 31, 2019. The increase was driven by an increase in capital lease obligations.

Gain on Extinguishment of Debt

								Cha	nge	
	Ye	ear Ende	d Decembe	er 31,			2019 to 2	020	2018 t	o 2019
	 2020		2019		2018		\$	%	\$	%
						(dolla	ars in thousands))		
Gain on extinguishment of debt	\$ _	\$	_	\$	4,500	\$	_	— %	\$ 4,500	100 %

No gains or losses on extinguishment of debt were recognized for the years ended December 31, 2020 and 2019. Gain on extinguishment of debt was \$4.5 million for the year ended December 31, 2018. The gain on extinguishment of debt in 2018 was attributable to principal loan forgiveness in response to achievement of milestones specified in the amended loan agreement with the DECD.

Other Income, Net

								Change	e	
	Yes	ar End	led December	r 31,			2019 to 2	020	2018 to	2019
	 2020		2019		2018		\$	%	\$	%
						(dol	lars in thousands)			
Other income, net	\$ 2,622	\$	504	\$	539	\$	2,118	420 % \$	(35)	(6)%

Other income, net increased by \$2.1 million, or 420%, from \$0.5 million for the year ended December 31, 2019 to \$2.6 million for the year ended December 31, 2020. The increase in other income, net was primarily attributable to \$2.6 million in funding that we received under the CARES Act.

Other income, net is \$0.5 million for the years ended December 31, 2018 and 2019 and there were no material offsetting charges within income and expense year over year.

Comparison of the Three Months Ended March 31, 2021 and 2020

The following table sets forth our results of operations for the periods presented:

	Three M	onths Ended M	arch 31,
	2021		2020
		(in thousands)	
Revenue			
Diagnostic test revenue	\$ 62	,760 \$	46,070
Other revenue	1	,591	585
Total revenue	64	,351	46,655
Cost of services	71	,812	39,239
Gross (loss) profit	(7	,461)	7,416
Research and development	53	,131	13,096
Selling and marketing	31	,569	11,733
General and administrative	101	,917	7,164
Related party expenses	1	,797	2,195
Loss from operations	(195	,875)	(26,772)
Other income (expense):			
Interest income		21	334
Interest expense		(723)	(574)
Other income, net	5	,584	22
Total other income (expense), net	4	,882	(218)
Loss before income taxes	(190	,993)	(26,990)
Income tax provision			
Net loss and comprehensive loss	\$ (190	,993) \$	(26,990)

Revenue

					Change	
	Three Months	Ende	d March 31,		2020 to 2021	
	 2021		2020		\$	%
			(dollars i	n thou	sands)	
Diagnostic test revenue	\$ 62,760	\$	46,070	\$	16,690	36 %
Other revenue	1,591		585		1,006	172 %
Total revenue	\$ 64,351	\$	46,655	\$	17,696	38 %

Total revenue increased by \$17.7 million, or 38%, from \$46.7 million for the three months ended March 31, 2020 to \$64.4 million for the three months ended March 31, 2021.

Diagnostic test revenue increased by \$16.7 million, or 36%, from \$46.1 million for the three months ended March 31, 2020 to \$62.8 million for the three months ended March 31, 2021. The increase was primarily attributable to an increase in volumes of 336%, partially offset by the change in the mix of tests performed and reduced

reimbursement rates. The increase in volume was primarily driven by the introduction of COVID-19 testing in May of 2020. The lower pricing on COVID-19 testing relative to other diagnostic tests and an overall decrease in average pricing on Women's Health and Oncology testing contributed to lower revenues generated per test for the three months ended March 31, 2021 relative to the three months ended March 31, 2020.

Other revenue increased by \$1.0 million, or 172%, from \$0.6 million for the three months ended March 31, 2020 to \$1.6 million for the three months ended March 31, 2021. The increase was primarily attributable to growth in collaboration service activities due to the execution of two new third-party contracts, partially offset by reduced revenues recognized related to an existing third-party contract. Other revenues are expected to continue to be driven predominately by services performed pursuant to contracts with third parties.

Cost of Services

				Cnange	<u> </u>	
	Three Months Ended March 31,			2020 to 20	to 2021	
	 2021	2020)	\$	%	
			(dollars in thousar	nds)		
Cost of services	\$ 71,812	\$	39,239 \$	32,573		83 %

Cost of services increased by \$32.6 million, or 83%, from \$39.2 million for the three months ended March 31, 2020 to \$71.8 million for the three months ended March 31, 2021. The increase was primarily attributable to the following cost components: a \$19.7 million increase in stock-based compensation expense primarily driven by the increase in fair value of the liability-classified awards; a \$3.9 million increase in personnel-related expenses driven by an increase in average headcount; a \$2.4 million increase in outside labor costs driven by temporary hires contracted to perform COVID-19 testing activities; a \$1.3 million increase in expenses for other services such as genetic counseling, shipping and phlebotomy services; a \$1.3 million increase in reagents and laboratory supplies expense due primarily to the 336% increase in accessioned volumes coupled with the lower per test cost of performing carrier screening and COVID-19 tests relative to our other tests; a \$1.3 million increase in depreciation expenses driven by an increase in leasehold improvements; a \$1.1 million increase in software expenses due to increased cloud storage and expanded computing capacity requirements from New York City to Stamford, Connecticut for testing data; and a \$0.7 million increase in occupancy expenses in connection with our laboratory move as production activities began at the Stamford facility in the first quarter of 2021.

Research and Development

				Change	<u>.</u>		
	Three Months Ended March 31,			2020 to 20	020 to 2021		
	 2021	2020		\$	%	_	
		(dol	lars in thousand	ds)			
Research and Development	\$ 53,131	\$ 13,0	096 \$	40,035	306 %	6	

Research and development expense increased by \$40.0 million, or 306%, from \$13.1 million for the three months ended March 31, 2020 to \$53.1 million for the three months ended March 31, 2021. The increase was primarily attributable to the following cost components: a \$38.0 million increase in stock-based compensation expense driven by the increase in fair value of the liability-classified awards; and a \$2.0 million increase in expenses for reagents, laboratory supplies and laboratory software for research and development use driven by an increase in the number of, and required investment in, research and development studies.

Selling and Marketing

				Chang	e	
	Three Months Ended March 31,			2020 to 2	2020 to 2021	
	 2021	2020	0	\$	%	
			(dollars in thousa	nds)		
Selling and marketing	\$ 31,569	\$	11,733 \$	19,836	169 %	

Selling and marketing expense increased by \$19.9 million, or 169%, from \$11.7 million for the three months ended March 31, 2020 to \$31.6 million for the three months ended March 31, 2021. The increase was primarily attributable to the following cost components: a \$17.3 million increase in stock-based compensation expense driven by the increase in fair value of the liability-classified awards; a \$2.1 million increase in personnel-related expenses driven by increased headcount; a \$0.5 million increase in information technology related expenses; and a \$0.4 million increase in consulting and outside service expenses to support revenue cycle transformation initiatives. These increases were partially offset by a \$0.6 million decrease in travel and entertainment expenses driven by reduced business travel during the COVID-19 pandemic.

General and Administrative

					Cha	nge		
	Three Months Ended March 31,				2020 to	20 to 2021		
	 2021		2020	\$		%		
			(dollars i	n thousands)				
General and administrative	\$ 101,917	\$	7,164	\$	94,753	1,323 %		

General and administrative expense increased by \$94.8 million, or 1,323%, from \$7.2 million for the three months ended March 31, 2020 to \$101.9 million for the three months ended March 31, 2021. The increase was primarily attributable to the following cost components: an \$89.3 million increase in stock-based compensation expense driven by the increase in fair value of the liability-classified awards and an increase in the number of outstanding awards; a \$2.5 million increase in expenses for professional services associated with expected public company requirements; a \$2.0 million increase in personnel-related expenses driven by an increase in average headcount including executive headcount; a \$0.6 million increase in insurance expenses driven by transitioning to standalone insurance policies separate from ISMMS; and a \$0.3 million increase in software expenses due to increased cloud storage capacity requirements. These increases were partially offset by a \$0.6 million decrease in occupancy expenses in connection with our laboratory move from New York City to Stamford, Connecticut.

Related Party Expenses

			Chan	ge	
	Three Months Ended M	Iarch 31,	2020 to	2020 to 2021	
	 2021	2020	\$	%	
		(dollars ir	thousands)		
Related party expenses	\$ 1,797 \$	2,195	\$ (398)	(18.1)%	

Related party expenses decreased by \$0.4 million, or 18.1%, from \$2.2 million for the three months ended March 31, 2020 to \$1.8 million for the three months ended March 31, 2021. The decrease was primarily attributable to the following cost components: a \$0.2 million decrease in fees associated with information technology support pursuant to the transition services agreement with ISMMS; and a \$0.2 million decrease in rent and facility expenses driven by a reduction of office and lab space leased from ISMMS pursuant to the transition services agreement.

Interest Income

				Change	2		
	Three Months Ended March 31,			2020 to 20	2020 to 2021		
	 2021	2020		\$	%		
		(dollars in thousand	is)			
Interest income	\$ 21	\$	334 \$	(313)	(94)%		

Interest income decreased by \$0.3 million, or 94%, from \$0.3 million for the three months ended March 31, 2020 to a nominal amount for the three months ended March 31, 2021. The decrease was due to declines in interest rates on money market deposit accounts and reductions in the average cash balances held in these interest-bearing accounts.

Interest Expense

						Change	!		
		Three Months Ended March 31,				2020 to 20	0 to 2021		
	· 	2021		2020		\$	%		
				(dollars i	n thousands)				
Interest expense	\$	723	\$	574	\$	149		26 %	

Interest expense increased by \$0.1 million, or 26%, from \$0.6 million for the three months ended March 31, 2020 to \$0.7 million for the three months ended March 31, 2021. The increase was driven by new loans executed in the second half of 2020.

Other Income, Net

					Change	2	
		Three Months Ended March 31,			2020 to 20) to 2021	
		2021	2020		\$	%	
	·		(0	lollars in thousands)		
Other income, net	\$	5,584	\$	22 \$	5,562	NM (1)	

⁽¹⁾ Not Meaningful ("NM")

Other income, net increased by \$5.6 million from a nominal amount for the three months ended March 31, 2020 to \$5.6 million for the three months ended March 31, 2021. The increase in other income, net was primarily attributable to \$5.6 million in funding that we received and recognized under the CARES Act.

Reconciliation of Non-GAAP Financial Measures

In addition to our results determined in accordance with GAAP, we believe the following non-GAAP measures are useful in evaluating our operating performance. We use the following non-GAAP financial information to evaluate our ongoing operations, as a component in determining employee bonus compensation, and for internal planning and forecasting purposes. We believe that non-GAAP financial information, when taken collectively, may be helpful to investors because it provides consistency and comparability with past financial performance. However, non-GAAP financial information is presented for supplemental informational purposes only, has limitations as an analytical tool and should not be considered in isolation or as a substitute for financial information presented in accordance with GAAP. In addition, other companies, including companies in our industry, may calculate similarly-titled non-GAAP measures differently or may use other measures to evaluate their performance, all of which could reduce the usefulness of our non-GAAP financial measures as tools for comparison. A reconciliation is provided below for each non-GAAP financial measure to the most directly comparable financial measure stated in accordance with GAAP. Investors are encouraged to review the related GAAP financial measures and the reconciliation of these non-GAAP financial measures to their most directly comparable GAAP financial measures, and not to rely on any single financial measure to evaluate our business.

Non-GAAP financial measures have limitations as analytical tools and you should not consider them in isolation, or as substitutes for analysis of our results as reported under GAAP. We may in the future incur expenses similar to the adjustments in the presentation of Non-GAAP financial measures. Other limitations include that Non-GAAP financial measures do not reflect:

- all expenditures or future requirements for capital expenditures or contractual commitments;
- · changes in our working capital needs;
- provision for income taxes, which may be a necessary element of our costs and ability to operate;
- · the costs of replacing the assets being depreciated, which will often have to be replaced in the future;
- · the non-cash component of employee compensation expense; and
- the impact of earnings or charges resulting from matters we consider not to be reflective, on a recurring basis, of our ongoing operations

Adjusted Gross Profit and Adjusted Gross Margin

Adjusted Gross Profit is a non-GAAP financial measure that we define as revenue less cost of services, excluding depreciation and amortization, stock-based compensation expense, related party expenses, labor costs due to a laboratory move, and COVID-19 costs. We define Adjusted Gross Margin as our Adjusted Gross Profit divided by our revenue. We believe these non-GAAP financial measures are useful in evaluating our operating performance compared to that of other companies in our industry, as these metrics generally eliminate the effects of certain items that may vary from company to company for reasons unrelated to overall operating performance.

The following is a reconciliation of revenue to our Adjusted Gross Profit and Adjusted Gross Margin for the years ended December 31, 2020, 2019 and 2018:

	Year Ended December 31,					
	2020			2019		2018
	(in thousands)					
Revenue	\$	179,322	\$	196,174	\$	133,341
Cost of services		184,648		119,623		92,093
Gross (Loss) Profit		(5,326)		76,551		41,248
Add:						
Stock-based compensation expense		13,947		710		748
Related party expenses (1)		2,189		1,859		4,122
Labor costs due to laboratory move (2)		16,391		_		_
COVID-19 costs (3)		3,179		_		_
Adjusted Gross Profit	\$	30,380	\$	79,120	\$	46,118
Adjusted Gross Margin		17 %		40 %		35 %

⁽¹⁾ Represents fees paid to ISMMS for certain services that, for GAAP purposes, are included in Cost of Services.

⁽²⁾ Represents labor costs in respect of laboratory employees' time spent to support our laboratory move from New York City to Stamford, Connecticut in 2020. During the move, our laboratory employees dedicated their time to re-validating and re-establishing instruments and equipment, rebuilding interface, obtaining a CLIA license, and other tasks to make sure the move was done correctly. For GAAP purposes we included these activities in Cost of Services. However, as the laboratory move and effort spent by our employees are one-time activities, we adjusted our Gross Profit to reflect management's view of our normal operations.

⁽³⁾ Represents labor costs in respect 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 management-assessed impact from the decrease in productivity of existing laboratory employees due to COVID-19 in the second quarter of 2020.

The following is a reconciliation of revenue to our Adjusted Gross Profit and Adjusted Gross Margin for the three months ended March 31, 2021 and 2020:

	 Three Months Ended March 31,			
	2021		2020	
	 (in thousands)			
Revenue	\$ 64,351	\$	46,655	
Cost of services	71,812		39,239	
Gross (Loss) Profit	(7,461)		7,416	
Add:				
Stock-based compensation expense	19,782		120	
Related party expenses (1)	278		574	
Adjusted Gross Profit	\$ 12,599	\$	8,110	
Adjusted Gross Margin	20 %	, D	17 %	

⁽¹⁾ Represents fees paid to ISMMS for certain services that, for GAAP purposes, are included in Cost of Services.

Adjusted EBITDA

Adjusted EBITDA is a non-GAAP financial measure that we define 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, labor costs due to a laboratory move and COVID-19 costs. We believe Adjusted EBITDA is useful in evaluating our operating performance compared to that of other companies in our 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.

The following is a reconciliation of our net loss to Adjusted EBITDA for the years ended December 31, 2020, 2019, and 2018:

	Year Ended December 31,				
	2020	2019	2018		
		(in thousands)			
Net loss	\$ (241,340)	\$ (29,704)	\$ (23,872)		
Interest (income) expense, net (1)	1,968	(205)	248		
Gain on extinguishment of debt (2)	_	_	(4,500)		
Depreciation and amortization	11,734	6,407	5,433		
Stock-based compensation expense	120,231	5,482	5,605		
Other (income) expense, net (3)	(2,622)	(504)	(539)		
Labor costs due to laboratory move (4)	16,391				
COVID-19 costs (5)	3,179	_	_		
Adjusted EBITDA	\$ (90,459)	\$ (18,524)	\$ (17,625)		

⁽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 a gain on debt extinguishment for the year ended December 31, 2018 related to principal loan forgiveness under one of our loan agreements.

⁽³⁾ For fiscal year 2020, consists of funding received under the CARES Act Provider Relief Fund, and sales and use taxes.

⁽⁴⁾ Represents labor costs in respect of laboratory employees' time spent to support our laboratory move from New York City to Stamford, Connecticut in 2020. During the move, our laboratory employees dedicated their time to re-validating and re-establishing instruments and equipment, rebuilding interface, obtaining a CLIA license, and other tasks to make sure the move was done correctly. For GAAP purposes we included these activities in Cost of Services. However, as the laboratory move and effort spent by our employees are one-time activities, we adjusted our Net Loss to reflect management's view of our normal operations.

⁽⁵⁾ Represents labor costs in respect 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 management-assessed impact from the decrease in productivity of existing laboratory employees due to COVID-19 in the second quarter of 2020.

The following is a reconciliation of our net loss to Adjusted EBITDA for the three months ended March 31, 2021 and 2020:

		Three Months Ended March 31,			
	2021			2020	
		(in tho	usands)		
Net loss	\$	(190,993)	\$	(26,990)	
Interest expense, net (1)		702		240	
Depreciation and amortization		4,902		2,398	
Stock-based compensation expense		164,962		815	
Transaction costs ⁽²⁾		1,954		_	
Other (income) expense, net (3)		(5,584)		(22)	
Adjusted EBITDA	\$	(24,057)	\$	(23,559)	

- (1) Represents the total of Interest Expense related to our capital leases and interest-bearing loans and Interest Income on money market funds.
- Represents professional service costs directly related to the Business Combination.
- (3) For the three months ended March 31, 2021, consists of funding received under the CARES Act Provider Relief Fund.

Going Concern, Liquidity and Capital Resources

Sema4 has incurred net losses and negative cash flows from operations since its inception, including net losses of \$241.3 million, \$29.7 million and \$23.9 million for the years ended December 31, 2020, 2019 and 2018, respectively, and net losses of \$191.0 million and \$27.0 million for the three months ended March 31, 2021 and 2020, respectively. As of March 31, 2021, we had an accumulated deficit of \$521.0 million. We expect to continue to generate significant operating losses for the foreseeable future. Through March 31, 2021, we have funded our operations primarily with proceeds from the issuance of redeemable convertible preferred stock and the issuance of long-term debt. On July 22, 2021, we consummated the Business Combination, receiving net cash proceeds of \$510 million in cash.

Based on our recurring losses from operations incurred since inception, expectation of continuing operating losses for the foreseeable future, and the need to raise additional capital to finance future operations, as of June 10, 2021, the issuance date of our unaudited condensed financial statements for the three months ended March 31, 2021 included elsewhere in this prospectus, we had concluded that there was substantial doubt about our ability to continue as a going concern for a period of one year from the date that these financial statements were issued. Although the funding we received upon the completion of the Business Combination addressed the substantial doubt about our ability to continue as a going concern, we may also seek additional funding in the future through the sale of common or preferred equity or convertible debt securities, the entry into a credit facility or another form of third-party funding or by seeking other debt financing.

We plan to utilize the existing cash and cash equivalents on hand primarily to fund our operations as we continue to grow our business, enter into partnerships, pursue strategic investments and continue research and development initiatives related to Women's Health and Oncology. We expect to incur additional costs associated with operating as a public company, including expenses related to legal, accounting, and regulatory matters; maintaining compliance with requirements of the Nasdaq and of the SEC; director and officer insurance premiums and investor relations. Cash used to fund operating expenses is affected by the timing of when we pay expenses, as reflected in the change in our outstanding accounts payable and accrued expenses. We also expect to make increased capital expenditures in the near term related to our laboratory operations.

Material Cash Requirements for Known Contractual Obligations and Commitments

The following is a description of commitments for known and reasonably likely cash requirements as of December 31, 2020 and March 31, 2021. We anticipate fulfilling such commitments with our existing cash and cash

equivalents, which amounted to \$108.1 million and \$58.7 million as of December 31, 2020 and March 31, 2021, respectively, or through additional capital raised to finance our operations; see "—Going Concern, Liquidity and Capital Resources".

Our future minimum payments under non-cancellable operating lease agreements were \$73.3 million as of December 31, 2020 and \$71.5 million as of March 31, 2021. The timing of these future payments, by year, can be found in Sema4's audited financial statements in Note 8, "Commitments and Contingencies" and Sema4's unaudited condensed financial statements in Note 8, "Commitments and Contingencies," respectively.

Our future payments under capital leases were \$70.2 million as of December 31, 2020 and \$69.2 million as of March 31, 2021. The timing of these future payments, by year, can be found in Sema4's audited financial statements in Note 8, "Commitments and Contingencies" and Sema4's unaudited condensed financial statements in Note 8, "Commitments and Contingencies," respectively.

In 2016, ISMMS received a loan funding commitment from the DECD, or the DECD Loan Agreement, to support the Genetic Sequencing Laboratory Project, which we refer to as the Project. As part of the spin-out of Sema4 from ISMMS, ISMMS assigned both the Project and the DECD Loan Agreement to us. In June of 2018, we amended the DECD Loan Agreement by increasing the total loan commitment amount to \$15.5 million. During the years ended December 31, 2020 and 2018, we received \$6.0 million and \$4.5 million, respectively, in loan funding. During the year ended December 31, 2020, we entered into a Master Loan and Security Agreement, or the Equipment Note, with a bank resulting in the receipt of \$6.3 million of proceeds. The loan is fully secured with funds deposited in a bank account opened by us in the lender-designated bank. Also, during the year ended December 31, 2020, we entered into a Master Lease Agreement with a lender whereby we agreed to sell certain equipment and immediately lease it back, resulting in the receipt of \$3.6 million of proceeds. We issued a letter of credit as security for this loan. More information on the terms of these financing arrangements can be found in Sema4's audited financial statements in Note 7, "Long-term debt."

The terms of the amended DECD Loan Agreement require us to make interest-only payments through July 2023 and principal and interest payments commencing in August 2023. The final payment of principal and interest is due in July 2028. Interest payments are fixed at an annual interest rate of 2.0%. The outstanding loan balance from the DECD was \$11.0 million and \$11.0 million at December 31, 2020 and March 31, 2021, respectively. The DECD may grant partial principal loan forgiveness that is contingent upon us achieving certain milestones. The timing of these future payments, by year, can be found in Sema4's audited financial statements in Note 7, "Long-Term Debt" and Sema4's unaudited condensed financial statements in Note 7, "Long-term debt."

The terms of the Equipment Note require us to make sixty consecutive monthly payments of principal and interest at a fixed monthly amount of \$0.1 million beginning in November 2020. Interest payments are fixed at an annual interest rate of 4.75%. The outstanding loan balance was \$6.1 million and \$5.8 million at December 31, 2020 and March 31, 2021, respectively. The timing of these future payments, by year, can be found in Sema4's audited financial statements in Note 7, "Long-Term Debt" and Sema4's unaudited condensed financial statements in Note 7, "Long-term debt," respectively.

The terms of the Master Lease Agreement require us to make sixty consecutive monthly payments of principal and interest at a fixed monthly amount of \$0.1 million beginning in February 2021. Interest payments are fixed at an annual interest rate of 3.54%. The outstanding loan balance was \$3.6 million and \$3.5 million at December 31, 2020 and March 31, 2021, respectively. The timing of these future payments, by year, can be found Sema4's audited financial statements in Note 7, "Long-Term Debt" and Sema4's unaudited condensed financial statements in Note 7, "Long-term debt," respectively.

Cash Flows

		Year Ended December 31,				Three Months Ended March, 31		
		2020	2019	2018		2021	2020	
	(in thousands)							
Net cash used in operating activities	\$	(93,128) \$	(18,728)	\$ (24,684)	\$	(42,208) \$	(22,613)	
Net cash used in investing activities		(31,974)	(15,456)	(3,803)		(4,994)	(5,321)	
Net cash provided by (used in) financing activities		129,056	148,012	27,065		(2,278)	4,657	

Operating Activities

Net cash used in operating activities during the year ended December 31, 2020 was \$93.1 million, which was primarily attributable to a net loss of \$241.3 million, partially offset by non-cash depreciation and amortization of \$11.7 million, non-cash stock-based compensation expense of \$120.2 million and a net change in our operating assets and liabilities of \$13.8 million. The net change in our operating assets and liabilities primarily reflected an increase in accounts receivable of \$10.6 million driven by a slowdown in collections due to the COVID-19 pandemic, a \$9.0 million increase in inventories in preparation for the move of certain laboratory operations to a new location in December 2020, an increase in accounts payable and accrued expenses of \$14.8 million due to timing of vendor payments and increased spending during the year related to COVID-19 diagnostic testing and a \$16.0 million increase in other current liabilities driven by higher personnel-related accruals due to increased headcount at 2020 year-end as compared to 2019 year-end, as well as an increase in accrued payroll taxes due to the deferral of U.S. payroll taxes as part of the CARES Act.

Net cash used in operating activities during the year ended December 31, 2019 was \$18.7 million, which was primarily attributable to a net loss of \$29.7 million and a net change in our operating assets and liabilities of \$0.7 million, partially offset by non-cash depreciation and amortization of \$6.4 million and non-cash stock-based compensation expense of \$5.5 million. The net change in our operating assets and liabilities primarily reflected an increase in accounts receivable of \$4.6 million driven by increase in testing volumes and billings, an \$8.0 million increase in inventories driven by anticipated future growth due to a year-over-year increase in testing volumes for the year ended December 31, 2019 as compared to the year ended December 31, 2018, a \$4.4 million increase in other assets due to security deposits on certain office and laboratory locations, an increase in accounts payable and accrued expenses of \$12.8 million due to increased operating expenditures in line with the growth of the business and a \$4.5 million increase in other current liabilities driven by higher personnel-related accruals due to increased headcount at 2019 year-end as compared to 2018 year-end.

Net cash used in operating activities during the year ended December 31, 2018 was \$24.7 million, which was primarily attributable to a net loss of \$23.9 million, a \$4.5 million non-cash gain on extinguishment of debt and a net change in our operating assets and liabilities of \$7.9 million, which were partially offset by non-cash depreciation and amortization of \$5.4 million and non-cash stock-based compensation expense of \$5.6 million. The net change in our operating assets and liabilities primarily reflected an increase in accounts receivable of \$4.7 million driven by an increase in testing volumes and billings, a \$4.9 million increase in inventories to support anticipated future growth in diagnostic testing and a \$3.9 million increase in other current liabilities driven by higher personnel-related accruals due to increased headcount at 2018 year-end as compared to 2017 year-end.

Net cash used in operating activities during the three months ended March 31, 2021 was \$42.2 million, which was primarily attributable to a net loss of \$191.0 million and a net change in our operating assets and liabilities of \$23.1 million, partially offset by non-cash depreciation and amortization of \$4.9 million and non-cash stock-based compensation expense of \$165.0 million. The net change in our operating assets and liabilities primarily reflected an \$9.8 million increase in inventories driven by a higher volume of purchases to support increasing testing volumes, a \$6.5 million increase in prepaid expenses and other current assets mainly driven by professional services costs directly related to the Business Combination, a \$3.5 million increase in accounts payable and accrued expenses due to the timing of vendor payments, and an \$8.7 million decrease in other current liabilities mainly driven by a decline in our bonus accrual following bonus payments in March 2021.

Net cash used in operating activities during the three months ended March 31, 2020 was \$22.6 million, which was primarily attributable to a net loss of \$27.0 million, partially offset by non-cash depreciation and amortization of \$2.4 million, non-cash stock-based compensation expense of \$0.8 million and non-cash lease expenses of \$1.1 million. The net change in our operating assets and liabilities was nominal for the three months ended March 31, 2020.

Investing Activities

Net cash used in investing activities during the year ended December 31, 2020 was \$32.0 million, which was attributable to \$24.1 million in purchases of property and equipment and \$7.9 million of costs related to development of internal-use software assets.

Net cash used in investing activities during the year ended December 31, 2019 was \$15.4 million, which was attributable to \$11.9 million in purchases of property and equipment and \$3.5 million of costs related to development of internal-use software assets.

Net cash used in investing activities during the year ended December 31, 2018 was \$3.8 million, which was attributable to \$2.2 million in purchases of property and equipment and \$1.7 million of costs related to development of internal-use software assets, partially offset by \$0.1 million in proceeds from the sale of laboratory equipment.

Net cash used in investing activities during the three months ended March 31, 2021 was \$5.0 million, which was attributable to \$2.1 million in purchases of property and equipment and \$2.9 million of costs related to development of internal-use software assets.

Net cash used in investing activities during the three months ended March 31, 2020 was \$5.3 million, which was attributable to \$3.9 million in purchases of property and equipment and \$1.4 million of costs related to development of internal-use software assets.

Financing Activities

Net cash provided by financing activities during the year ended December 31, 2020 was \$129.0 million, which was primarily attributable to \$117.3 million in net cash proceeds from the issuance of our Series C redeemable convertible preferred stock and \$15.9 million in net cash proceeds from the issuance of long-term debt. These increases were partially offset by \$4.0 million in principal payments on our capital lease obligations and \$0.2 million in principal payments on our long-term debt obligations.

Net cash provided by financing activities during the year ended December 31, 2019 was \$148.0 million, which was attributable to \$118.8 million in net cash proceeds from the issuance of our Series B redeemable convertible preferred stock and \$30.9 million in capital contributions from ISMMS, partially offset by \$1.7 million in principal payments on our capital lease obligations.

Net cash provided by financing activities during the year ended December 31, 2018 was \$27.0 million, which was attributable to \$24.6 million in capital contributions from ISMMS and \$4.5 million in net cash proceeds from the issuance of long-term debt, partially offset by \$2.1 million in principal payments on our capital lease obligations.

Net cash used in financing activities during the three months ended March 31, 2021 was \$2.3 million, which was attributable to \$1.3 million in payments for deferred transaction costs related to the Business Combination, \$1.0 million in principal payments on our capital lease obligations and \$0.4 million in principal payments on our long-term debt obligations, offset by \$0.4 million cash received from stock option exercise.

Net cash provided by financing activities during the three months ended March 31, 2020 was \$4.7 million, which was attributable to \$6.0 million in net cash proceeds from the issuance of long-term debt, partially offset by \$1.3 million in principal payments on our capital lease obligations.

Off-Balance Sheet Arrangements

We did not have during the periods presented, and we do not currently have, any off-balance sheet arrangements, as defined in the rules and regulations of the SEC.

Quantitative and Qualitative Disclosures about Market Risk

We are exposed to market risks in the ordinary course of our business. These risks primarily relate to interest rates. Our cash, cash equivalents, and restricted cash consists of bank deposits and money market funds, which totaled \$118.9 million and \$115.0 million at December 31, 2020 and 2019, respectively, and \$69.5 million at March 31, 2021. Such interest-bearing instruments carry a degree of risk; however, because our investments are primarily high-quality credit instruments with short-term in durations with high-quality institutions, we have not been exposed to, nor do we anticipate being exposed to, material risks due to changes in interest rates. A 100 basis point change in interest rates would not have a material effect on the fair market value of our cash, cash equivalents and restricted cash.

Our loans and financing obligations are recorded at amortized cost and are set at fixed interest rates. As a result, fluctuations in interest rates would not impact our financial statements. However, the fair value of our debt will generally fluctuate with movements of interest rates. Additional information on our long-term debt can be found in Sema4's audited financial statements in Note 7, "Long-Term Debt" and Sema4's unaudited condensed financial statements in Note 7, "Long-Term Debt."

The fair value of our liability-classified stock options is determined using the Black-Scholes model, which uses the risk-free interest rate as an input. A 100 basis point change in interest rates would not have a material effect on the fair value of our liability classified stock options using the Black-Scholes model.

Critical Accounting Policies and Estimates

We have prepared our financial statements in accordance with GAAP. Our preparation of these financial statements requires us to make estimates, assumptions and judgments that affect the reported amounts of assets, liabilities and related disclosures at the date of the financial statements, as well as revenue and expense recorded during the reporting periods. We evaluate our estimates and judgments on an ongoing basis. We base our estimates on historical experience and or other relevant assumptions that we believe to be reasonable under the circumstances. Actual results may differ from these estimates under different assumptions or conditions.

An accounting policy is deemed to be critical if it requires an accounting estimate to be made based on assumptions about matters that are highly uncertain at the time the estimate is made, if different estimates reasonably could have been used, or if changes in the estimate that are reasonably possible could materially impact the financial statements. While our significant accounting policies are described in more detail in Sema4's audited financial statements in Note 2, "Summary of Significant Accounting Policies" and Sema4's unaudited condensed financial statements in Note 2, "Summary of Significant Accounting Policies," included elsewhere in this prospectus, we believe the following accounting policies to be critical to the judgments and estimates used in the preparation of our financial statements.

Revenue Recognition

Effective January 1, 2019 we adopted Accounting Standards Codification ("ASC") Topic 606 ("ASC 606"), Revenue from Contracts with Customers. Under ASC 606, revenue is recognized when, or as, performance obligations under the terms of a contract are satisfied, which occurs when control of the promised products or services are transferred to a customer. Revenue is measured as the amount of consideration we expect to receive in exchange for transferring products or services to a customer. Our contracts require significant judgments in determining the transaction price and satisfying performance obligations under ASC 606.

We recognized revenue pursuant to ASC Topic 605 ("ASC 605"), Revenue recognition, for the year ended December 31, 2018 prior to the adoption of ASC 606. Under ASC 605, revenue was recognized when persuasive evidence of a final agreement existed; delivery had occurred or services were rendered; the price of the product or

service was fixed or determinable; and collectability from the customer was reasonably assured. Our contracts require significant judgments in determining whether the price is fixed or determinable and whether collectability is reasonably assured under ASC 605.

Diagnostic test revenue

Our diagnostic test revenue contracts typically consist of a single performance obligation to deliver diagnostic testing services to the ordering facility or patient and therefore allocation of the contract transaction price is not applicable. Control over diagnostic testing services is transferred at a point in time. Specifically, we determined the customer obtains control of the promised service upon delivery of the test results.

Under ASC 606, we include the unconstrained amount of estimated variable consideration in the transaction price. The transaction price is constrained to only include the amount for which it is probable that a significant reversal of cumulative revenue recognized will not occur when underlying uncertainties or contingencies resolve. At the end of each subsequent reporting period, we re-evaluate the estimated variable consideration included in the transaction price and any related constraint and, if necessary, adjust our estimate of the overall transaction price. The process for estimating the transaction price associated with services provided to customers involves significant judgments and assumptions.

We estimate the transaction price in arrangements with third-party insurance payors based on historical collection experience, contractual provisions and insurance reimbursement policies, payor mix, and other relevant information for applicable payor portfolios. The estimates for implicit price concessions require significant judgment and are based upon management's assessment of expected net collections, business and economic conditions, historical trends, trends in federal, state and private employer health care coverage and other collection indicators.

For self-pay patients, we determine the transaction price associated with services rendered in consideration of implicit price concessions that are granted to such patients. The estimates for implicit price concessions require significant judgment and are based upon management's assessment of expected net collections, business and economic conditions, historical trends, trends in federal, state and private employer health care coverage and other collection indicators.

For institutional clients, the customer is the institution. We determine the transaction price associated with services rendered in accordance with the contractual rates established with each customer.

We monitor these accrual estimates at each reporting period based on actual cash collections in order to assess whether a revision to the estimate is required. Both the initial estimate and any subsequent revision to the estimate contain uncertainty and require the use of judgment in the estimation of the transaction price and application of the constraint for variable consideration. If actual results in the future vary from our estimates, we will adjust these estimates, which could affect revenue and earnings in the period such variances become known.

Under ASC 605, we recognize revenue from diagnostic tests performed in the period in which tests are reported to customers if the price is fixed or determinable and collectability from the customer is reasonably assured. The criterion for whether the price was fixed or determinable and whether collectability was reasonably assured were based on management's judgments. When evaluating collectability, in situations where reimbursement coverage did not exist, we considered whether a sufficient history to reliably estimate a payer's individual payment patterns existed. For most uninsured customers, we were not able to demonstrate a predictable pattern of collectability and, therefore, recognized revenue when payment was received. For customers who had demonstrated a consistent pattern of payment of tests billed at the appropriate amounts, we recognized revenue at estimated realizable amounts upon delivery of test results.

Other revenue

We also recognize revenue from collaboration service agreements with Biopharma companies and other third parties pursuant to which we provide diagnostic testing and related data aggregation reporting services. The goods and services transferred to our customers pursuant to these agreements generally comprise a single performance obligation on the basis that such goods and services are not distinct within the context of the contract. This is

because the goods and services are highly interdependent and interrelated such that we would not be able to fulfill its underlying promise to our customers by transferring each good or service independently. These contracts generally include non-refundable upfront payments, which we record as contract liabilities, and variable payments based upon the achievement of certain milestones during the contract term. Milestone payments are a form of variable consideration that are included in the transaction price only when it is probable that doing so will not result in a significant reversal of cumulative revenue recognized when the uncertainty associated with the milestone is subsequently resolved.

Under ASC 606, we recognize revenue over time using an input measure based on costs incurred on the basis that this measure best reflects the pattern of transfer of control of the services to the customer. The measure of progress is developed using our best estimate of the performance period and the anticipated costs to be incurred to perform such services. The costs for any subcontracted services are included in our measure of progress used to recognize revenue.

Under ASC 605, we recognize revenues when the contractual obligations are met based on the terms of the respective agreements.

Capitalized Internal-Use Software Costs

We capitalize certain costs related to the development of our software applications for internal use. Capitalization begins during the application development stage, once the preliminary project stage has been completed. If a project constitutes an enhancement to existing software, we assess whether the enhancement creates additional functionality to the software, thus qualifying the work incurred for capitalization. Costs incurred prior to meeting these criteria together with costs incurred for training and maintenance are expensed as incurred. Once the project is available for general release, capitalization ceases and we estimate the useful life of the asset and begin amortization. We exercise judgment in determining the point at which various projects may be capitalized, in assessing the ongoing value of the capitalized costs and in determining the estimated useful lives over which the costs are amortized. We periodically assess whether triggering events are present to review internal-use software for impairment. To the extent that we change our estimates related to internal-use software, the amount of internal-use software development costs we capitalize and amortize could change in future periods.

Stock-Based Compensation

We measure stock-based compensation expense for liability-classified stock options granted to employees, consultants and directors based on the estimated fair value of the awards and recognize compensation expense over the requisite service period for each separate vesting portion of the award as if the award was, in-substance, multiple awards. Terms of our stock options include a provision whereby we have a call option to repurchase the award for cash upon termination of employment or termination of the consulting agreement. We have concluded that it is probable we will continue to exercise our call option prior to the award holder being subject to the risks and rewards of equity ownership. As a result, stock options are classified as liabilities in the accompanying balance sheets. Additional information on our stock-based compensation can be found in Sema4's audited financial statements in Note 9, "Stock-Based Compensation."

The initial measurement of fair value and subsequent change in fair value are recognized as compensation expense over the requisite service period from grant date to settlement date for all awards that vest with a corresponding adjustment to stock-based compensation liabilities on the balance sheet. Shares of common stock issued upon settlement of an award continue to be classified as a liability and remeasured to fair value each reporting period until the shareholder bears the risks and rewards of equity ownership for a reasonable period of time, which we conclude is a period of at least six months.

We estimate the fair value of stock options using the Black-Scholes option-pricing model. The Black-Scholes option-pricing model requires the use of assumptions regarding a number of variables that are complex, subjective

and generally require significant judgment to determine. Changes in the assumptions can materially affect the fair value and ultimately how much stock-based compensation expense is recognized. These assumptions include:

Expected volatility. As we do not have any trading history for our common stock, the expected volatility was estimated based on the average volatility for comparable publicly traded companies over a period equal to the expected term of stock option grants. When selecting these comparable companies, we considered the enterprise value, risk profiles, position within the industry, and whether there was sufficient historical share price information to meet the expected life of the stock-based awards. We computed historical volatility using the daily closing prices for the selected companies' common stock during the equivalent period of the calculated expected term of the stock-based awards.

Expected term. The expected term represents the period that awards are expected to be outstanding and is determined by the potential timing of a liquidity event since all awards have accelerated vesting features upon a liquidation event and we generally do not expect grantees to exercise vested options prior to a liquidation event.

Risk-free interest rate. The risk-free interest rate is based on the U.S. Treasury yield curve in effect at the time of grant for bonds with maturities consistent with the expected holding periods corresponding with the expected term of the option.

Dividend yield. We have not historically paid dividends on common stock and do not anticipate paying dividends in the foreseeable future. Therefore, the expected dividend yield is zero.

Fair value of common stock. Prior to the closing of the Business Combination, the fair value of our common stock issuable upon exercise of stock options was determined by our board of directors, with input from management and independent third-party valuations, as discussed in "Common Stock Valuations" below.

The estimated forfeiture rate is not determinable due to a lack of historical and comparable data. Therefore, we account for forfeitures as they occur.

Common Stock Valuations

The estimated fair value of common stock underlying our stock options was determined at each grant date by our board of directors, with input from management, considering our most recently available third-party valuations of common stock and our board of directors' assessment of additional objective and subjective factors that it believed were relevant and factors that may have changed from the date of the most recent valuation through the end of the reporting period. All options to purchase shares of our common stock are intended to be exercisable at a price per share not less than the per-share fair value of our common stock underlying those options on the date of grant.

We determined the fair value of our common stock using methodologies, approaches and assumptions consistent with the American Institute of Certified Public Accountants Accounting and Valuation Guide, Valuation of Privately-Held-Company Equity Securities Issued as Compensation. Given the absence of a public trading market for our common stock, our common stock valuation methodologies utilize certain assumptions, including probability weighting of events, volatility, time to liquidation, a risk-free interest rate and an assumption for a discount for lack of marketability. Other considerations include:

- · the prices, rights, preferences and privileges of our redeemable convertible preferred stock relative to our common stock;
- our operating and financial performance, forecasts and capital resources;
- current business conditions;
- · our stage of commercialization;
- the likelihood of achieving a liquidity event for the shares of common stock issuable upon exercise of these stock options, such as an initial public
 offering, reverse merger SPAC transaction, or sale of Sema4, given prevailing market conditions;

- · the market performance of comparable publicly traded technology companies; and
- the U.S. and global economic and capital market conditions.

In valuing our common stock for periods prior to December 31, 2020, we utilized the "backsolve" method to derive our implied enterprise value from arm's length transactions in our redeemable convertible preferred securities assuming various timelines to liquidity via an initial public offering or sale. We then used an option-pricing model ("OPM") to estimate the fair value of our common stock based on the calculated enterprise value under each liquidity scenario. The OPM treats the rights of the holders of redeemable convertible preferred stock and common stock as equivalent to that of call options on any value of the enterprise above certain break points of value based upon the liquidation preferences of the holders of preferred stock, as well as their rights to participation and conversion. Based on the timing and nature of an assumed liquidity event in each scenario, a discount for lack of marketability was applied to each scenario. We then probability weighted the value of each expected outcome to arrive at an estimate of fair value per share of common stock.

In valuing our common stock prior to the closing of the Business Combination, including as of December 31, 2020, we estimated the fair value of the enterprise using the probability-weighted expected return method ("PWERM"), which is a highly complex and subjective valuation methodology. Under a PWERM, the fair market value of the common stock is estimated based upon the discounted expected future values for the enterprise assuming various future outcomes. Based on the timing and nature of an assumed liquidity event in each scenario, a discount for lack of marketability was applied to each scenario. We then probability-weighted the value of each expected outcome to arrive at an estimate of fair value per share of common stock.

For valuations after the closing of the Business Combination, our board of directors determines the fair value of each share of common stock based on the closing price of our common stock on the date of grant or other relevant determination date, as reported on Nasdaq.

JOBS Act Accounting Election

We are an "emerging growth company" within the meaning of the JOBS Act. The JOBS Act allows an emerging growth company to delay the adoption of new or revised accounting standards that have different effective dates for public and private companies until those standards apply to private companies. We have elected to use this extended transition period and, as a result, our financial statements may not be comparable to companies that comply with public company effective dates. We also intend to rely on other exemptions provided by the JOBS Act, including not being required to comply with the auditor attestation requirements of Section 404(b) of the Sarbanes-Oxley Act.

We will remain an emerging growth company until the earliest of (1) September 1, 2025, (2) the last day of the fiscal year in which we have total annual gross revenue of at least \$1.07 billion, (3) the last day of the fiscal year in which we are deemed to be a "large accelerated filer" as defined in Rule 12b-2 under the Exchange Act, which would occur if the market value of our common stock held by non-affiliates exceeded \$700.0 million as of the last business day of the second fiscal quarter of such year or (4) the date on which we have issued more than \$1.0 billion in non-convertible debt securities during the prior three-year period.

Recent Accounting Pronouncements

Additional information on recent accounting pronouncements can be found in Sema4's audited financial statements in Note 2, "Summary of Significant Accounting Policies" and Sema4's unaudited condensed financial statements in Note 2, "Summary of Significant Accounting Policies."

Internal Controls

In connection with the preparation of Sema4's audited financial statements included elsewhere in this prospectus, we identified material weaknesses in our internal control over financial reporting, which existed as of December 31, 2020. Our management is actively engaged and committed to taking the steps necessary to remediate

the control deficiencies that constituted the material weaknesses. During 2021, we made the following enhancements to our control environment:

- In May 2021, we hired a permanent Chief Accounting Officer with substantial technical accounting and internal controls experience, whose
 responsibilities include working with our Chief Financial Officer, existing employees and third-party consultants to improve the design,
 implementation, execution and supervision of our internal control over financial reporting.
- We added accounting and information technology employees with appropriate experience, certification, education and training to the organization to strengthen our internal accounting team, to provide oversight, structure and reporting lines, and to provide additional review over our disclosures. This includes hiring a Corporate Controller, whose primary responsibilities include working with third-party consultants to improve the design, implementation, execution, and supervision of our internal controls over financial reporting. We expect to continue to evaluate our needs for additional personnel. We expect to provide enhanced training to existing and new employees in order to enhance the level of communication and understanding of controls with key individuals that provide key information and perform key roles within our financial accounting and reporting group.
- We engaged outside consultants to assist in the design, implementation, and documentation of internal controls that address the relevant risks, are properly designed, and provide for appropriate evidence of performance of the internal controls; and
- We engaged outside consultants to assist us in the evaluation of a new Enterprise Resource Planning ("ERP") system in order to mitigate the internal control gaps and limitations that cannot be addressed by the current ERP around segregation of duties, and to enhance the information technology general controls environment.

Our remediation activities are continuing during 2021. In addition to the above actions, we expect to engage in additional activities, including, but not limited to:

- · Hiring more technical accounting resources to enhance our control environment;
- Until we have sufficient technical accounting resources, engaging external consultants to provide support and to assist us in our evaluation of more
 complex applications of GAAP, and to assist us with documenting and assessing our accounting policies and procedures;
- Implementing business process-level controls across all significant accounts and information technology general controls across all relevant domains.
 This will include providing training such that the preparers and control operators to establish clear expectations as it relates to the control design, execution and monitoring of such controls, including enhancements to the documentation to evidence the execution of the controls; and
- Implementing improvements to our ERP to enhance the accuracy of our financial records, enable the enforcement of systematic segregation of duties, and to improve our information technology general controls environment.

We continue to enhance corporate oversight over process-level controls and structures to ensure that there is appropriate assignment of authority, responsibility, and accountability to enable remediation of our material weaknesses. We believe that our remediation plan will be sufficient to remediate the identified material weaknesses and strengthen our internal control over financial reporting. As we continue to evaluate, and work to improve, our internal control over financial reporting, management may determine that additional measures to address control deficiencies or modifications to the remediation plan are necessary.

BUSINESS

Overview

Who We Are

We are a patient-centered, health intelligence company with a mission to use artificial intelligence, or AI, and machine learning to enable personalized medicine for all. Our integrated information platform leverages longitudinal patient data, AI-driven predictive modeling, and genomics in combination with other molecular and high-dimensional data in our efforts both to deliver better outcomes for patients and to transform the practice of medicine, including how disease is diagnosed, treated, and prevented.

We have established one of the largest, most comprehensive, and fastest growing integrated health information platforms, collecting and leveraging genomic and clinical data in partnership with patients, healthcare providers and an extensive ecosystem of life science industry contributors. We are now generating and processing over 30 petabytes of data per month, growing by almost 1 petabyte per month, and maintains a database that includes more than 11.5 million de-identified clinical records, many with genomic profiles, integrated in a way that enables physicians to proactively diagnose and manage disease. This expanding database is a virtuous cycle of data: new data enables us to further develop, train, and refine predictive models and drive differentiated insights, which models and insights we deploy through our next generation diagnostic and research solutions and portals to support clinicians and researchers and engage patients, all of which interactions generate more data to continue the cycle.

Today, by providing differentiated insights through diagnostic testing solutions to physicians and patients across the United States in areas such as reproductive health, or Women's Health, population health, and oncology, or Oncology, we are reimbursed by payors, providers, and patients for providing these services. In collaboration with pharmaceutical and biotech, or Biopharma, companies, we receive payments for a broad range of services relating to the aggregated data on our information platform, such as consenting and recontacting patients, the development and implementation of a wide range of predictive models, including drug discovery programs, conducting real-world evidence studies, and aiding in the identification and recruitment of patients into clinical trials. Over the next several years, we expect to focus on expanding the revenue from our health system and Biopharma partners, while also working to continue to grow the volumes and revenues from our diagnostics test solutions.

While there are many companies seeking to harness the potential of "big data" to address the challenges within the healthcare ecosystem, we believe that few have the scale of our company combined with our revenue-generating diagnostics testing business and origins as a company conceived and nurtured within a world-class health system. These characteristics have enabled us to build a significant and highly differentiated technological and informational asset positioned to drive precision medicine solutions into the standard of care in an unparalleled way.

Our World Class Team and Unique Origins

Sema4 was founded by Eric Schadt, Ph.D. as part of Icahn School of Medicine at Mount Sinai's Department of Genetics and Genomic Sciences and the Icahn Institute for Genomics and Multiscale Biology. Dr. Schadt is a world-renowned expert on constructing predictive models of disease that link molecular data to physiology to enable clinical medicine. He has published more than 450 peer-reviewed papers in leading scientific journals, with a public citation or hindex of 128, and contributed to discoveries relating to the genetic basis of common human diseases such as cancer, diabetes, obesity, and Alzheimer's disease. As of March 31, 2021, we have almost 1000 employees, including over 160 Ph.D.-level data scientists whose collective work has been recognized in areas such as data science, network modeling, multiscale biotechnology and genomics.

Sema4 was established out of the Mount Sinai Health System (which we refer to together with our related entities as Mount Sinai) and commenced operations in June 2017 as a commercial entity that could effectively engage diverse patient populations and health care institutions at scale, founded on the idea that more information, deeper AI-driven learning, and increased engagement of patients and their providers will improve diagnosis, treatment, and prevention of disease. We have since established and deployed our comprehensive and integrated genomics and information platforms, and intend to continue to expand our scale and reach through organic and inorganic growth.

Our Purpose-Built, Flexible Platforms Address Immediate and Untapped Market Opportunities

With the rapid decline in next generation sequencing costs and the increased accessibility of large scale, commoditized computer hardware and storage information products through the cloud, we expect that our core information platform, Centrellis®, supported and fueled by our genomic analysis platform, TraversaTM, will be well-positioned to drive improved clinical outcomes competitively in the healthcare market.

Our information platform was built to be highly adaptable to different data types and different diseases and health conditions, with the aim to deliver precision medicine and improved health outcomes across a patient's entire life cycle. Accordingly, we expect our platforms to capitalize on a wide range of growth opportunities, and we intend to apply capital over time to make targeted acquisitions to accelerate our ability to reach a wider range of patients, integrate more deeply into clinical workflows, and address the significant, unaddressed white space for health intelligence in the healthcare ecosystem. These include a broad range of therapeutic segments, beyond our existing focus of our diagnostics solutions for Women's Health, and Oncology, where we believe there is an immediate need for precision medicine solutions such as in autoimmune disorders, which are expected to represent an approximately \$149.4 billion global market by 2025, rare diseases, which are expected to represent an approximately \$106.1 billion global market in 2023.

By combining our data-driven approach and our deep understanding of health system workflows, we have developed a holistic health information platform, Centrellis, to transform the disease diagnosis and treatment paradigm for the entire healthcare ecosystem: patients, physicians, health systems, payers, and Biopharma companies. The Centrellis platform is comprised of a data management backend that supports a wide array of databases, data warehouses, and knowledge bases, a data analytics layer to mine the data and construct predictive models that provide differentiated insights, and a series of application programmable interfaces to enable tool and software applications to access the data and models. Centrellis serves as the underlying foundation of our precision medicine solution and comprises a sophisticated data management and analytics engine. In the data management layer, our platform processes and stores data in a highly structured and accessible way, which is then analyzed by an advanced insights engine in the analytics layer that deploys state-of-the-art AI, probabilistic causal reasoning and machine learning approaches, and complementary analytics capabilities to deliver increasingly accurate insights to patients, providers, and researchers across a broad range of applications. Centrellis is designed to transform treatment decisions across multiple therapeutic areas by engaging large-scale, high-dimensional data and querying the predictive models of disease and wellness using patient-specific data to derive highly personalized, clinically actionable insights. Centrellis supports various applications, such as delivery of personalized and actionable treatment insights into clinical reports, clinical trial matching, real-world evidence trials and clinical decision support, through an advanced programmable interface, or API, layer.

We have also developed a comprehensive genomic platform, TraversaTM, to serve as the backbone of our screening and diagnostic products and with the capacity to deliver molecular data that can be re-accessed, analyzed and delivered throughout a patient's lifetime. Traversa is designed to simultaneously assay at clinical-grade coverage all known medically relevant regions of the genome, as well as survey the entirety of the human genome, to surface signals that might be medically relevant to a patient in the future. Traversa is integrated with the Centrellis information platform and is designed to adapt at the rate of learning and to match the significant pace of information and knowledge growth, especially in the genomics arena, to allow us to provide actionable, accurate, and cutting-edge insights from complex and comprehensive data assets. We also expect this platform to enable us to scale our operations and to improve its margins in generating secondary insights for patients and providers.

We Are Building Richer Longitudinal Data Through Deeper Patient and Provider Engagement

We engage with patients, physicians, and health systems as partners and based on principles of transparency, choice, and consent. Driven by our direct engagement with patients and strategic relationships with multiple health systems, the database we have built contains extensive electronic medical record, or EMR, data, surpassing 11.5 million de-identified clinical records, many with genomic profiles, and has been designed to enable Centrellis to draw from our extensive data assets in a way that enables physicians to proactively diagnose and manage disease. We expect our current and targeted strategic relationships will provide us with access to additional active patient

cohorts and datasets to fuel this growth and perpetuate our iterative, data-driven business model, including by rapidly scaling our diagnostic test solutions franchise with physicians and patients through direct engagement with multiple health system partners.

In addition to providing a majority of our current revenue and generating hundreds of thousands of genomic profiles, our established diagnostic test solutions also allow us to engage patients directly as partners, both as part of their clinical care and also acting on their behalf, with appropriate informed consent, to acquire, organize and manage any health data generated on them through the course of their care, all of which contributes to the further development of our genomics and information platforms. Further, we have demonstrated patients' willingness to partner with us. For example, over 80% of diagnostics solutions patients and users who engaged with our patient portal have given us their informed consent to retrieve, organize, and manage their health records and data, and to facilitate their access to and sharing of those data, as well as additional data that patients share and create through their use of our expanding suite of digital experience products.

Our Established Diagnostic Solutions Are Scaling Rapidly

We currently operate a mature diagnostic business that generates revenue and engages with patients through our varied and sophisticated diagnostics and screening offerings. Our population health offerings are designed to run through our Traversa platform and give us the ability to inform on thousands of diseases and conditions, from rare disorders, to drug safety, to risk profiles across a broad range of common human diseases of significant public health concern. We have developed an array of diagnostic and screening solutions to inform across a patient's life course, ranging from reproductive health and newborn screening to drug safety and oncology. Our Women's Health solutions sequence and analyze an industry-leading number of genes, and use Centrellis' interpretive information tools to translate raw sequencing and clinical data efficiently and accurately into digestible clinical reports that guide decision making by patients and physicians. Our Oncology diagnostic solutions feature both somatic tumor profiling and hereditary cancer screenings, along with a foundational whole exome and whole transcriptome sequencing approach.

Centrellis enables the complex interpretations of these data to identify key driver genes, activated and suppressed pathways, molecular subtypes, therapeutic interventions and matching to clinical trials. We believe our array of diverse diagnostic solutions, built on our differentiated grounding in scientific excellence and coupled with an end-to-end full-service model, have led to our rapidly growing customer bases in Women's Health and Oncology and increasing traction with health systems, as well as deep, trusting engagement with patients.

We Are Embedding Our Solutions Through Innovative, Deep Relationships

Our origins in and subsequent work with Mount Sinai have provided us with an extensive understanding of health systems, patient, and physician workflows as well as the complex interconnectivities that define patient-physician relationships. We have used this knowledge to develop our integrated health system collaboration model, where we have the capabilities necessary to integrate across health system workflows as a holistic health intelligence partner in order to deploy our comprehensive genomics and information platforms, our data curation and harmonization capabilities, and our patient and provider engagement software applications. Our solutions support our health system partners across their operations, helping them integrate a new standard of care and creating a deep relationship with us that helps both partners realize the potential of the relationship. In addition to creating diagnostic revenue and a clinical relationship with our health system partners and their patients, this engagement provides us with access to insights informed by analyzed and processed EMRs from the health system, as well as the expansive molecular information we generate from our genomics platform as the health system's precision medicine partner. Learning from our long-standing relationship with Mount Sinai, we have refined a health system engagement model that is both operational and economic and designed to maximize both our and our health system partner's value from the relationship. We are currently activating and expanding our relationships with several leading health systems that will expand our access to data and that we expect will position our platforms for rapid growth and broad commercial opportunities, and have recently signed contracts with three new health systems in support of this strategy.

Centered on Centrellis and Traversa, we have also established and continue to seek strategic relationships with Biopharma companies to enable innovation across the entire drug lifecycle, from next generation drug discovery and development, to post-market efficacy surveillance, to informing on bioavailability, toxicity, tolerability, and other features critical to drug development. We have demonstrated the ability to integrate across all aspects of the next generation therapeutic and drug development process, including: biomarker identification as part of early stage drug discovery; identification, validation and prioritization of drug targets; clinical trial patient recruitment; real-world evidence studies; and identifying new markets and indications for existing assets. We believe our solutions allow our Biopharma partners to harness the potential of big data to enable the development of next generation precision medicine therapeutics.

The Current Opportunity for a Comprehensive Health Information and Precision Medicine Solution

"Big data" and analytics have been increasingly viewed as critical components of healthcare delivery in order to achieve the best patient outcomes at increasing efficiencies, including participation in clinical trials and research to deliver more accurate insights that augment clinical decision making. There has been an exponential increase in the availability of health-related data in recent years, driven by increasing digitization of medical records and the adoption of fast-moving technologies such as imaging and next generation sequencing capable of generating massive amounts of data on individual patients. However, we believe today's practice of medicine persists in classifying patients in more binary terms—healthy or sick, high risk or low risk—based on clinical assessments that are informative but ultimately overly simplistic, based on low-dimensional biomarkers, with many diagnoses still applying thresholds that are predefined using standardized epidemiological tables.

We are here to change that. Our goal is to enable the transformation of traditional practices in medicine, and we recognize that a different approach is required in order to fully harness the potential of big data. Accordingly, we seek to achieve this through a single, health intelligence solution that systematizes, harmonizes and curates data; standardizes genomic data across diseases and conditions; and integrates and applies probabilistic, causal reasoning to the healthcare data available today to improve patient clinical outcomes, to enable better physician diagnostics and decision making, and to optimize the life cycle of next generation therapeutics.

Centrellis: Our Health Information Platform Solution

By combining our data-driven approach and our deep understanding of health system workflows, we have developed a holistic health information platform, Centrellis, to transform the disease diagnosis and treatment paradigm for the entire healthcare ecosystem: patients, physicians, health systems, payers, and Biopharma companies. Centrellis is the culmination of our critical competencies and goals as a company:

- · technologies aimed at patient and provider engagement,
- the generation, aggregation and standardization of multi-dimensional data, and
- the modeling and generation of differentiated, domain-specific insights

Driven by the virtuous cycle and interconnection of our clinical diagnostics products, rich data assets, database engineering and data science applications, we continue to evolve and deploy our platform to facilitate a better understanding of disease and wellness and improve the standard of care through information driven knowledge and understanding.

Provider Engagement Technologies: Our Next Generation Tools

We have built comprehensive solutions in Centrellis that enable clinicians, researchers, and patients to engage with the relevant structured health data and to leverage our predictive models of disease and wellness and produce clinically actionable insights.

For clinicians and researchers, we have designed Centrellis's adaptive learning capabilities and tools to enable health systems and clinicians to manage their patient care, research, and health data in one place and to adapt to

rapidly changing scientific and clinical norms through an advanced programmable interface, or API, layer, including:

- Integration and on-boarding for health systems and practices that connects data from EMRs and disparate and varied databases,
- Searching and analyzing cohorts of patients, allowing an assessment of their patient populations and quality of care in real-time,
- Enabling clinical decision support and personalized and actionable treatment insights into clinical reports,
- Identifying patients who are candidates for certain clinical genomic analyses,
- Managing the clinical analysis ordered for their patients, from ordering, tracking, resulting, and reanalyzing based on new findings,
- Supporting clinical care and research by matching patients to available clinical trials based on highly personalized inclusion and exclusion metrics,
- · Informing on administrative decisions including as they relate to patient growth, total cost of care, and risk identification and mitigation.

Patient Engagement Technologies: Building Trust and Providing Value Through Clinical Partnership

We are dedicated to giving patients control of their own health data, and in support of this goal, we have designed patient access to Centrellis through our patient portal. Patients have demonstrated their trust by engaging with us and providing consent for us to collect and store their EMR data. After creating an account, patients are able to manage and track the clinical analysis that we are performing for them, including by being able to track, receive, and understand the initial insights into their clinical tests and data (including expanded carrier screening, or ECS, tests, and hereditary cancer tests), and to access our supporting clinical services, such as genetic counseling. Our patient portal also provides patients with the opportunity to partner with us to collect, manage, and regularly update their health data from their disparate healthcare providers, and help participants engage with their data through user-friendly applications, such as their genomic ancestry, personalized residual risk calculations, and other clinical and educational insights and information through important health events, like their pregnancy journey. For patients who have indicated their willingness to participate in research studies, our platform also provides integrated digital informed consenting and research program participation, through transparent, institutional review board approved processes, including targeted clinical trials offerings that provide relevant alternatives and access to the latest scientific trials.

Activating Data Through Generation, Curation and Engineering

In order to create an accessible and usable database that can support interpretation consistently across patient populations represented within the broad healthcare ecosystem, we designed Centrellis to aggregate large-scale and diverse data, abstract and structure informative unstructured data, and finally integrate the data into an accessible, web-scalable data warehouse that employs a common data model across a broad series of databases. Unstructured data derived from EMR and associated data are run through multiple pipelines leveraging machine learning-enabled natural language processing, augmented as needed by human annotators, to extract information and knowledge from those data and then structure and implement extensive quality assurance processes for the resulting annotations. Our multiscale, integrative strategy allows us to connect the processed EMR data with complex biological data from many sources, such as the genome, proteome, transcriptome, epigenome, and microbiome. Our standardization of the genomic and EMR data also allows us to pursue strategic relationships in the Biopharma industry, connecting Biopharma companies with clinicians and researchers to create computational models of disease, discover and validate targets and biomarkers, help design clinical trials and recruit patients, and support the collection of real-world data and evidence.

We not only collect data from external sources, but also generates clinical-grade genomic datasets in our clinical and research processes, which further fuels the richness of the data from which Centrellis draws. Our genomic

infrastructure enables us to convert bio-samples into datasets that span a range of genomic modalities, from DNA and RNA sequencing to epigenomic profiling, as well as different next generation sequencing technologies, including long-read, single molecule sequencing, low pass whole genome sequencing, and additional transformative technologies. Together with our diagnostic solutions, we use this multi-technology approach to ensure we generate data to comprehensively cover clinically actionable insights from and common variation in the genome, enabling the diagnosis of rare conditions and diseases or risk of passing on mutations to offspring that may cause severe disease, predicting risks of developing diseases such as cancer, predicting tolerability of various therapeutics, and creating broad genomic health profiles through the use of polygenic risk scores.

Our Advanced Domain-Specific AI Informatics for Insight Generation

Finally, we believe our informatics and analysis capabilities form a meaningful connection between the web of databases that we have created in our data warehouse and the utility of Centrellis to our users. Based on our informatics engine, Centrellis generates deep interpretive insights derived from large-scale, multi-omic data, taking advantage of our deeper data generation capabilities, and provides actionable treatment recommendations and innovative research findings. These insights are provided to patients, clinicians, researchers, and partners through the tools described above.

We are also continuing to develop these models and insights. Our researchers have developed a methodology to integrate diverse multi-omics data, including genomic, transcriptomic, and proteomic data, into causal probabilistic networks that help us to understand disease processes and identify key biomarkers through advanced network analysis. Our scientists have pioneered the use of DNA variation information to statistically infer causal relationships among any number of traits that have common genetic variance components. These approaches allow our teams to infer directed causal relationships among a pair of traits with shared genetic variance components, which then can be more systematically applied to traits to infer probabilistic causal network structures that can be mined for a broad range of discoveries. We also designed Centrellis with a high degree of flexibility to allow the platform to adjust to the rapidly changing and advancing health information landscape, highlighted by our Traversa genomic analysis platform, which we believe will lead to improved cost profiles over time as assays transition to whole genome sequencing at increasing resolutions.

As we collect and analyze additional datasets, our platform enables the virtuous cycle of data, and we are able to further refine our products and hone our capabilities to provide enhanced analysis of these data. More data and more insights generate further data and insights to support our models. We have constructed automated pipelines to continuously search the literature and research repositories to expand and distill our knowledge graphs, which are in turn queried to provide the interpretations and insights delivered to users of our systems. To support our interpretations and insights, we utilize internal experts as needed to help resolve conflicting findings to improve upon the actionable insights we deliver to physicians and patients.

Traversa: Our Genomics Platform for Optimizing Screening and Diagnostic Genomics Products and Population Health Initiatives

Traversa is our comprehensive genomics platform that has been designed to serve as the backbone of our genomic analysis products, and we are in the process of transitioning all of our genomic analyses to this platform. For products on the Traversa platform, we generate data on all known medically relevant regions of the genome at clinical-grade coverage, as well as low-pass whole genome data to span all common variation in the genome. We also ask for the patient's consent to biobank the corresponding samples for future clinical testing. While we report on the specific genes analyzed at the request of the clinician and patient, these baseline data and bio-banked samples allow us to respond to requests for additional analysis quickly by generating "in silico" interpretations on genomic data already existing on a patient and to surface signals that might be medically relevant across a patient's life course.

When deployed at across an entire health system, as we intend with our health system partners, Traversa will enable data driven collaborations and initiatives with health systems by establishing comprehensive clinical and genomic data profiles with patient consent. Particularly where integrated with EMR data, Traversa provides health systems with a unique opportunity to deploy population health management programs because of the robust data

from which those programs will draw and because of the efficiencies it will create across the health ecosystem by eliminating the repetition of the most time-consuming and costly aspects of genomic analysis, including sample collection and preparation and the generation of sequence data. Using Traversa, clinicians and health systems will have the freedom to advance patient care by allowing clinicians to establish clinical utility and drive adoption of new analysis products, which we believe will consequently expedite improved reimbursements against lower total production costs for those offerings.

We Collect and Manage Rich, Longitudinal Data Built from Diverse Sources

The health information database that we have created draws from many complementary sources, which we manage in accordance with patient consent and preferences, our regulatory obligations, and our transparent privacy policy and practices. These data are housed in a complex, cloud-based data lake that allows us to manage the various rights and obligations for each dataset at a granular level, including patient-specific requests with regard to their data.

This database includes data generated in the performance of our clinical services to patients and clinicians, including Women's Health and Oncology testing, as well as additional data that patients provide to us through their engagement with our patient portal and research programs. In addition, we participate in health information exchanges and public database programs, including through the National Institutes of Health. We also generate and collect data by collaborating with our research partners and provide sequencing and analysis services in connection with research programs. We further leverage the data rights provided by patients and secured through our strategic relationships, such as our oncology information partnership with VieCure that by the end of 2021 is expected to provide us with access to multiple cancer centers and data from all of their active cancer patients, with the number of newly diagnosed active cancer patients growing substantially each year. Additionally, we support health systems and other clinical service providers by applying our Centrellis tools to their clinical workflows and medical record databases, and we receive certain rights to work with anonymized datasets and to partner with the health systems in their ongoing clinical and research programs. We have provided such services extensively for Mount Sinai and are in the process of expanding this program with additional health systems, including NorthShore University Healthsystem, as discussed below. For more information regarding our data arrangements with Mount Sinai, see "Certain Relationships and Related Party Transactions—Related Party Transactions—Sema4".

Our Established Diagnostics Solutions

Our existing diagnostics solutions business centers around Women's Health and Oncology and our industry-leading diagnostic solutions are powered by Centrellis and delivered through a full-service model that efficiently integrates into provider workflows. Currently, we derive the majority of our revenue from these established diagnostic test solutions.

Our Women's Health Solutions

Our deep foundation in Women's Health began before Sema4's formation within Mount Sinai, where our lab—then called the "Mount Sinai Genetics Testing Lab"—pursued the goal of providing compassionate patient care to a highly diverse population while advancing science through education, research, and outreach. We pioneered accurate and precise pre-conception genetic screening, and we have continued to build upon that work, expanding its focus into a multi-generational and pan-ethnic view of the health of individual women and their families. We continue our focused effort to accelerate the expansion of genomic diagnostic solutions, secondary insights, platform solutions and enriching health system value to drive continued growth in our Women's Health business, including by leveraging our state-of-the-art genomic infrastructure and Centrellis platform.

Carrier Screening: Deriving population-health insights from genomic data to differentiate our industry-leading tests

Our Expanded Carrier Screen, or ECS, test is one of the most comprehensive and accurate carrier screening tests available in the market, covering up to 502 genes. We provide a comprehensive solution to physician practices to enable them not only to deliver sophisticated differential insights and care management guidance in support of the clinician's care plan for the patient, but to also do so with minimal impact on the practice's operation, helping to

ensure physician offices are not overwhelmed by the amount of information and follow up that can be necessitated by carrier screening.

Our ECS solution uses proprietary technology to identify a patient's molecular ancestry on a genome-wide level for personalized residual risk assessments by analyzing patient-specific genealogical information that is critical to better understand a patient's chance for passing on inherited disease. This technology has been designed to increase the accuracy of the residual risks reported to patients, in comparison to competing products that determine residual risk based on using self-reported ancestry information that does not reflect the population groups represented in the patient's genome. Our solution also provides patients with personalized residual risk education, along with the option to view their molecular ancestry report in the Sema4 patient portal.

Our Non-invasive Prenatal Select Solutions

Our Noninvasive Prenatal Select is a comprehensive noninvasive prenatal test, or NIPT, that screens for autosomal and sex chromosome aneuploidies. Our advanced sequencing technology has been designed to provide reliable results down to approximately 2% fetal fraction, the amount of fetal cell-free DNA in the maternal blood sample, and has been designed to have a low failure rate, which helps reduce the need for redraws, limits unnecessary invasive procedures, and improves time to results.

Expansive development in prenatal screening allows our to advance scientific efforts to deliver Genome Wide Screening and includes the ability to detect additional whole chromosome aneuploidies and copy number variations, or CNVs. We believe an updated bioinformatics pipeline will help to further reduce false positives. We expect to release new versions of our code in 2021, which we believe will help improve the positive predictive value for CNV calling through fetal fraction enrichment and CNV normalization through nucleosome positioning and fragment characteristics

We are developing these future test versions to enable the detection of single gene disorders, such as cystic fibrosis and sickle cell disease. This testing may be used for at risk couples to screen a pregnancy for genomic analysis of a specific disorder or as a general screening tool with a panel of diseases. We believe these code enhancements will also facilitate validation of polyploidy, fetal zygosity and molar pregnancy detection, all of which are important aspects of screening pregnancies for chromosomal abnormalities and are not widely available through non-invasive testing.

Our Natalis Newborn Screening Solutions

Our Natalis test is an extension of our screening portfolio allowing for detection of heritable conditions from pre-conception, pregnancy and childhood. Newborn Screening, or NBS, detects heritable conditions that are amenable to medical management in newborns and young children. Natalis screens for 193 conditions where knowledge of the condition by the pediatrician may result in prescribing treatment with medications, dietary modifications, or other therapies to improve the baby's health. All positives are confirmed using biochemical and molecular analysis. Natalis screens for up to five times as many conditions as the newborn screening programs run by certain state governments.

Our Signal Precision Oncology Solutions

We believe that our Centrellis platform, combined with our comprehensive whole exome and whole transcriptome tumor profiling and hereditary cancer genomic testing solutions, will make a meaningful difference in transforming cancer care. We have developed the "Sema4 Signal®" portfolio of solutions to be leveraged individually or as part of a holistic solution for precision oncology care. The Sema4 Signal portfolio features the integration of our germline, somatic, and informatics tools, along with customized services to meet patient needs and to help drive better personalized care. The Sema4 Signal products include our oncology genomic test solutions, our molecular and clinical data curation and annotation capabilities to inform on the genomic information in the context of the patient's previous and current medical records, and various software applications to enable engagement of these data and complex results to facilitate clinical decisions or research discoveries.

The Sema4 Signal Hereditary Cancer Solution

Our Sema4 Signal Hereditary Cancer solution determines if a patient carries an inherited genetic change that increases the risk of cancer or informs on cancer treatment. It is used to inform personalized medical management decisions to aid early detection and prevention of cancer, as well as to determine the most appropriate treatment approaches if cancer occurs, and strategies to reduce risk of additional cancers.

We offer one of the most comprehensive set of panels on the U.S. market, and deliver this solution supported by the Traversa platform to enable us to adapt our panels as new discoveries on clinically actionable variants are made, enabling our genomic testing solutions to adapt at the rate of learning. Our solution includes tools to enable testing at the point of care or outside the office, including digital ordering via an EMR portal, video-based education, saliva procurement in the patient's home, proactive billing investigation, pre-and post-test genetic counselling and family outreach to enable cascade testing.

Our Hereditary Cancer Solution is a unique product in our portfolio in that it is sold in connection with our Oncology and Women's Health solutions. For affected cancer patients, integrating hereditary cancer with our Sema4 Signal Whole Exome and Transcriptome and our informatics offerings creates a holistic approach that can help inform better personalized clinical care decisions. For unaffected patients, our Sema4 Signal Hereditary Cancer solution is incorporated into both our Women's Health and Population Health products and services.

Our Signal Whole Exome and Transcriptome Solution

We believe our Sema4 Signal Whole Exome and Transcriptome solution is one of the most comprehensive molecular profiling solutions from a commercial entity to receive New York State approval. Our profiling platform integrates tumor-normal matched whole exome sequencing, or WES, with whole transcriptome sequencing, or WTS, to deliver clinically actionable information about somatic and germline alterations in solid tumors and hematologic malignancies. This solution provides for access to a holistic view of a patient's genome and insights into novel fusions, splice variants, and molecular pathways. It also provides for germline findings for cancer and non-cancer genes, as per American College of Medical Genetics guidelines, with relevance to comorbidities, such as familial hypercholesterolemia, and certain drug interactions.

We deliver the WES/WTS solution using a number of proprietary tools housed in Centrellis, including our oncology knowledge-base, which contains comprehensive structured data and learnings on clinically relevant variants, including curated maps that link relevant clinical trials to variants that serve as eligibility biomarkers for the trials, as annotated by Ph.D. oncology experts. Our variant interpretation station for oncology automates clinical reporting by managing the variant curation process and recommending suitable therapies. This AI-driven genomic platform is updated regularly with recent medical literature and prioritizes clinically-significant variants, enabling providers to quickly review and leverage actionable insights.

Regulatory Strategy and Managed Care

We have developed and are advancing our strategy to drive increased reimbursement and higher average selling prices, or ASPs, for our Sema4 Signal Oncology solutions. As part of this strategy, we are expanding our presence in select markets covered by the Molecular Diagnostic Services Program, or MolDx Program, by Palmetto GBA. We plan to submit our WES/WTS and other tumor profiling solutions and take advantage of the established coverage and reimbursement for Comprehensive Genomic Profiling.

We also intend to move all Oncology solutions onto the Traversa platform, which we expect will substantially reduce our production costs and streamline our analysis operations, and we are preparing to submit our WES/WTS for approval by the FDA by engaging in the studies needed to demonstrate clinical utility, which will, if approved, enable us to enhance our coverage and reimbursement with our commercial payors.

Sema4 Signal Informatics Solutions

To complement the genomics diagnostic solutions, the Sema4 Signal products leverage Centrellis's provider engagement technologies, described above, including to automatically abstract, annotate, and combine oncology

specific datasets, including clinical medical record data, imaging, and genomics. This clinical-genomic data set is provided back to health systems and providers and is powered by our digital applications to drive better personalized care for patients, improved system-wide quality of care and increased financial and research activity.

Our Covid-19 Testing Initiative

In response to the worldwide COVID-19 pandemic, in the first quarter of 2020, we rapidly leveraged our existing technologies and infrastructure capabilities, supplemented by a requisite set of technologies and services, to offer a comprehensive COVID-19 diagnostic testing service for our customers.

Within a highly concentrated and coordinated research, development and commercialization planning effort over a ten-week period, we developed a testing solution designed to assist the State of Connecticut and commercial customers looking to safely return their employees to the workplace. In particular, we developed a set of technologies and services that led to our implementing viral genomic sequencing and testing capabilities in our Branford lab, including securing a reliable supply chain for chemical reagents and testing kits. To complement the COVID-19 testing services, we built out an integrated, end-to-end software environment by adapting our Centrellis platform to the needs of COVID-19 patients, then expanded our existing customer services and support framework to accommodate the unique turn-around time and workflow needs of COVID-19 testing. Since April 2020, we have completed hundreds of thousands of COVID-19 tests across a wide range of patients in both public and commercial settings.

Our Solution for Health Systems and Providers

Our origins within a large academic medical center helped us establish our integrated health system collaboration model, where we seek to integrate our platform across numerous health system workflows to enable precision medicine solutions using Centrellis, from Women's Health, to Oncology, to patient wellness. Our provider and health system engagement offerings include patient and provider portals, facilitating scheduling of patient appointments, patient consenting, pre-test and post-test genetic counseling, results delivery and patient record management, among other tools and applications that are designed to allow physicians to better engage contextualized information around their patients to improve decision making.

Our Health System Engagement Model

We believe we have developed a compelling value proposition for our initial health system partners, with distinguishing features including our focus on serving local community populations, our track-record of delivering digital or technology-enabled standards of care, and our investment in precision medicine and adoption of genomic diagnostic solutions, with our desire to have predictive insights permeate all service lines and the general patient experience in their system. In addition to our deep relationship with Mount Sinai, we have contracted to deploy Centrellis in additional health systems, which we expect will expand our impact and reach.

We have refined a health system engagement model designed to maximize both our and our partner health system's value from the relationship. We balance clinical-grade and research-based projects in order to deliver value in an economically sustainable manner and establish health and economic performance metrics that form the basis of quarterly steering committee reviews with the program's executive sponsors. Our model focuses on:

- Embedding our genomic analyses as a standard of care for Women's Health, Oncology and/or specific diseases, which includes our full-service
 model including patient and provider education, patient engagement, genetic counseling and integration with the health systems' clinical workflow
 and EMR,
- Enhancing existing health system data sets by leveraging our data curation capabilities for both structured and unstructured data to identify clinical utility that can be used by health system providers, researchers and administration,
- Developing software applications to facilitate deeper engagement of the enhanced health system data we produce, such as reconstructing and visualizing patient health journeys, identifying patient cohorts based on

any number of filter criteria, and characterizing outcomes of patients in response to different treatments prescribed,

- Establishing population health programs where health system patients are invited to broad population genetic screening, and
- · Developing mutually beneficial research collaboration programs that leverage the strengths of our and our health system partners.

We seek to develop its products and services by focusing on partnering more intimately with a select number of health system partners with whom we can deeply integrate and deploy holistic solutions that drive improvements in both economics and outcomes for patient populations. We then intend to take our learnings and developments to deploy more widely, fundamentally re-imagining the care model with similarly committed partners.

Our Solutions Create Mutually Beneficially Value for Us and Our Health System Partners

We pursue strategic relationships with health systems that evaluate financial returns on a holistic basis. We evaluate success on a long-term basis and recognize that the primary aim of every health system is to provide superior patient care with improved health economics. As such, we intend to use the proceeds from the Business Combination, the PIPE Investment and related transactions to accelerate growth in our health system relationships by further investing in research-oriented projects, as well as data curation, platform integrations, and building standards of care to operationalize our testing programs. Starting with Mount Sinai and extending throughout our network, we intend to cross-validate and scale our technologies across health systems, as we seek to enable patients by leveraging data and tools across systems and patient populations in a network model so each partner can benefit from what is being learned across the healthcare ecosystem. One such health system where we have established a strategic relationship is NorthShore University Healthsystem, where we are integrating our data-driven precision medicine solutions, built on the Centrellis and Traversa platforms, into the standard of care to deliver personalized insights and improve clinical outcomes to eligible participants included in the 1.2 million patients served by NorthShore. We have also established a strategic relationship with AdventHealth, where we will focus on accelerating research through data structuring and curation of combined genomic and clinical data in AdventHealth's Orlando-area network, which includes more than 20 hospitals and emergency departments, and accounts for more than 2 million patient visits annually.

We Act as a Broker and Catalyst for Commercial Engagement Between Health System and Biopharma Companies

While health systems and Biopharma companies have an established ability to collaborate effectively and will continue to partner directly, we believe that our network in both segments of the healthcare ecosystem and ability to add value to these relationships through data engineering makes it well-positioned as a valued collaborator for both types of organizations. Biopharma collaborations are often not the focus for health systems, as they have high start-up costs to develop relationships that extend to patient care. We can support our health system partners by working more collaboratively with the health systems to understand their capabilities and how those capabilities are complemented by our enhancement of a health systems' data assets and clinical-genomic data generation capabilities, and by facilitating solutions that can be provided jointly to Biopharma companies. For example, we have built tools that comply with applicable security requirements and regulations and that leverage Centrellis datasets to help Biopharma companies understand clinical trial eligible patient population characteristics and help launch trial sites or design trial protocols more precisely. In turn, health systems can enroll more of their patients into clinical trials and research, bringing their patient population innovative treatments.

Our Biopharma Solutions Engage and Enable Our Partners

We have established and continue to seek strategic relationships with Biopharma companies to enable drug discovery, development, and commercialization. We have demonstrated the ability to integrate across the pharmaceutical life cycle as a result of the unique data and patient and provider engagements developed in our health system relationships and information-driven diagnostics solutions, combined with our powerful analytics capabilities and software solutions.

The Biopharma industry has become increasingly competitive as it moves toward the more precise targeting of patients in crowded disease segments and we believe this trend positions us as a key partner for Biopharma companies to build a competitive advantage by unlocking the power of big data and enabling next generation precision medicine.

We Strive for Interconnected Strategic Relationships

We serve our Biopharma customers through a unique combination of clinical testing services, clinical and research study design and execution, and advanced data and analytics capabilities.

Our competitive advantage in this space comes from leveraging comprehensive data generated via testing, integrating these deep molecular profiles with clinical patient information, and representing this comprehensive patient data in the Centrellis platform. This enables us to create direct and real time integration of clinical and genetic data with providers connected to drug discovery research, real world evidence studies, and other therapy development opportunities. We are also able to utilize our solutions and unique data assets to enroll patients into clinical trials and to connect Biopharma partners to patient populations matching eligibility criteria for their trials, to facilitate patients receiving novel therapies still under development, and to perform broad genomic and transcriptomic sequencing on health system partner sample banks in collaboration with Biopharma partners.

In our engagement with Biopharma customers, we are focused on a range of disease conditions, including oncology, autoimmune and inflammatory disorders, and rare diseases. Our disease-agnostic approach provides us with the flexibility to support our Biopharma partners across varied therapeutic areas. We continue to work with our Biopharma partners to identify their specific needs and broaden the scope of our disease coverage accordingly.

We believe that, because of our core capabilities and differentiated approach, we are well-positioned to support next-generation drug discovery, development, and commercialization. We further believe our ability to generate deep, clinical-grade multi-omic datasets renders us a valuable genomic testing solution provider for precision medicine Biopharma products. Through direct engagement of providers and patients, we assist Biopharma partners in a patient-centric approach to research and clinical development. By obtaining and curating high-dimensional data in our Centrellis platform, we can deliver novel insights that help to de-risk the development of next generation therapeutics, provide for pharmacologic proof of concept via the integration of genomic and clinical data support, reduce development costs, enhance the patient experience, and increase speed to market. We believe the integration of our solutions forms a holistic and highly differentiated value proposition to Biopharma customers and makes Sema4 a key partner to support our customers across the Biopharma value chain.

MANAGEMENT

The following table provides information, including ages as of the Closing Date, regarding our executive officers and directors:

Name	Age	Position
Executive Officers:		
Eric Schadt, Ph.D.	56	Chief Executive Officer and Director
Isaac Ro	43	Chief Financial Officer
James Coffin, Ph.D.	57	President and Chief Operating Officer
Daniel Clark, J.D.	41	Secretary and General Counsel
Anthony Prentice	48	Chief Product Officer
Kareem Saad	42	Chief Business Officer
Karen White	50	Chief People Officer
Non-Employee Directors:		
Joshua Ruch	71	Chairman of the Board and Director
Dennis Charney, M.D.	70	Director
Eli D. Casdin	48	Director
Emily Leproust, Ph.D.	48	Director
Jason Ryan	47	Director
Michael Pellini, M.D.	55	Director
Nat Turner	35	Director
Rachel Sherman, M.D., M.P.H., F.A.C.P.	63	Director

Executive Officers

Eric Schadt, Ph.D., has served as our Chief Executive Officer and as a member of our Board since July 2021. Prior to the Business Combination, he was the founder of Sema4 and had served as its Chief Executive Officer and as a member of its board of directors since June 2017. Dr. Schadt also serves as the Dean for Precision Medicine, and Mount Sinai Professor in Predictive Health and Computational Biology at the Icahn School of Medicine at Mount Sinai. Dr. Schadt was previously Founding Director of the Icahn Institute for Genomics and Multiscale Biology from September 2011 to June 2017, and Professor and Chair of the Department of Genetics and Genomic Sciences from August 2011 to June 2017. Dr. Schadt previously served as the Chief Scientific Officer at Pacific Biosciences of California, a biotechnology company, from May 2009 to July 2012, and as an Executive Director at Merck from July 2001 to May 2009. Dr. Schadt also currently serves on numerous boards of directors and scientific advisory boards for various private companies. Dr. Schadt earned his Ph.D. from the University of California, Los Angeles, his M.A. from the University of California, Davis, and his B.S. from California Polytechnic State University-San Luis Obispo. Dr. Schadt's expertise in computational biology, genomics, health systems operating experience, and knowledge of Sema4's business, years of senior management experience at a biotechnology company, and his service as a director of other biopharmaceutical companies provide him with the qualifications and skills to serve as a director on our Board.

Isaac Ro has served as our Chief Financial Officer since July 2021. Prior to the Business Combination, he had served as Sema4's Chief Financial Officer since February 2021. Mr. Ro previously served as the Chief Financial Officer of Thrive Earlier Detection Corp., a company focused on early detection cancer screening, from June 2019 to February 2021, through Thrive's sale to Exact Sciences Corporation in January 2021. From July 2010 to June 2019, Mr. Ro held roles of increasing responsibility at Goldman Sachs leading the U.S. Medical Technology team, including as Vice President. Prior to Goldman Sachs, Mr. Ro served as a Director at SVB Leerink from June 2004 to July 2010. Mr. Ro holds a B.A. in History, with honors, from Middlebury College.

James Coffin, Ph.D., has served as our President and Chief Operating Officer since July 2021. Prior to the Business Combination, he had served as Sema4's President and Chief Operating Officer since August 2017 and previously served as our Treasurer from January 2021 to March 2021. Dr. Coffin previously served as Chief Executive Officer, Chairman of the Board and President at Source Medical Solutions, a practice management and EMR solutions provider in the ambulatory surgical space, from December 2014 to June 2017. Prior to joining Source Medical Solutions, Dr. Coffin was Worldwide Vice President and General Manager at Dell, leading the Global Healthcare and Life Science business from January 2007 to April 2013. Prior to Dell, Dr. Coffin served as Worldwide Vice President of IBM's Healthcare and Life Sciences and its Life Sciences Solutions divisions between August 1999 and January 2007. Dr. Coffin earned his Ph.D. in Chemistry from the University of Arkansas and his B.S. in Chemistry from Louisiana Tech University. Dr. Coffin also completed a fellowship in Chemistry at the University of Cambridge.

Daniel Clark, J.D., has served as our General Counsel since July 2021. Prior to the Business Combination, he had served as Sema4's General Counsel since March 2016 and Secretary since March 2020. From 2015 to May 2017, Mr. Clark served as the Senior Contracts Manager — Genetics & Genomics at Mount Sinai Innovation Partners. Prior to joining Mount Sinai Innovation Partners, Mr. Clark practiced with two leading law firms in New York, clerked for Judge Frederic Block in the Eastern District of New York, and helped found a boutique startup law firm. Mr. Clark received his J.D. from the University of Michigan School of Law, cum laude, and his B.A. in Economics and Philosophy from Pomona College, cum laude. Mr. Clark also traveled as a Thomas J. Watson Fellow.

Anthony Prentice has served as our Chief Product Officer since July 2021. Prior to the Business Combination, he had served as Sema4's Chief Product Officer since September 2016. Prior to joining Sema4, Mr. Prentice served in various roles of increasing responsibility at American Express from May 2005 to September 2016, including as the Vice President of Mobile Payments from August 2011 to September 2016 and as the Vice President of Gold Card Product Management from April 2010 to October 2011. Prior to joining American Express, Mr. Prentice served as the Director of Category Management at Starbucks Corp from 2002 to 2005, and as an Engagement Manager at McKinsey & Company from 1998 to 2002. Mr. Prentice earned an M.B.A. from Columbia University and his B.S. in Mechanical Engineering from Cornell University.

Kareem Saad has served as our Chief Business Officer since July 2021. Prior to the Business Combination, he had served as Sema4's Chief Business Officer since January 2021. Mr. Saad also previously served as the Chief Strategy Officer at Sema4 from October 2017 to January 2020. Prior to rejoining Sema4, Mr. Saad served as the President and Chief Operating Officer of Apervita, Inc., a healthcare technology company, from February 2020 to January 2021. Mr. Saad previously served as the Chief Commercial Officer and EVP of Strategy and Business Development of SourceMed, a healthcare technology company, between January 2015 and June 2017. Prior to joining SourceMed, Mr. Saad served as a National Sales Director and Manager in Dell's Healthcare and Life Sciences division between June 2009 and July 2013, and as a Business Segment Executive in IBM's Healthcare Life Sciences group from November 2001 to February 2006. Mr. Saad received an M.B.A. with a concentration in Economics and Finance from the University of Chicago and a B.S. in Biochemistry and Molecular Biology with a minor in Computer Science from the University of British Columbia.

Karen White has served as our Chief People Officer since July 2021. Prior to the Business Combination, she had served as Sema4's Chief People Officer since September 2020. Prior to joining Sema4, Ms. White was Vice President of Human Resources for Commercial Solutions at Syneos Health, Inc., a biopharmaceutical outsource services organization, from June 2016 to September 2020. Prior to the merger of inVentiv Health, Inc. and INC Research Holdings, Inc. in August 2017, and later rebranding to Syneos Health in January 2018, Ms. White served as Managing Director of Human Capital at inVentiv Health from June 2016 to August 2017. Prior to that, Ms. White served as Director of Talent Development at Memorial Sloan Kettering Cancer Center where she was employed from October 2011 to June 2016. Before October 2011, Ms. White held various positions at large global organizations such as Goldman Sachs Group Inc., International Business Machines Corp., and PricewaterhouseCoopers. Ms. White earned her M.B.A. from The George Washington University and her B.A. from Hobart and William Smith Colleges.

Non-Employee Directors

Joshua Ruch has served as the chairman of our Board since July 2021, and prior to the Business Combination, he had served as a member of Sema4's board of directors since November 2017. Mr. Ruch is also a managing partner and co-founder of Rho Capital Partners, an investment and venture capital management company focused on innovative technology, and has held such positions since the founding of Rho Capital Partners in 1981. Prior to co-founding Rho Capital Partners and Rho Ventures in 1981, Mr. Ruch worked as an investment banker at Salomon Brothers in New York, a multinational investment bank. In addition to Sema4, Mr. Ruch is also a trustee of the Mount Sinai Health System, Carnegie Hall and the National Humanities Center, and is a member of the Board of Governors of the Technion – Israel Institute of Technology and the Steering Committee of the Jacobs Institute. Joshua received an M.B.A. from the Harvard Business School and a B.S. in electrical engineering from the Technion – Israel Institute of Technology in Haifa, Israel. Mr. Ruch's broad experience as an investor and serving on the boards of emerging technology companies, including health care and biotechnology companies, qualifies him to serve on our Board.

Dennis Charney, M.D., has served as a member of our Board since July 2021, and prior to the Business Combination, he had served as a member of Sema4's board of directors since June 2017. Dr. Charney has served as the Anne and Joel Ehrenkranz Dean of the Icahn School of Medicine at Mount Sinai since January 2007, and as President for Academic Affairs for the Mount Sinai Health System since September 2013. From March 2006 to March 2007, Dr. Charney served as the Dean of the School and Executive Vice President for Academic Affairs of the Medical Center. Dr. Charney first joined the Icahn School of Medicine at Mount Sinai in 2004 as Dean of Research. Prior to joining the Icahn School of Medicine at Mount Sinai, Dr. Charney led the Mood and Anxiety Disorder Research Program and the Experimental Therapeutics and Pathophysiology Branch at the National Institute of Mental Health, and he served as Professor of Psychiatry with tenure at Yale University from January 1990 to January 2000. Dr. Charney received his M.D. from Penn State College of Medicine and his B.A. from Rutgers University. Dr. Charney completed a residency in clinical psychiatry at Yale University School of Medicine and a fellowship in biological psychiatry at Connecticut Mental Health Center. Dr. Charney's extensive medical and clinical experience in the biotechnology industry qualifies him to serve as a director on our Board.

Eli D. Casdin has served as a member of our Board since July 2020, and prior to the Business Combination, he had served as our Chief Executive Officer since July 2020. Mr. Casdin has served as a member of the board of directors and as the Chief Executive Officer of CMLS since July 2020. Mr. Casdin founded Casdin Capital, LLC, an investment firm focused on the life sciences and healthcare industry, in November 2011 and currently serves as its Chief Investment Officer. Mr. Casdin has served on the board of directors of Exact Sciences Corp., a molecular diagnostics company focused on early cancer detection, treatment and monitoring, since October 2017. Mr. Casdin holds an M.B.A. from Columbia Business School and a B.S. degree from Columbia University School of General Studies. Mr. Casdin's qualifications to serve on our Board include his extensive leadership experience as an executive officer of an investment firm, his extensive public and private company directorship experience in the life sciences and healthcare sectors, and his expertise in finance, capital markets, and the biotechnology industry.

Emily Leproust, Ph.D., has served as a member of our Board since September 2020. Dr. Leproust has been President and Chief Executive Officer of Twist Bioscience Corp., a biotechnology company, since co-founding Twist in 2013. Since October 2018, she has also served as Chair of the board of directors for Twist. Prior to co-founding Twist, Dr. Leproust served in various positions at Agilent Technologies, Inc., an analytical instrumentation development and manufacturing company, most recently as its Director, Applications and Chemistry R&D from February 2009 to April 2013. Dr. Leproust holds a Ph.D. in Organic Chemistry from the University of Houston and a M.Sc. in Industrial Chemistry from the Lyon School of Industrial Chemistry. Dr. Leproust's qualifications to serve on our Board include her extensive professional and educational experience in the life sciences industry.

Jason Ryan has served as a member of our Board since July 2021. Mr. Ryan served as Chief Operating and Financial Officer of Magenta Therapeutics, Inc., a biotechnology company, from January 2019 to October 2020. Prior to joining Magenta Therapeutics, Inc., Mr. Ryan previously served as Chief Financial Officer of Foundation Medicine, Inc., a molecular information company which became a wholly-owned subsidiary of Roche Holdings, Inc., from March 2015 to November 2018. Prior to his position as Chief Financial Officer of Foundation Medicine, Inc., Mr. Ryan served in various other finance roles at Foundation Medicine, including as Senior Vice President of

Finance. Prior to joining Foundation Medicine, Inc., Mr. Ryan led the finance and strategic planning functions of various other life science companies including Taligen Therapeutics, Inc., Codon Devices Inc. and Genomics Collaborative, Inc. Mr. Ryan joined the board of directors of Singular Genomics Systems, Inc. in April 2021, and previously served on the board of directors of ArcherDX, Inc. (which was acquired by Invitae Corporation) from April 2020 to October 2020. He began his career at Deloitte & Touche. Mr. Ryan holds an M.B.A. from Babson College and a B.S. in economics from Bates College, and earned a C.P.A. in Massachusetts. Mr. Ryan's extensive finance experience and his leadership experience in the life sciences and biopharmaceutical industries qualifies him to serve as a director on our Board.

Michael Pellini, M.D., has served as a member of our Board since July 2021, and prior to the Business Combination, he had served as a member of Sema4's board of directors since August 2019. Since December 2017, Dr. Pellini has served as a Managing Partner of Section 32, LLC, a technology and life sciences-based venture capital fund. Dr. Pellini held roles of increasing responsibility at Foundation Medicine, Inc., a molecular information company, which was acquired by F. Hoffmann-La Roche Ltd. in 2018, from May 2011 until its acquisition, including as Chairman of the board of directors, Chief Executive Officer and President. From April 2008 to April 2011, Dr. Pellini held the position of President and Chief Operating Officer at Clarient, Inc., a medical diagnostic services company, which was acquired by General Electric Healthcare Company in 2010, and also served on Clarient's board of directors from May 2007 to April 2009. Dr. Pellini also previously served as Vice President, Life Sciences at Safeguard Scientifics, Inc., a private equity and venture capital firm from March 2007 to April 2008. Dr. Pellini currently serves as a member of the board of directors of Adaptive Biotechnologies Corporation, the Personalized Medicine Coalition, the Mission Hospital Foundation and several private companies. Dr. Pellini earned an M.D. from Jefferson Medical College (now the Sidney Kimmel Medical College of Thomas Jefferson University), an M.B.A. from Drexel University, and a B.A. in Economics from Boston College. Dr. Pellini's broad experience in the technology, health care and life sciences industries as an investor, and his years of senior management experience at public biotechnology companies, provides him with the qualifications and skills to serve as a director on our Board.

Nat Turner has served as a member of our Board since September 2020. Mr. Turner has been the Co-Founder and Chief Executive Officer of Flatiron Health, Inc., a healthcare technology company focusing on accelerating oncology research and improving patient care since June 2012 and was acquired by Roche Holding AG in April 2018. Previously, Mr. Turner co-founded and served as Chief Executive Officer of Invite Media, Inc., an advertising technology company, from March 2007 until it was acquired by Google Inc. in June 2010, after which he remained at Google until June 2012. Mr. Turner received a B.S., cum laude, in Economics with concentrations in entrepreneurship and marketing from The Wharton School of the University of Pennsylvania. Mr. Turner's qualifications to serve on our Board include his significant experience in the life sciences industry, both as an executive and as an angel investor.

Rachel Sherman, M.D., M.P.H., F.A.C.P., has served as a member of our Board since July 2021, and prior to the Business Combination, she had served as a member of Sema4's board of directors since March 2020. Dr. Sherman is currently the President of Rachel Sherman Partners LLC, a drug development, regulatory, and policy consulting firm she founded in 2019, and a clinical lecturer at Harvard Pilgrim Health Care Institute. Dr. Sherman also currently serves as a member of the Board of Directors for Aptinyx Inc., a biopharmaceutical company. From May 2017 to January 2019, Dr. Sherman served as Principal Deputy Commissioner at the U.S. Food and Drug Administration (FDA), where she spent nearly 30 years in medical product development and regulation. Dr. Sherman also served in additional roles at the FDA including as deputy commissioner for Medical Products and Tobacco in the Office of the Commissioner and director of the Office of Medical Policy in the Center for Drug Evaluation and Research. Dr. Sherman earned an M.D. from Mount Sinai School of Medicine, an M.P.H from The School of Hygiene and Public Health at Johns Hopkins University and an A.B. in mathematics from Washington University (St. Louis). Dr. Sherman's medical and regulatory experience across a broad range of subject matters, including biosimilars, expedited drug development, prescription drug promotion, and active post-market surveillance provides her with the qualifications and skills to serve on our Board.

Classified Board of Directors

In accordance with the Amended and Restated Certificate of Incorporation, our Board is divided into three staggered classes of directors. At each annual meeting of stockholders, a class of directors will be subject to re-election for a three-year term. As a result, only one class of directors will be elected at each annual meeting of our stockholders, with the other classes continuing for the remainder of their respective three-year terms. The directors are divided among the three classes as follows:

- the Class I directors are Eli D. Casdin, Joshua Ruch and Michael Pellini and their terms will expire at the first annual meeting of stockholders held after the Closing;
- the Class II directors are Rachel Sherman, Eric Schadt, Nat Turner and Dennis Charney, and their terms will expire at the second annual meeting of stockholders held after the Closing; and
- the Class III directors are Emily Leproust and Jason Ryan and their terms will expire at the third annual meeting of stockholders held after the Closing.

Each director's term continues until the election and qualification of his or her successor, or his or her earlier death, resignation or removal. The Amended and Restated Certificate of Incorporation and Bylaws authorize only the Board to fill vacancies on the Board. Any increase or decrease in the number of directors will be distributed among the three classes so that, as nearly as possible, each class will consist of one-third of the directors. This classification of the Board may have the effect of delaying or preventing changes in control of us. See the section titled "Description of Securities— Certain Anti-Takeover Provisions of Delaware Law and Our Amended and Restated Certificate of Incorporation and Bylaws."

Director Independence

The rules of Nasdaq require that a majority of our Board be independent. An "independent director" is defined generally as a person other than an executive officer or employee of the issuer or any other individual having a relationship which, in the opinion of the issuer's board of directors, would interfere with the exercise of independent judgement in carrying out the responsibilities of a director. Each individual serving on our Board, other than Eric Schadt and Eli Casdin, qualifies as an independent director under Nasdaq listing standards.

Committees of the Board of Directors

Our Board has the authority to appoint committees to perform certain management and administration functions. Our Board has established an audit committee, a compensation committee, and a nominating and corporate governance committee. The composition and responsibilities of each committee are described below. Members serve on these committees until their resignation or until otherwise determined by the Board. The charters for each of these committees are available on our website at www.Sema4.com. Information contained on or accessible through our website is not a part of this prospectus, and the inclusion of such website address in this prospectus is an inactive textual reference only.

Audit Committee

Our audit committee is comprised of Dennis Charney, Emily Leproust, and Jason Ryan, with Mr. Ryan as the chairman of our audit committee. The Board has determined that the composition of our audit committee meets the requirements for independence under the current Nasdaq and SEC rules and regulations, and that each member of the audit committee is financially literate. In addition, the Board has determined that Jason Ryan is an "audit committee financial expert" as defined in Item 407(d)(5)(ii) of Regulation S-K promulgated under the Securities Act. This designation does not impose on him or her any duties, obligations or liabilities that are greater than are generally imposed on members of our audit committee and our board of directors. Our audit committee is directly responsible for, among other things:

- selecting and hiring the independent registered public accounting firm;
- the qualifications, independence and performance of our independent auditors;

- the preparation of the audit committee report to be included in our annual prospectus;
- our compliance with legal and regulatory requirements;
- · our accounting and financial reporting processes, including our financial statement audits and the integrity of our financial statements; and
- reviewing and approving related-person transactions.

Compensation Committee

Our compensation committee is comprised of Joshua Ruch, Rachel Sherman and Nat Turner, with Mr. Ruch as the chairman of our compensation committee. The Board has determined that each member of our compensation committee is a non-employee director, as defined by Rule 16b-3 promulgated under the Exchange Act, and meets the requirements for independence under the current Nasdaq listing standards and SEC rules and regulations. Our compensation committee is responsible for, among other things:

- evaluating, recommending, approving and reviewing executive officer compensation arrangements, plans, policies and programs;
- evaluating and recommending non-employee director compensation arrangements for determination by our board of directors;
- administering our cash-based and equity-based compensation plans; and
- overseeing our compliance with regulatory requirements associated with the compensation of directors, officers and employees.

Nominating and Corporate Governance Committee

Our nominating and governance committee is comprised of Joshua Ruch and Rachel Sherman, with Ms. Sherman as the chairwoman of our nominating and governance committee. The Board has determined that each member of our nominating and governance committee meets the requirements for independence under the current Nasdaq listing standards. Our nominating and governance committee is responsible for, among other things:

- · identifying, considering and recommending candidates for membership on our board of directors;
- · overseeing the process of evaluating the performance of our board of directors; and
- advising our board of directors on other corporate governance matters.

Code of Business Conduct and Ethics

We have adopted a Code of Business Conduct and Ethics that applies to all of our employees, officers and directors, including those officers responsible for financial reporting. The Code of Business Conduct and Ethics is available on our website at www.Sema4.com. Information contained on or accessible through such website is not a part of this prospectus, and the inclusion of the website address in this prospectus is an inactive textual reference only. We intend to disclose any amendments to the Code of Business Conduct and Ethics, or any waivers of its requirements, on its website to the extent required by the applicable rules and exchange requirements.

Compensation Committee Interlocks and Insider Participation

No member of our compensation committee has ever been an officer or employee of either company. None of our executive officers serve, or have served during the last year, as a member of the board of directors, compensation committee, or other board committee performing equivalent functions of any other entity that has one or more executive officers serving as one of our directors or on our compensation committee.

EXECUTIVE COMPENSATION

Executive Compensation Overview

The following tables and accompanying narrative disclosure set forth information about the compensation earned by Sema4's named executive officers for the year ended December 31, 2020, who were:

- Eric Schadt, Ph.D., Sema4's founder and Chief Executive Officer,
- · James Coffin, Ph.D., Sema4's President and Chief Operating Officer, and
- Joel Sendek, Sema4's former Chief Financial Officer.

The named executive officers' compensation primarily consists of (1) base salary, (2) annual discretionary cash bonus and (3) equity incentive awards, as well as perquisites described below. Sema4's named executive officers, during their employment with Sema4, are also eligible to participate in the same retirement and health and welfare benefit plans as its other full-time employees.

2020 Summary Compensation Table

The following table presents summary information regarding the total compensation for services rendered in all capacities that was awarded to and earned by Sema4's named executive officers during the year ended December 31, 2020.

Name and Principal Position	Salary (\$)	Bonus (\$) ⁽¹⁾	Option Awards (\$) ⁽²⁾	All Other Compensation (\$) ⁽³⁾	Total (\$)
Eric Schadt, Ph.D. Chief Executive Officer	643,846	540,000	1,770,474	13,756	2,968,076
James Coffin, Ph.D. President and Chief Operating Officer	524,615	363,000	623,189	11,169	1,521,974
Joel Sendek ⁽⁴⁾ Former Chief Financial Officer	405,385	_	1,669,257	8,742	2,083,383

⁽¹⁾ The amounts reported reflect the annual performance-based cash bonus amounts awarded to Sema4's named executive officers for their service in 2020. For additional information regarding the bonus compensation, see "—2020 Bonuses."

Narrative Disclosure to the Summary Compensation Table

2020 Bonuses

Under their employment agreements, Dr. Eric Schadt and Dr. James Coffin are entitled to receive annual bonuses based on the achievement of certain corporate performance objectives. For the 2020 bonuses, the target annual bonuses for Dr. Schadt and Dr. Coffin were equal to 100% and 60%, respectively of their respective annual base salaries. In March 2020, based on the achievement of corporate performance objectives, Sema4's board of directors determined to award bonuses for 2020 as set forth in the table above.

⁽²⁾ Amounts represent the aggregate grant date fair value of the stock options awarded to the named executive officer during 2020 in accordance with FASB Accounting Standards Codification Topic 718. The assumptions used in calculating the grant date fair value of the stock options reported in the Option Awards column are set forth in Note 9 of the notes to Sema4's audited financial statements included in this prospectus. Such grant-date fair market value does not take into account any estimated forfeitures related to service-based vesting conditions.

⁽³⁾ The amounts reported in this column represent our matching contributions made on behalf of our named executive officers under our 401(k) plan.

⁽⁴⁾ Mr. Sendek served as Sema4's Chief Financial Officer from September 2019 through January 2021.

Outstanding Equity Awards at 2020 Fiscal Year-End

The following table sets forth information concerning outstanding equity awards held by each of Sema4's named executive officers as of December 31, 2020.

		Option Awards ⁽¹⁾			
Name	Grant Date	Number of Securities Underlying Unexercised Options Exercisable (#)	Number of Securities Underlying Unexercised Options Unexercisable (#)	Option Exercise Price (\$)	Option Expiration Date
Eric Schadt, Ph.D	6/1/2017 ⁽²⁾	39,000	_	18.94	6/1/2027
	10/17/2019 ⁽³⁾	412,500	687,500	0.9485	10/17/2029
	2/18/2020 ⁽⁴⁾	583,310	1,283,294	0.9485	2/18/2030
James Coffin, Ph.D	8/31/2017 ⁽⁵⁾	14,222	3,278	18.94	8/31/2027
	2/18/2020 ⁽⁴⁾	205,320	451,706	0.9485	2/18/2030
Joel Sendek ⁽⁶⁾	2/18/2020 ⁽⁷⁾	549.965	1.209.926	0.9485	2/18/2030

⁽¹⁾ All of the outstanding equity awards described in this table were granted under our 2017 Plan.

(6) Mr. Sendek served as Sema4's Chief Financial Officer from September 2019 through January 2021.

In addition, it is anticipated that Dr. Schadt and Dr. Coffin will each receive a grant of Earnout RSUs when the Earnout RSUs are granted following the closing of the Business Combination.

Employment Agreements with Sema4's Named Executive Officers

Each of Sema4's current named executive officers has entered into an employment agreement with Sema4 that provides for at-will employment and includes each named executive officer's base salary, a discretionary incentive bonus opportunity and standard employee benefit plan participation. In connection with the Business Combination, we have entered into amended and restated employment agreements with each named executive officer to provide for an annual base salary of \$675,000 and a target annual bonus of 100% of annual base salary, in the case of Dr. Schadt, and an annual base salary of \$550,000 and a target annual bonus of 70% of annual base salary, in the case of Dr. Coffin. The amended and restated employment agreements also provide for the potential payments and benefits upon a termination of employment or in connection with a change in control as described below in "—Potential Payments upon Termination or Change in Control." In addition, Dr's Schadt's amended and restated employment agreement provides for Dr. Schadt to receive a grant of stock options following the closing of the Business Combination representing the opportunity to purchase a number of shares of Company Class A common stock outstanding as of immediately following the closing of the Business Combination, and Dr. Coffin's amended and restated employment agreement provides for Dr. Coffin to receive a grant of stock options following the closing of the Business Combination representing the

⁽²⁾ The shares underlying the stock option are fully vested.

⁽³⁾ The stock option vests at a rate of 6.25% of the shares of Sema4's Class B common stock underlying the stock option each quarter following the June 1, 2019 vesting commencement date. 100% of the shares underlying the stock option will vest upon a change in control transaction.

⁽⁴⁾ The stock option vests at a rate of 6.25% of the shares of Sema4's Class B common stock underlying the stock option each quarter following the August 2, 2019 vesting commencement date. 100% of the shares underlying the stock option will vest (a) in the event that the service provider's option is not assumed or replaced by the buyer in connection with a change of control transaction or (b) upon termination of the service provider's employment by Sema4 without cause or by the service provider for good reason in connection with a change in control transaction.

⁵⁾ The stock option vests at a rate of 6.25% of the shares of Sema4's Class B common stock underlying the stock option each standard calendar quarter following the August 31, 2017 vesting commencement date, beginning on December 30, 2017 and ending on August 30, 2021. 100% of the shares underlying the stock option will vest (a) in the event that the service provider's option is not assumed or replaced by the buyer in connection with a change of control transaction or (b) upon termination of the service provider's employment by Sema4 without cause or by the service provider for good reason in connection with a change in control transaction.

^{(7) 109,993} shares of Sema4's Class B common stock underlying the stock option vested on the Grant Date; thereafter the stock option vests at a rate of 6.25% of the shares of Sema4's Class B common stock underlying the stock option each quarter following the September 11, 2019 vesting commencement date, beginning on March 11, 2020 and ending on September 11, 2023. 100% of the shares underlying the stock option will vest (a) in the event that the service provider's option is not assumed or replaced by the buyer in connection with a change of control transaction or (b) upon termination of the service provider's employment by Sema4 without cause or by the service provider for good reason in connection with a change in control transaction.

opportunity to purchase a number of shares of Company Class A common stock equal to 0.4% of the total number of shares of Company Class A common stock outstanding as of immediately following the closing of the Business Combination. These awards will be granted under the Incentive Plan and will be subject to service-based vesting conditions.

In addition, in connection with the amended and restated employment agreements, each of Dr. Schadt and Dr. Coffin agreed that, during the nine-month period following the Closing, he will not: (i) sell, offer to sell, contract or agree to sell, hypothecate pledge, grant any option to purchase or otherwise dispose of or agree to dispose of, directly or indirectly, or establish or increase a put equivalent position or liquidate or decrease a call equivalent position within the meaning of Section 16 of the Exchange Act, with respect to any shares of Company Class A common stock, (ii) enter into any swap or other arrangement that transfers to another, in whole or in part, any of the economic consequences of ownership of any of such shares, in cash or otherwise, or (iii) publicly announce any intention to effect any transaction specified in clause (i) or (ii).

Potential Payments upon Termination or Change in Control

Pursuant to his amended and restated employment agreement, if Dr. Schadt is terminated without "cause" or resigns for "good reason" (as such terms will be defined in his amended and restated employment agreement) other than in connection with a change in control, he will be entitled to receive 24 months of base salary continuation and continued coverage under our group health benefit plans, subject to his execution of a release of claims. If instead such termination occurs within the period commencing three months prior to and ending 12 months following a change in control, he will be entitled to receive 24 months of base salary continuation, a lump sum payment equal to two times his target annual bonus, 24 months of continued coverage under our group health benefit plans, and accelerated vesting of his outstanding equity-based compensation awards, subject to his execution of a release of claims.

Pursuant to his amended and restated employment agreement, if Dr. Coffin is terminated without "cause" or resigns for "good reason" (as such terms will be defined in his amended and restated employment agreement) other than in connection with a change in control, he will be entitled to receive 12 months of base salary continuation and continued coverage under our group health benefit plans, subject to his execution of a release of claims. If instead such termination occurs within the 12-month period following a change in control, he will be entitled to receive 12 months of base salary continuation, a lump sum payment equal to one times his target annual bonus, 12 months of continued coverage under our group health benefit plans, and accelerated vesting of his outstanding equity-based compensation awards, subject to his execution of a release of claims.

As described above in "—Outstanding Equity Awards at 2020 Fiscal Year-End", a portion of the stock options held by Dr. Schadt would vest upon a change in control transaction. Our Board has determined that the Business Combination will not constitute a change in control transaction for purposes of our named executive officer's stock options.

Equity Compensation Plans and Other Benefit Plans

Incentive Plan

The Incentive Plan was adopted by our Board and approved by our stockholders in July 2021. The following summarizes the material terms of the Incentive Plan. This summary is qualified in its entirety to the full text of the Incentive Plan.

Shares reserved. We have initially reserved 28,824,070 shares of common stock for issuance pursuant to awards granted under our Incentive Plan. The number of shares reserved for issuance under our Incentive Plan will increase automatically on January 1 of each of 2022 through 2031 by the number of shares equal to 5% of the aggregate number of outstanding shares of all classes of our common stock as of the immediately preceding December 31, or a lesser number as may be determined by our board of directors.

In addition, the shares set forth below will again be available for issuance pursuant to awards granted under our Incentive Plan:

- shares subject to options or SARs granted under our Incentive Plan that cease to be subject to the option or SAR for any reason other than exercise of
 the option or SAR;
- shares subject to awards granted under our Incentive Plan that are subsequently forfeited or repurchased by us at the original issue price;
- · shares subject to awards granted under our Incentive Plan that otherwise terminate without such shares being issued;
- shares subject to awards granted under our Incentive Plan that are surrendered, cancelled, or exchanged for cash or a different award (or combination thereof);
- shares issuable upon the exercise of options or subject to other awards granted under the Sema4 Incentive Plan that cease to be subject to such options or other awards, by forfeiture or otherwise, after the effective date of the Incentive Plan;
- shares subject to awards granted under the Sema4 Incentive Plan that are forfeited or repurchased by us at the original price after the effective date of the Incentive Plan; and
- shares subject to awards under the Sema4 Incentive Plan or our Incentive Plan that are used to pay the exercise price of an option or withheld to satisfy the tax withholding obligations related to any award.

Administration. Our Incentive Plan will be administered by our compensation committee, or by our board of directors acting in place of our compensation committee. Subject to the terms and conditions of the Incentive Plan, the administrator will have the authority, among other things, to select the persons to whom awards may be granted, construe and interpret our Incentive Plan as well as to determine the terms of such awards and prescribe, amend and rescind the rules and regulations relating to the plan or any award granted thereunder. The Incentive Plan provides that the administrator may delegate its authority, including the authority to grant awards, to one or more executive officers to the extent permitted by applicable law, provided that awards granted to non-employee directors may only be determined by our board of directors.

Options. The Incentive Plan provides for the grant of both incentive stock options intended to qualify under Section 422 of the Code, and nonqualified stock options to purchase shares of our common stock at a stated exercise price. Incentive stock options may only be granted to employees, including officers and directors who are also employees. The exercise price of stock options granted under the Incentive Plan must be at least equal to the fair market value of our common stock on the date of grant. Incentive stock options granted to an individual who holds, directly or by attribution, more than ten percent of the total combined voting power of all classes of our capital stock must have an exercise price of at least 110% the fair market value of our common stock on the date of grant.

Options may vest based on service or achievement of performance conditions, as determined by the administrator. The administrator may provide for options to be exercised only as they vest or to be immediately exercisable, with any shares issued on exercise being subject to our right of repurchase that lapses as the shares vest. In the event of a participant's termination of service, an option is generally exercisable, to the extent vested, for a period of three months in the case of termination without cause (except due to a participant's death or disability), for a period of 12 months in the case of termination due to the participant's death or disability, or such longer or shorter period as the administrator may provide, and for a period of 24 months in the case of termination due to the participant's retirement (consistent with our policies regarding retirement). Stock options generally terminate upon a participant's termination of employment for cause. The maximum term of options granted under our Incentive Plan is ten years from the date of grant, except that the maximum permitted term of incentive stock options granted to an individual who holds, directly or by attribution, more than ten percent of the total combined voting power of all classes of our capital stock is five years from the date of grant.

Restricted stock awards. An RSA is an offer by us to grant or sell shares of our common stock subject to restrictions, which may lapse based on the satisfaction of service or achievement of performance conditions. The price, if any, of an RSA will be determined by the administrator. Unless otherwise determined by the administrator, vesting will cease on the date the participant no longer provides services to us and unvested shares may be forfeited to or repurchased by us.

Stock appreciation rights. A SAR provides for a payment, in cash or shares of our common stock (up to a specified maximum number of shares, if determined by the administrator), to the participant based upon the difference between the fair market value of our common stock on the date of exercise and a predetermined exercise price, multiplied by the number of shares. The exercise price of a SAR must be at least the fair market value of a share of our common stock on the date of grant. SARs may vest based on service or achievement of performance conditions. No SAR may have a term that is longer than ten years from the date of grant.

Restricted stock units. RSUs represent the right to receive the value of shares of our common stock at a specified date in the future and may be subject to vesting based on service or achievement of performance conditions. RSUs may be settled in cash, shares of our common stock or a combination of both as soon as practicable following vesting or on a later date subject to the terms of the Incentive Plan. No RSU may have a term that is longer than ten years from the date of grant.

Performance awards. Performance awards granted pursuant to the Incentive Plan may be in the form of a cash bonus, or an award of performance shares or performance units denominated in shares of our common stock that may be settled in cash, property or by issuance of those shares, subject to the satisfaction or achievement of specified performance conditions.

Stock bonus awards. A stock bonus award provides for payment in the form of cash, shares of our common stock or a combination thereof, based on the fair market value of shares subject to such award as determined by the administrator. The awards may be granted as consideration for services already rendered, or at the discretion of the administrator, may be subject to vesting restrictions based on continued service or performance conditions.

Dividend equivalents rights. Our board of directors or the compensation committee thereof may permit participants holding RSUs to receive dividend equivalent payments if and when dividends are paid to stockholders. In the discretion of our board or the compensation committee thereof, such dividend equivalent payments may be paid in cash or shares of our common stock and may either be paid at the same time as dividend payments are made to stockholders or delayed until shares are issued pursuant to the RSU grants and may be subject to the same vesting or performance requirements as the RSUs.

Change of control. Our Incentive Plan provides that, in the event of a corporate transaction that constitutes a change of control of our company under the terms of the plan, outstanding awards will be subject to the agreement evidencing the change of control, which need not treat all outstanding awards in an identical manner, and may include one or more of the following: (i) the continuation of the outstanding awards; (ii) the assumption of the outstanding awards by the surviving corporation or its parent; (iii) the substitution by the surviving corporation or its parent of new options or equity awards for the outstanding awards; (iv) the full or partial acceleration of exercisability or vesting or lapse of the company's right to repurchase or other terms of forfeiture and accelerated expiration of the award; or (v) the settlement of the full value of the outstanding awards (whether or not then vested or exercisable) in cash, cash equivalents, or securities of the successor entity with a fair market value equal to the required amount, as determined in accordance with the Incentive Plan, which payments may be deferred until the date or dates the award would have become exercisable or vested. Notwithstanding the foregoing, upon a change of control the vesting of all awards granted to our non-employee directors will accelerate and such awards will become exercisable, to the extent applicable, and vested in full immediately prior to the consummation of the change of control.

Adjustment. In the event of a change in the number of outstanding shares of our common stock without consideration by reason of a stock dividend, extraordinary dividend or distribution, spin-off, recapitalization, stock split, reverse stock split, subdivision, combination, consolidation reclassification, spin-off or similar change in our capital structure, proportional adjustments will be made to (i) the number and class of shares reserved for issuance

under our Incentive Plan; (ii) the exercise prices, number and class of shares subject to outstanding options or SARs; (iii) the number and class of shares subject to other outstanding awards; and (iv) the maximum number and class of shares that may be issued as incentive stock options, subject to any required action by the board or our stockholders and compliance with applicable laws.

Exchange, repricing and buyout of awards. The administrator may, without prior stockholder approval, (i) reduce the exercise price of outstanding options or SARs without the consent of any participant and (ii) pay cash or issue new awards in exchange for the surrender and cancellation of any, or all, outstanding awards, subject to the consent of any affected participant to the extent required by the terms of the Incentive Plan.

Director compensation limits. No non-employee director may receive awards under our Incentive Plan with a grant date value that when combined with cash compensation received for his or her service as a director, exceed \$750,000 in a calendar year, increased to \$1,000,000 in the calendar year of his or her initial services as a non-employee director.

Clawback; transferability. All awards will be subject to clawback or recoupment pursuant to any compensation clawback or recoupment policy adopted by our board of directors or the compensation committee thereof or required by law during the term of service of the participant, to the extent set forth in such policy or applicable agreement. Except in limited circumstances, awards granted under our Incentive Plan may generally not be transferred in any manner other than by will or by the laws of descent and distribution.

Sub-plans. Subject to the terms of the Incentive Plan, the plan administrator may establish a sub-plan under the Incentive Plan and/or modify the terms of awards granted to participants outside of the United States to comply with any laws or regulations applicable to any such jurisdiction.

Amendment and termination. Our board of directors or compensation committee may amend our Incentive Plan at any time, subject to stockholder approval as may be required. Our Incentive Plan will terminate ten years from the date our board of directors adopts the plan, unless it is terminated earlier by our board of directors. No termination or amendment of the Incentive Plan may materially adversely affect any then-outstanding award without the consent of the affected participant, except as is necessary to comply with applicable laws or as otherwise provided by the terms of the Incentive Plan.

2017 Stock Incentive Plan

Sema4's 2017 Plan was adopted by Sema4's board of directors and approved by its stockholders in April 2017. The 2017 Plan allows for the grant of stock options, stock appreciation rights, restricted stock, and restricted stock units, or RSUs, as described below. As of March 31, 2021, Sema4 had 122,000 shares of Sema4 Class A common stock and 11,710,025 shares of Sema4 Class B common stock reserved for issuance pursuant to awards under Sema4's 2017 Plan, of which 3,014,526 shares remained available for grant. Sema4 terminated the 2017 Plan upon the effective date of the Incentive Plan, which was July 21, 2021. Any awards granted under the 2017 Plan that remained outstanding as of such date continue to be subject to the terms of Sema4's 2017 Plan and applicable award agreements until such awards are exercised or amended or until they terminate or expire by their terms.

ESPP

The ESPP was adopted by our Board and approved by our stockholders in July 2021. The following summarizes the material terms of the ESPP. This summary is qualified in its entirety to the full text of the ESPP.

Shares Reserved. We have initially reserved 4,804,011 shares of our common stock equal for issuance and sale under the ESPP. The number of shares reserved for issuance and sale under our ESPP will increase automatically on January 1 of each of 2022 through 2031 by the number of shares equal to 1% of the aggregate number of outstanding shares of all classes of our common stock as of the immediately preceding December 31, or a lesser number as may be determined by our compensation committee, or by our board of directors acting in place of our compensation committee. Subject to stock splits, recapitalizations, or similar events, no more than the number of shares of our common stock equal to ten times the Initial ESPP Share Reserve may be issued over the term of the ESPP.

Administration. Our ESPP will be administered by our compensation committee, or by our board of directors acting in place of our compensation committee, subject to the terms and conditions of the ESPP. Among other things, the administrator will have the authority to determine eligibility for participation in the ESPP, designate separate offerings under the plan, and construe, interpret and apply the terms of the plan.

Eligibility. Employees eligible to participate in any offering pursuant to the ESPP generally include any employee that is employed by us or certain of our designated subsidiaries at the beginning of the offering period. However, the administrator may exclude employees who do not meet eligibility requirements that our compensation committee may choose to impose (within the limits permitted by the Code), are customarily employed for 20 hours or less per week, are customarily employed for five months or less in a calendar year or certain highly-compensated employees as determined in accordance with applicable tax laws. In addition, any employee who owns (or is deemed to own because of attribution rules) 5% or more of the total combined voting power or value of all classes of our capital stock, or the capital stock of one of our qualifying subsidiaries, or who will own such amount because of participation in the ESPP, will not be eligible to participate in the ESPP. The administrator may impose additional restrictions on eligibility from time to time.

Offering Periods; Enrollment. Under our ESPP, eligible employees will be offered the option to purchase shares of our common stock at a discount over a series of offering periods through accumulated payroll deductions over the period. The length of the offering periods under ESPP will be determined by the plan administrator and may be up to twenty-seven (27) months long. Each offering period may itself consist of one or more purchase periods. When the first offering period commences, our employees who meet the eligibility requirements for participation in that offering period will be eligible to enroll. For subsequent offering periods, new participants will be required to enroll in a timely manner. Once an employee is enrolled, participation will be automatic in subsequence offering periods. Participation in the ESPP ends automatically upon a participant's termination of employment. A participant may withdraw his or her participation from the ESPP at any time by submitting written notice to the company.

Offerings; Contributions; Limitations. The purchase price for shares purchased under the ESPP during any given purchase period will be 85% of the lesser of the fair market value of our common stock on (i) the first trading day of the applicable offering period or (ii) the last trading day of the purchase period. The ESPP permits participants to purchase shares of our common stock through payroll deductions of a percentage of their eligible compensation, which may not be less than one percent (1%) and may be up to a maximum of fifteen percent (15%) or such lower limit set by the plan administrator. No participant may purchase more than 2,500 shares of our common stock during any one purchase period, and may not subscribe for more than \$25,000 in fair market value of shares of our common stock (determined as of the date the offering period commences) in any calendar year in which the offering is in effect. The administrator in its discretion, may set a lower maximum number of shares which may be purchased.

Adjustments upon recapitalization. If the number of outstanding shares of our common stock is changed by stock dividend, recapitalization, stock split, reverse stock split, subdivision, combination, reclassification or similar change in our capital structure without consideration, then the administrator will proportionately adjust the number and class of common stock that is available under the ESPP, the purchase price and number of shares any participant has elected to purchase as well as the maximum number of shares which may be purchased by participants.

Corporate Transaction. If the post-combination company experiences a corporate transaction as determined under the terms of the ESPP, any offering period then in effect will be shortened and terminated on a final purchase date established by the administrator. The final purchase date will occur on or prior to the effective date of change of control transaction, and our ESPP will terminate on the closing of the change of control.

Transferability. Participants may generally not assign, transfer, pledge or otherwise dispose of payroll deductions credited to his or her account, or any rights with regard to an election to purchase shares pursuant to the ESPP other than by will or the laws of descent or distribution.

Amendment; termination. The board or compensation committee may amend, suspend or terminate the ESPP at any time without stockholder consent, except as to the extent such amendment would increase the number of shares available for issuance under the ESPP, change the class or designation of employees eligible for participation in the

plan or otherwise as required by law. If the ESPP is terminated, the administrator may elect to terminate all outstanding offering periods immediately, upon the next purchase date (which may be sooner than originally scheduled) or upon the last day of such offering period. If any offering period is terminated prior to its scheduled completion, all amounts credited to participants which have not been used to purchase shares will be returned to participants as soon as administratively practicable. Unless earlier terminated, the ESPP will terminated upon the earlier to occur of the issuance of all shares of common stock reserved for issuance under the ESPP, or the 10th anniversary of the effective date.

401(k) Plan

Sema4 sponsors a retirement savings plan established in January 1, 2018 that is intended to qualify for favorable tax treatment under Section 401(a) of the IRC, and contains a cash or deferred feature that is intended to meet the requirements of Section 401(k) of the IRC. Participants may make pre-tax and certain after-tax (Roth) salary deferral contributions to the plan from their eligible earnings up to the statutorily prescribed annual limit under the IRC. Participants who are 50 years of age or older may contribute additional amounts based on the statutory limits for catch-up contributions. Participant contributions are held in trust as required by law. No minimum benefit is provided under the plan. The plan provides for employer safe harbor matching contributions equal to 100% of an employee's salary deferrals that do not exceed 6% of the employee's compensation. An employee's interest in his or her deferrals and safe harbor matching contributions is 100% vested when contributed.

Other Benefits

Our named executive officers, while employed by us, are eligible to participate in our employee benefit plans on the same basis as our other employees, including our health and welfare plans. Sema4 generally does not provide our named executive officers with perquisites or other personal benefits. However, we do reimburse our named executive officers for their necessary and reasonable business and travel expenses incurred in connection with their services to Sema4.

Director Compensation

Dr. Schadt did not receive any compensation for his service as a director during fiscal year 2020, while also serving as Chief Executive Officer. Please see the section entitled "Executive Compensation—2020 Summary Compensation Table" for a summary of payments made to Dr. Schadt. Other than as described below, none of our non-employee directors received any fees or reimbursement of any expenses (other than customary expenses in connection with the attendance of meetings of our board of directors) or any equity or non-equity awards in the year ended December 31, 2020.

2020 Director Compensation Table

The following table presents the total compensation earned by each of our non-employee directors in the year ended December 31, 2020.

Name	Fees Earned or Paid in Cash(\$) ⁽¹⁾	Option Awards(\$) ⁽²⁾	All Other Compensation(\$) ⁽³⁾	Total(\$)
Joshua Ruch	_		_	_
Kenneth Davis, M.D	-	_	_	_
Rachel Sherman, M.D., M.P.H., F.A.C.P	88,736	278,209	_	366,945
R. Martin Chavez, Ph.D	<u> </u>	1,960,993	_	1,960,993
Dennis Charney, M.D	_	_	_	_
Michael Pellini, M.D	<u> </u>	_	_	_
Andrew ElBardissi	<u> </u>	_	_	_
Viral Patel	_	_	_	_
David Windreich	_	_	_	_

⁽¹⁾ The amounts reported in this column represent fees earned for service on Sema4's board of directors.

The following table sets forth the aggregate number of shares of Sema4's Class B common stock subject to outstanding options held by Sema4's non-employee directors as of December 31, 2020:

Name	Number of Shares Underlying Options Held as of December 31, 2020
Joshua Ruch	_
Kenneth Davis, M.D	-
Dennis Charney, M.D	<u> </u>
Michael Pellini, M.D	_
Rachel Sherman, M.D., M.P.H., F.A.C.P	293,315 ⁽¹⁾
R. Martin Chavez, Ph.D	832,199 ⁽²⁾
Andrew ElBardissi	_
Viral Patel	<u>—</u>
David Windreich	_

⁽¹⁾ The stock option vests at a rate of 6.25% of the shares of Sema4's Class B common stock underlying the stock option each quarter following the February 18, 2020 vesting commencement date. 100% of the shares underlying the stock option will vest in connection with a change in control transaction.

⁽²⁾ The amounts reported in this column represent the aggregate grant date fair value of the awards granted under Sema4's 2017 Equity Incentive Plan to Sema4's directors during the year ended December 31, 2020, as computed in accordance with FASB ASC Topic 718. The assumptions used in calculating the grant date fair value of the awards reported in the Option Awards column are set forth in Note 9 to Sema4's financial statements included elsewhere in this prospectus. Note that the amounts reported in this column reflect the aggregate accounting cost for these awards, and do not necessarily correspond to the actual economic value that may be received by the director from the awards.

⁽³⁾ The amounts reported in this column represents Sema4's reimbursement for reasonable business and travel expenses incurred in connection with the director's services to Sema4.

^{(2) 52,012} shares of Sema4's Class B common stock underlying the stock option shall vest on the 11th day of each August, November, February and May from May 11, 2020 through May 11, 2024, with the first such vesting date to occur on August 11, 2020, such that 52,012 of the shares of Sema4's Class B common stock underlying the stock option shall be vested as of the date of the award. The balance of 7 shares of Sema4's Class B common stock underlying the stock option will vest in connection with a change in control transaction.

Non-Employee Director Compensation Policy

Following the Business Combination, we adopted a non-employee director compensation policy that is designed to enable us to attract and retain, on a long-term basis, highly qualified non-employee directors. Our non-employee directors will receive an annual cash retainer of \$40,000, payable quarterly, and a grant of stock options and restricted stock units with an aggregate grant-date value of \$200,000, which will vest on the earlier of the first anniversary of the grant date and the next annual meeting of our stockholders. New non-employee directors will receive a grant of stock options and restricted stock units upon joining our Board with an aggregate grant-date value of \$400,000, which will vest over the three-year period following the grant date.

The Chairman of our Board will receive an additional annual cash retainer of \$35,000. Members of our audit committee will receive an additional annual cash retainer of \$10,000, and the chairperson of our audit committee will receive an additional cash retainer of \$30,000 (in lieu of the annual retainer for membership on the audit committee). Members of our compensation committee will receive an additional annual cash retainer of \$7,500, and the chairperson of our compensation committee will receive an additional cash retainer of \$22,500 (in lieu of the annual retainer for membership on the compensation committee). Members of our nominating and governance committee will receive an additional annual cash retainer of \$5,000, and the chairperson of our nominating and governance committee will receive an additional cash retainer of \$15,000 (in lieu of the annual retainer for membership on the compensation committee).

CERTAIN RELATIONSHIPS AND RELATED PARTY TRANSACTIONS

Related Party Transactions - CMLS

Founder Shares

On July 16, 2020, the Sponsor purchased an aggregate 10,062,500 shares of Class B common stock for a total purchase price of \$25,000, or approximately \$0.002 per share. In August 2020, the Sponsor transferred 25,000 shares of Class B common stock each of Mr. Islam, Dr. Leproust and Mr. Turner. On September 1, 2020, we effected a 1:1.1 stock split of our Class B common stock, resulting in the Sponsor holding an aggregate of 10,993,750 shares of Class B common stock and there being an aggregate of 11,068,750 shares of Class B common stock outstanding. The purchase price of the shares of Class B common stock was determined by dividing the amount of cash contributed to CMLS by the number of shares of Class B common stock issued. In connection with the closing of the Business Combination, we issued 11,068,750 share of Class A common stock to the Initial Stockholders in exchange for the then-outstanding shares of Class B common stock then outstanding.

Private Placement Warrants

Simultaneously with the closing of the IPO, the Sponsor and each of Mr. Islam and Dr. Leproust purchased an aggregate of 7,236,667 private placement warrants, at a price of \$1.50 per private placement warrant, for an aggregate purchase price of \$10,855,000. The Sponsor purchased 6,903,335 private placement warrants, and each of Mr. Islam and Dr. Leproust (and/or one or more entities controlled by them) purchased 166,666 private placement warrants. Each private placement warrant is exercisable to purchase one share of Class A common stock at a price of \$11.50 per share, subject to adjustment. Proceeds from the sale of the private placement warrants were added to the net proceeds from the IPO held in the Trust Account.

Promissory Note - Related Party

On July 16, 2020, the Sponsor issued an unsecured promissory note to CMLS (the "Promissory Note"), pursuant to which CMLS could borrow up to an aggregate principal amount of \$300,000. The Promissory Note was non-interest bearing and payable on the earlier of (i) December 31, 2020 or (ii) the consummation of the IPO. The outstanding balance under the Promissory Note of \$165,081 was repaid at the closing of the IPO on September 4, 2020.

Subscription Agreement

In connection with the Business Combination, the PIPE Investors (which included certain former equity holders in Sema4) purchased an aggregate of 35,000,000 shares of our Class A common stock at \$10.00 per share, for an aggregate purchase price of \$350,000,000, in private placements that closed immediately prior to the Closing. The funds from such private placement were used as part of the consideration to Sema4's equity holders in connection with the Business Combination

Insider Letter

In connection with the IPO of CMLS, CMLS, the Sponsor and each insider and the Sponsor entered into the Insider Letter providing for a lock-up in relation to the Class B common stock of CMLS or any shares of our Class A common stock until the earlier of (a) one year after the completion of the Business Combination and (b) subsequent to the Business Combination, (x) if the closing price of our Class A common stock equals or exceeds \$12.00 per share (as adjusted for stock splits, stock dividends, reorganizations, recapitalizations, and the like) for any 20 trading days within any 30-day trading day period commencing at least 150 days after the Business Combination or (y) the date following the completion of the Business Combination on which we complete a liquidation, merger, capital stock exchange, reorganization or other similar transaction that results in all of our stockholders having the right to exchange their shares of our Class A common stock for cash securities or other property. The Sponsor and each insider also agreed not to transfer any private placement warrants (or any share of our Class A common stock issued or issuable upon the exercise of the private placement warrants), until 30 days after the completion of the Business Combination.

Related Party Policy

Prior to the consummation of CMLS's IPO, CMLS adopted a code of ethics requiring CMLS to avoid, wherever possible, all conflicts of interests, except under guidelines or resolutions approved by the CMLS board of directors (or the appropriate committee of the board) or as disclosed in CMLS's public filings with the SEC. Under CMLS's code of ethics, conflict of interest situations included any financial transaction, arrangement or relationship (including any indebtedness or guarantee of indebtedness) involving CMLS.

In addition, CMLS's audit committee, pursuant to a written charter that CMLS adopted prior to the consummation of the IPO, was responsible for reviewing and approving related party transactions to the extent that CMLS entered into such transactions. An affirmative vote of a majority of the members of the audit committee present at a meeting at which a quorum is present was required in order to approve a related party transaction. A majority of the members of the entire audit committee constituted a quorum. Without a meeting, the unanimous written consent of all of the members of the audit committee was required to approve a related party transaction. CMLS also required each of its directors and executive officers to complete a directors' and officers' questionnaire that elicited information about related party transactions.

These procedures were intended to determine whether any such related party transaction impaired the independence of a director or presented a conflict of interest on the part of a director, employee or officer.

Related Party Transactions - Sema4

The following is a description of transactions since January 1, 2020 and currently proposed transactions in which:

- a. we have been or is to be a participant;
- b. the amount involved exceeded or exceeds \$120,000; and
- c. any of Sema4's directors, executive officers or holders of more than 5% of its capital stock prior to the Business Combination, or any immediate family member of, or person sharing the household with, any of these individuals, had or will have a direct or indirect material interest.

Series C Preferred Stock Financing

In July 2020, Sema4 sold an aggregate of 197,821 shares of its Series C preferred stock at a purchase price of \$613.6743 per share to accredited investors for an aggregate purchase price of approximately \$121.4 million. Each share of Sema4's Series C preferred stock was cancelled and represent the right to receive a portion of the merger consideration in connection with the completion of the Business Combination, as provided in the Merger Agreement.

The following table summarizes purchases of shares of Sema4's Series C preferred stock by its executive officers, directors, and holders of more than 5% of its capital stock.

_	Shares of Series C Freience Stock				
		Aggregate Gross Consideration			
Purchaser	Number of Shares	(\$)			
Entities affiliated with Blackstone ⁽¹⁾	38,13	23,399,401			

⁽¹⁾ Consists of 37,138 shares of Series C preferred stock held by BTO Sema4 Holdings L.P., 768 shares of Series C preferred stock held by Blackstone Tactical Opportunities Fund - FD L.P. and 224 shares of Series C preferred stock held by Blackstone Family Tactical Opportunities Investment Partnership III ESC L.P.

Employment Arrangements with Immediate Family Members of Sema4's Executive Officers and Directors

Rick Wallsten, the brother of Eric Schadt, Sema4's Chief Executive Officer and a director, has been employed by Sema4 since November 2017 as a clinical pharmacist. As a clinical pharmacist for Sema4, Mr. Wallsten is

responsible for certain aspects of Sema4's pharmacogenomics program. During the year ended December 31, 2020, Mr. Wallsten had total cash compensation, including base salary and bonus, of \$157,620.

Kelly Peterson, the sister of James Coffin, Sema4's President and Chief Operating Officer has been employed by Sema4 since February 2019 as an account manager. As an account manager for Sema4, Ms. Peterson is responsible for managing certain of Sema4's oncology customer accounts. During the year ended December 31, 2020, Ms. Peterson had total cash compensation, including base salary, commission and other compensation, of \$160,223.

Licenses and Subleases

Sema4 was a party to several space license agreements and continues to be a party to sublease agreements with the Mount Sinai Health System (which we refer to together with its related entities as Mount Sinai) pursuant to which Sema4 leased certain office and laboratory space from Mount Sinai at fair market value, including approximately 124,000 square feet of office and laboratory space in Stamford, Connecticut for its headquarters and laboratory operations, and approximately 26,000 square feet of office and laboratory space in New York, New York for additional office space and laboratory operations. Rent expense for these licensed and subleased facilities was \$5.9 million for the year ended December 31, 2020 and \$1.4 million for the three months ended March 31, 2021. Future minimum lease payments are expected to total \$4.8 million related to all facilities subleased by ISMMS to Sema4 for the year ending December 31, 2021. We will continue to operate out of the office and laboratory space in Stamford, Connecticut for its headquarters and laboratory operations, and certain of the subleased office space in New York, New York, following the completion of the Business Combination.

Transition Services and Employee Compensation

ISMMS provided transition services, under a transition services agreement and other contractual arrangements with Sema4 for services related to finance (accounts payable & purchasing, general accounting, financial systems, and payroll), real estate management, insurance coverage, compliance, equipment subleases, and IT. The transition services agreement expired on March 28, 2021. Sema4 made direct payments to ISMMS of approximately \$3.1 million and \$0.7 million for the year ended December 31, 2020 and the three months ended March 31, 2021 pursuant to the transition services agreement. It is expected that Sema4 will negotiate and enter into a new transition services agreement prior to the completion of the Business Combination.

We provide partial reimbursement to Mount Sinai for limited compensation, services, and related expenses for certain individuals employed by Mount Sinai and certain individuals employed at both Mount Sinai and Sema4. For the year ended December 31, 2020 and the three months ended March 31, 2021, the total amount of reimbursement for employee compensation and expenses paid by Sema4 to Mount Sinai was equal to approximately \$1.3 million and \$0.3 million, respectively.

Commercial Relationships

We provide products and services to Mount Sinai at fair market value, including for certain oncology testing, research services and clinical data services. Mount Sinai pays for certain of these services in cash, and for other of these services in kind through performing components of collaborative research projects and/or the provision of intellectual property and data rights.

In particular, these arrangements include a data structuring and curation services agreement, dated August 1, 2019, with ISMMS and certain other Mount Sinai entities, pursuant to which we provide certain data structuring and clinical support services to Mount Sinai, including the delivery to Mount Sinai of a curated dataset and interface allowing Mount Sinai users to query the curated dataset as mutually agreed by the parties. As compensation for these services, Mount Sinai provides Sema4 certain rights to use de-identified curated data. The data structuring and curation services agreement has a five-year term and, provided we are not in default under the terms of the agreement, the agreement may be renewed at Sema4's option for up to two one-year extension periods. Following the extension periods, the agreement may be further renewed by the mutual agreement of the parties. The agreement may be terminated earlier by Mount Sinai upon certain fundamental breaches by Sema4, by Sema4 upon a breach by

Mount Sinai of its material obligations, and by either party if certain insolvency or bankruptcy events occur with respect to the other party.

We also receive products and services from Mount Sinai at fair market value, including for certain research and clinical services, development services and lab services, and licenses certain intellectual property from Mount Sinai. Pursuant to these arrangements, Sema4 made direct payments to Mount Sinai of approximately \$3.7 million and \$0.3 million for the year ended December 31, 2020 and the three months ended March 31, 2021, respectively.

Related Party Transactions Entered into in Connection with the Business Combination

In connection with the Business Combination, affiliates of each of Eli Casdin and Keith Meister purchased an aggregate of 9,000,000 shares of our Class A common stock in the PIPE Financing.

In addition, certain agreements were entered into pursuant to the Merger Agreement. These agreements include:

Amended and Restated Registration Rights Agreement

In connection with the consummation of the Business Combination, we, the Sponsor and certain other parties thereto (collectively, the "rights holders") entered into the Amended and Restated Registration Rights Agreement, which amended and restated in its entirety the existing registration rights agreement, dated September 1, 2020, by and between us and the parties thereto. Pursuant to the terms of the Amended and Restated Registration Rights Agreement, we are to prepare and file with the SEC, no later than 30 days after the Closing Date, a shelf registration statement for an offering to be made on a continuous basis from time to time with respect to the resale of the registrable shares under the Amended and Restated Registration Rights Agreement. We are further required to use commercially reasonable efforts to cause such shelf registration statement to be declared effective as soon as possible after filing, but in no event later than the earlier of 60 days following the filing date thereof and five business days after the SEC notifies us that it will not review such registration statement, subject to extension in the event that the registration is subject comments from the SEC.

In addition, pursuant to the terms of the Amended and Restated Registration Rights Agreement and subject to certain requirements and customary conditions, including with regard to the number of demand rights that may be exercised, the rights holders may demand at any time or from time to time, that we file a registration statement on Form S-1 or Form S-3 to register certain shares of our Class A common stock held by such rights holders. The Amended and Restated Registration Rights Agreement also provides the rights holders with "piggy-back" registration rights, subject to certain requirements and customary conditions. We will bear the expenses incurred in connection with the filing of any such registration statement.

ISMMS Lock-Up Agreement

In connection with the execution of the Merger Agreement, we and Icahn School of Medicine at Mount Sinai ("ISMMS"), a shareholder of Sema4, entered into the ISMMS Lock-Up Agreement whereby ISMMS agreed not to (i) sell, offer to sell, contract or agree to sell, hypothecate pledge, grant any option to purchase or otherwise dispose of or agree to dispose of, directly or indirectly, or establish or increase a put equivalent position or liquidate or decrease a call equivalent position within the meaning of Section 16 of the Exchange Act, with respect to shares of our Class A common stock issued to ISMMS pursuant to the Merger Agreement (such shares of our Class A common stock, the "Lock-up Shares"), (ii) enter into any swap or other arrangement that transfers to another, in whole or in part, any of the economic consequences of ownership of any of the Lock-up Shares, in cash or otherwise, or (iii) publicly announce any intention to effect any transaction specified in clause (i) or (ii); the ISMMS will take none of the foregoing actions until the earliest of (a) the date that is 180 calendar days from the Closing Date, and (b) the date following the Closing Date on which we complete a liquidation, merger, stock exchange or other similar transaction that results in all of the our stockholders having the right to exchange their shares of our capital stock for cash, securities or other property. Notwithstanding the foregoing, the ISMMS may take any of the actions specified in clauses (i), (ii) and (iii) above at any time after the first date on which the closing price of our Class A common stock has equaled or exceeded \$12.00 per share (as adjusted for stock splits, stock dividends, reorganizations, recapitalizations and the like) for any 20 trading days within any 30-trading day period commencing at least 150 days after the Closing Date.

Shareholder Lock-up Agreement

In connection with the execution of the Merger Agreement, each Sema4 Stockholder holding more than 1% of the outstanding common stock of Sema4 as of the date thereof, entered into a Stockholder Lock-up Agreement whereby such shareholder agreed not to (i) sell, offer to sell, contract or agree to sell, hypothecate pledge, grant any option to purchase or otherwise dispose of or agree to dispose of, directly or indirectly, or establish or increase a put equivalent position or liquidate or decrease a call equivalent position within the meaning of Section 16 of the Exchange Act, with respect to shares of our Class A common stock issued to such shareholder pursuant to the Merger Agreement (such shares of our Class A common stock, the "Lock-up Shares"), (ii) enter into any swap or other arrangement that transfers to another, in whole or in part, any of the economic consequences of ownership of any of the Lock-up Shares, in cash or otherwise, or (iii) publicly announce any intention to effect any transaction specified in clause (i) or (ii); the PIPE Investor will take none of the foregoing actions until the earliest of (a) the date that is 180 calendar days from the Closing Date, and (b) the date following the Closing Date on which we complete a liquidation, merger, stock exchange or other similar transaction that results in all of our stockholders having the right to exchange their shares of our capital stock for cash, securities or other property. Notwithstanding the foregoing, the shareholder may take any of the actions specified in clauses (i), (ii) and (iii) above at any time after the first date on which the closing price of our Class A common stock has equaled or exceeded \$12.00 per share (as adjusted for stock splits, stock dividends, reorganizations, recapitalizations and the like) for any 20 trading days within any 30-trading day period commencing at least 150 days after the Closing Date.

Indemnification Agreements

The Amended and Restated Certificate of Incorporation contains provisions limiting the liability of directors, and our Bylaws provide that we will indemnify each of its directors to the fullest extent permitted under Delaware law. The Amended and Restated Certificate of Incorporation and the Bylaws also provide the board of directors with discretion to indemnify officers and employees when determined appropriate by our board of directors.

We entered into indemnification agreements with each of our directors and executive officers and certain other key employees upon the completion of the Business Combination. The indemnification agreements provide that the we will indemnify each of our directors, executive officers, and such other key employees against any and all expenses incurred by that director, executive officer, or other key employee because of his or her status as one of our directors, executive officers, or other key employees, to the fullest extent permitted by Delaware law, the Amended and Restated Certificate of Incorporation and our Bylaws. In addition, the indemnification agreements provide that, to the fullest extent permitted by Delaware law, we will advance all expenses incurred by its directors, executive officers, and other key employees in connection with a legal proceeding involving his or her status as a director, executive officer, or key employee.

Policies and Procedures for Related Party Transactions

We adopted a written related party transaction policy effective upon the completion of the Business Combination. The policy provides that officers, directors, holders of more than 5% of any class of our voting securities, and any member of the immediate family of and any entity affiliated with any of the foregoing persons, will not be permitted to enter into a related-party transaction with us without the prior consent of our audit committee, or other independent members of our board of directors in the event it is inappropriate for the audit committee to review such transaction due to a conflict of interest. Any request for us to enter into a transaction with an executive officer, director, principal stockholder, or any of their immediate family members or affiliates, in which the amount involved exceeds \$120,000, must first be presented to our audit committee for review, consideration, and approval. In approving or rejecting the proposed transactions, our audit committee will take into account all of the relevant facts and circumstances available.

All of the transactions described in this section were entered into prior to the adoption of this policy.

PRINCIPAL SECURITYHOLDERS

The following table sets forth information known to us regarding the beneficial ownership of our common stock immediately following consummation of the Business Combination by:

- each person who is the beneficial owner of more than 5% of the outstanding shares of common stock;
- · each of our named executive officers and directors; and
- · all of our executive officers and directors as a group

Beneficial ownership is determined according to the rules of the SEC, which generally provide that a person has beneficial ownership of a security if he, she or it possesses sole or shared voting or investment power over that security, including options and warrants that are currently exercisable within 60 days. Except as described in the footnotes below and subject to applicable community property laws and similar laws, we believe that each person listed above has sole voting and investment power with respect to such shares. Unless otherwise noted, the address of each beneficial owner is c/o Sema4 Holdings Corp., 333 Ludlow Street, North Tower, 8th Floor, Stamford, Connecticut 06902.

The beneficial ownership of common stock is based on 240,190,402 shares of our Class A common stock issued and outstanding immediately following consummation of the Business Combination, including the redemption of the public shares as described elsewhere in this prospectus, the conversion of the Class B common stock as described elsewhere in this prospectus and the consummation of the PIPE Financing.

Number of Shares of

Percentage of

Name of Beneficial Owners	Number of Shares of Class A Common Stock Beneficially Owned	Outstanding Class A Common Stock
5% Stockholders:		
Entities affiliated with Blackstone Group Inc. (1)	25,056,993	10.4%
Entities affiliated with Deerfield Management Company, L.P. ⁽²⁾	13,848,488	5.8%
Icahn School of Medicine at Mount Sinai ⁽³⁾	88,355,473	36.8%
Directors and Named Executive Officers:		
Eric Schadt ⁽⁴⁾	6,751,479	2.8%
Isaac Ro	_	—%
Daniel Clark ⁽⁵⁾	1,322,267	*
James Coffin ⁽⁶⁾	2,573,902	1.1%
Anthony Prentice ⁽⁷⁾	2,056,939	*
Kareem Saad	_	—%
Karen White ⁽⁸⁾	38,646	*
Dennis Charney	_	—%
Eli D. Casdin ⁽⁹⁾	22,730,419	9.5%
Emily Leproust ⁽¹⁰⁾	191,666	*
Michael Pellini		—%
Jason Ryan	-	—%
Joshua Ruch	_	%
Rachel Sherman ⁽¹¹⁾	136,207	*
Nat Turner ⁽¹²⁾	191,666	*
Directors and executive officers as a group (15 individuals) ⁽¹³⁾	163,254,145	68.0%

^{*} Less than one percent

- Consists of 24,404,324 shares of common stock held by BTO Sema4 Holdings L.P., 505,095 shares of common stock held by Blackstone Tactical Opportunities Fund FD L.P. and 147,574 shares of common stock held by Blackstone Family Tactical Opportunities Investment Partnership III ESC L.P. BTO Holdings Manager L.L.C. is the general partner of BTO Sema4 Holdings L.P. Blackstone Tactical Opportunities Associates L.L.C. is the managing member of BTO Holdings Manager L.L.C. BTOA L.L.C. is the sole member of Blackstone Tactical Opportunities Associates L.L.C. Blackstone Holdings III L.P. is the managing member of BTOA L.L.C. Blackstone Tactical Opportunities Associates III - NQ L.P. is the general partner of Blackstone Tactical Opportunities Fund - FD L.P. BTO DE GP - NQ L.L.C. is the general partner of Blackstone Tactical Opportunities Associates III - NQ L.P. Blackstone Holdings II L.P. is the managing member of BTO DE GP - NQ L.L.C. Blackstone Holdings II L.P. is the general partner of Blackstone Holdings II L.P. BTO Side-by-Side GP L.L.C. is the general partner of Blackstone Family Tactical Opportunities Investment Partnership III ESC L.P. Blackstone Holdings III L.P. is the sole member of BTO Side-by-Side GP L.L.C. Blackstone Holdings III GP L.P. is the general partner of Blackstone Holdings III L.P. Blackstone Holdings III GP Management L.L.C. is the general partner of Blackstone Holdings III GP L.P. The Blackstone Group Inc. is the sole member of each of Blackstone Holdings I/II GP L.L.C. and Blackstone Holdings III GP Management L.L.C. The sole holder of the Class C common stock of The Blackstone Group Inc. is Blackstone Group Management L.L.C. Blackstone Group Management L.L.C. is wholly-owned by Blackstone's senior managing directors and controlled by its founder, Stephen A. Schwarzman. Each of the Blackstone entities described in this footnote and Stephen A. Schwarzman may be deemed to beneficially own the shares directly or indirectly controlled by such Blackstone entities or him, but each disclaims beneficial ownership of such shares. The address of Mr. Schwarzman and each of the other entities listed in this footnote is c/o The Blackstone Group Inc., 345 Park Avenue, New York, New York 10154
- Consists of 6,924,244 shares of common stock held by Deerfield Partners and 6,924,244 shares of common stock held by DPDF. Deerfield Management Company, L.P. ("Deerfield Management") is the investment manager of Deerfield Partners, L.P. ("Deerfield Partners") and Deerfield Private Design Fund V, L.P. ("DPDF"). Deerfield Mgmt, L.P. ("Deerfield Mgmt,") is the general partner of Deerfield Partners. Deerfield Mgmt V, L.P. ("Deerfield Mgmt V") is the general partner of DPDF. James E. Flynn is the sole member of the general partner of each of Deerfield Management, Deerfield Mgmt and Deerfield Mgmt V. Deerfield Management, Deerfield Mgmt and Mr. Flynn may be deemed to beneficially own the securities held by Deerfield Partners. Deerfield Management, Deerfield Mgmt V and Mr. Flynn may be deemed to beneficially own the securities held by DPDF. The address for each of Deerfield Partners, DPDF, Deerfield Management, Deerfield Mgmt, Deerfield Mgmt V and Mr. Flynn is 345 Park Avenue South, New York, New York 10010.
- Consists of 88,355,473 shares of common stock held by Icahn School of Medicine at Mount Sinai ("ISMMS"). The shares are held by ISMMS, a New York Education Corporation. The responsibility and authority for the voting and investment decisions with respect to the shares held by ISMMS is vested in those persons who from time to time are the executive officers of ISMMS under the oversight and direction of its board of directors and its sole member, Mount Sinai Health System, Inc., a New York Not-for-Profit Corporation. The address for Icahn School of Medicine at Mount Sinai is One Gustave L. Levy Place, New York, New York 10029.
- Consists of 6,751,479 shares of common stock subject to options that are exercisable within 60 days of Closing.
- Consists of 1,322,267 shares of common stock subject to options that are exercisable within 60 days of Closing. Consists of 2,573,902 shares of common stock subject to options that are exercisable within 60 days of Closing.
- Consists of 2,056,939 shares of common stock subject to options that are exercisable within 60 days of Closing.
- Consists of 38,646 shares of common stock subject to options that are exercisable within 60 days of Closing.

 Includes 5,000,000 shares of common stock held indirectly by Casdin Partners Master Fund L.P., and 10,993,750 shares of common stock and 6,736,669 shares of common stock underlying private placement warrants that are exercisable within 60 days of Closing held indirectly by the Sponsor. The Board of Managers of the Sponsor, or CMLS Holdings LLC, is comprised of Mr. Eli Casdin and Mr. Keith Meister who share voting and investment discretion with respect to the common stock held of record by CMLS Holdings LLC. Mr. Casdin is a member of Sema4 Holdings' board of directors. C-LSH LLC and M-LSH LLC are the members of CMLS Holdings LLC, and Mr. Casdin and Mr. Meister are the managing members of C-LSH LLC and M-LSH LLC, respectively. As such, each of the foregoing may be deemed to have or share beneficial ownership of the common stock held directly by CMLS Holdings LLC. The business address of the Sponsor is c/o Corvex Management LP, 667 Madison Avenue, New York, NY 10065.
- (10) Consists of 25,000 shares of common stock and 166,666 shares of common stock underlying private placement warrants that are exercisable within 60 days of Closing. (11) Consists of 136,207 shares of common stock subject to options that are exercisable within 60 days of Closing.
- (12) Consists of 25,000 shares of common stock held by Nat Turner and 166,666 shares of common stock underlying private placement warrants held by NTWJ Holdings, LLC ("NTWJ"), that are exercisable within 60 days of Closing. Mr. Turner is a managing member of NTWJ. The address for NTWJ is 139 Reade Street, New York, New York 10013.
- (13) Consists of (i) 163,254,145 shares of common stock held by all directors and executive officers of the Company as a group, and (ii) 12,879,440 shares of common stock subject to options held by all directors and executive officers of the Company as a group and that are exercisable within 60 days of Closing.

DESCRIPTION OF SECURITIES

The following summary of the material terms of our securities is not intended to be a complete summary of the rights and preferences of such securities. The full text of the proposed Amended and Restated Certificate of Incorporation is attached as an exhibit to the registration statement of which this prospectus is a part. We urge you to read our Amended and Restated Certificate of Incorporation in its entirety for a complete description of the rights and preferences of our securities.

Authorized and Outstanding Stock

Our Amended and Restated Certificate of Incorporation authorizes the issuance of 400,000,000 shares of Class A common stock, \$0.0001 par value per share. The outstanding shares of our common stock are, and the shares of common stock issuable in connection with the Business Combination pursuant to the Merger Agreement and the PIPE Investment will be, duly authorized, validly issued, fully paid and non-assessable. As of the Closing Date, there were 240,190,402 shares of our Class A common stock outstanding, no shares of preferred stock outstanding and 21,995,000 warrants outstanding.

Common Stock

Our Amended and Restated Certificate of Incorporation provides that the common stock will have identical rights, powers, preferences and privileges to current common stock.

Voting Power

Except as otherwise required by law or as otherwise provided in any certificate of designation for any series of preferred stock, under the current certificate of incorporation and the Amended and Restated Certificate of Incorporation, the holders of common stock possess or will possess, as applicable, all voting power for the election of our directors and all other matters requiring stockholder action and are entitled or will be entitled, as applicable, to one vote per share on matters to be voted on by stockholders. The holders of common stock shall at all times vote together as one class on all matters submitted to a vote of the holders of common stock under both the current certificate of incorporation and the Amended and Restated Certificate of Incorporation.

Dividends

Subject to the rights, if any of the holders of any outstanding shares of preferred stock, under both the current certificate of incorporation and the Amended and Restated Certificate of Incorporation, holders of common stock will be entitled to receive such dividends and other distributions, if any, as may be declared from time to time by our Board in its discretion out of funds legally available therefor and shall share equally on a per share basis in such dividends and distributions.

Liquidation, Dissolution and Winding Up

In the event of the voluntary or involuntary liquidation, dissolution or winding-up of the Company under both the current certificate of incorporation and the Amended and Restated Certificate of Incorporation, the holders of common stock will be entitled to receive all the remaining assets of the Company available for distribution to stockholders, ratably in proportion to the number of shares of common stock held by them, after the rights of the holders of the preferred stock have been satisfied.

Preemptive or Other Rights

Under our Amended and Restated Certificate of Incorporation, our stockholders have no preemptive or other subscription rights and there are no sinking fund or redemption provisions applicable to our common stock.

Election of Directors

Under the terms of our Amended and Restated Certificate of Incorporation, upon the effectiveness thereof, the term of the Class I Directors in place at such time will expire at our first annual meeting of the stockholders of the

following the effectiveness of our Amended and Restated Certificate of Incorporation; the term of the Class II Directors in place at such time will expire at our second annual meeting of the stockholders following the effectiveness of our Amended and Restated Certificate of Incorporation; and the term of the Class III Directors in place at such time will expire at our third annual meeting of the stockholders following the effectiveness of our Amended and Restated Certificate of Incorporation.

Preferred Stock

Our Amended and Restated Certificate of Incorporation provides that shares of preferred stock may be issued from time to time in one or more series. Our Board is authorized to fix the voting rights, if any, designations, powers, preferences and relative, participating, optional, special and other rights, if any, and any qualifications, limitations and restrictions thereof, applicable to the shares of each series. Our Board is able, without stockholder approval, to issue preferred stock with voting and other rights that could adversely affect the voting power and other rights of the holders of the common stock and could have anti-takeover effects. The ability of our Board to issue preferred stock without stockholder approval could have the effect of delaying, deferring or preventing a change of control of us or the removal of existing management. We have no preferred stock outstanding at the date hereof. Although we do not currently intend to issue any shares of preferred stock, we cannot assure you that we will not do so in the future.

Warrants

Public Warrants

Each whole public warrant entitles the registered holder to purchase one share of our Class A common stock at a price of \$11.50 per whole share, subject to adjustment as discussed below, at any time commencing on the later of 12 months from the closing of the IPO or 30 days after the completion of the Business Combination. Pursuant to the warrant agreement, a warrant holder may exercise its public warrants only for a whole number of shares of common stock. This means that only a whole public warrant may be exercised at any given time by a warrant holder. No fractional public warrants will be issued upon separation of the units and only whole public warrants will trade. The public warrants will expire five years after the completion of our initial business combination, at 5:00 p.m., New York City time, or earlier upon redemption or liquidation.

We are not obligated to deliver any shares of common stock pursuant to the exercise of a public warrant and will have no obligation to settle such public warrant exercise unless a registration statement under the Securities Act with respect to the shares of common stock underlying the public warrants is then effective and a prospectus relating thereto is current, subject to our satisfying our obligations described below with respect to registration. No public warrant will be exercisable for cash or on a cashless basis, and we will not be obligated to issue any shares to holders seeking to exercise their public warrants, unless the issuance of the shares upon such exercise is registered or qualified under the securities laws of the state of the exercising holder, or an exemption is available. In the event that the conditions in the two immediately preceding sentences are not satisfied with respect to a public warrant, the holder of such public warrant will not be entitled to exercise such public warrant and such public warrant may have no value and expire worthless. In the event that a registration statement is not effective for the exercised public warrants, the purchaser of a unit containing such public warrant will have paid the full purchase price for the unit solely for the share of common stock underlying such unit.

We have agreed that as soon as practicable, but in no event later than 15 business days, after the closing of the Business Combination, we will use our best efforts to file with the SEC a registration statement for the registration, under the Securities Act, of the shares of common stock issuable upon exercise of the public warrants. We will use our best efforts to cause the same to become effective and to maintain the effectiveness of such registration statement, and a current prospectus relating thereto, until the expiration of the public warrants in accordance with the provisions of the warrant agreement. Notwithstanding the above, if our common stock is at the time of any exercise of a public warrant not listed on a national securities exchange such that it satisfies the definition of a "covered security" under Section 18(b)(1) of the Securities Act, we may, at our option, require holders of public warrants who exercise their public warrants to do so a "cashless basis" in accordance with Section 3(a)(9) of the Securities Act (or any successor rule) and, in the event we so elect, we will not be required to file or maintain in effect a registration

statement, but will use our best efforts to register the shares under applicable blue sky laws to the extent an exemption is not available.

Redemption of Warrants When the Price per Share of Class A Common Stock Equals or Exceeds \$18.00 — Once the warrants become exercisable, we may redeem the outstanding Public Warrants:

- in whole and not in part;
- at a price of \$0.01 per public warrant;
- upon not less than 30 days' prior written notice of redemption to each warrant holder; and
- if, and only if, the closing price of the Class A common stock equals or exceeds \$18.00 per share (as adjusted) for any 20 trading days within a 30-trading day period ending three trading days before sending the notice of redemption to warrant holders (the "Reference Value")

If and when the warrants become redeemable by us, we may exercise its redemption right even if it is unable to register or qualify the underlying securities for sale under all applicable state securities laws.

Redemption of Warrants When the Price per Share of Class A Common Stock Equals or Exceeds \$10.00 — Once the warrants become exercisable, we may redeem the outstanding warrants:

- in whole and not in part;
- at \$0.10 per warrant upon a minimum of 30 days' prior written notice of redemption provided that holders will be able to exercise their warrants on a
 cashless basis prior to redemption and receive that number of shares based on the redemption date and the fair market value of the Class A common
 stock:
- if, and only if, the closing price of the Class A common stock equals or exceeds \$10.00 per share (as adjusted) for any 20 trading days within the 30-trading day period ending three trading days before we send the notice of redemption to the warrant holders; and
- if the closing price of the Class A common stock for any 20 trading days within a 30-trading day period ending three trading days before we sends notice of redemption to the warrant holders is less than \$18.00 per share (as adjusted), the Private Placement Warrants must also be concurrently called for redemption on the same terms as the outstanding Public Warrants, as described above.

We have established the last of the redemption criterion discussed above to prevent a redemption call unless there is at the time of the call a significant premium to the warrant exercise price. If the foregoing conditions are satisfied and we issue a notice of redemption of the public warrants, each warrant holder will be entitled to exercise his, her or its public warrant prior to the scheduled redemption date. However, the price of the common stock may fall below the \$18.00 redemption trigger price as well as the \$11.50 warrant exercise price after the redemption notice is issued.

Redemption procedures and cashless exercise.

If we call the public warrants for redemption as described above, our management will have the option to require any holder that wishes to exercise his, her or its public warrant to do so on a "cashless basis." In determining whether to require all holders to exercise their public warrants on a "cashless basis," our management will consider, among other factors, our cash position, the number of public warrants that are outstanding and the dilutive effect on our stockholders of issuing the maximum number of shares of common stock issuable upon the exercise of our public warrants. If our management takes advantage of this option, all holders of public warrants would pay the exercise price by surrendering their public warrants for that number of shares of common stock equal to the quotient obtained by dividing (i) the product of the number of shares of common stock underlying the public warrants, multiplied by the difference between the exercise price of the public warrants and the "fair market value" (defined below) by (ii) the fair market value. The "fair market value" shall mean the average reported last sale price of the common stock for the 10 trading days ending on the third trading day prior to the date on which the notice of

redemption is sent to the holders of public warrants. If our management takes advantage of this option, the notice of redemption will contain the information necessary to calculate the number of shares of common stock to be received upon exercise of the public warrants, including the "fair market value" in such case. Requiring a cashless exercise in this manner will reduce the number of shares to be issued and thereby lessen the dilutive effect of a warrant redemption. We believe this feature is an attractive option to us if we do not need the cash from the exercise of the public warrants after our initial business combination. If we call our public warrants for redemption and our management does not take advantage of this option, the Sponsor and its permitted transferees would still be entitled to exercise their private placement warrants for cash or on a cashless basis using the same formula described above that other warrant holders would have been required to use had all warrant holders been required to exercise their public warrants on a cashless basis, as described in more detail below.

A holder of a public warrant may notify us in writing in the event it elects to be subject to a requirement that such holder will not have the right to exercise such public warrant, to the extent that after giving effect to such exercise, such person (together with such person's affiliates), to the warrant agent's actual knowledge, would beneficially own in excess of 9.8% (or such other amount as a holder may specify) of the shares of common stock outstanding immediately after giving effect to such exercise.

Anti-dilution Adjustments. If the number of outstanding shares of common stock is increased by a stock dividend payable in shares of common stock, or by a split-up of shares of common stock or other similar event, then, on the effective date of such stock dividend, split-up or similar event, the number of shares of common stock issuable on exercise of each public warrant will be increased in proportion to such increase in the outstanding shares of common stock. A rights offering to holders of common stock entitling holders to purchase shares of common stock at a price less than the fair market value will be deemed a stock dividend of a number of shares of common stock equal to the product of (i) the number of shares of common stock actually sold in such rights offering (or issuable under any other equity securities sold in such rights offering that are convertible into or exercisable for common stock) multiplied by (ii) one minus the quotient of (a) the price per share of common stock paid in such rights offering divided by (b) the fair market value. For these purposes (1) if the rights offering is for securities convertible into or exercisable for common stock, in determining the price payable for common stock, there will be taken into account any consideration received for such rights, as well as any additional amount payable upon exercise or conversion and (2) fair market value means the volume weighted average price of common stock as reported during the 10 trading day period ending on the trading day prior to the first date on which the shares of common stock trade on the applicable exchange or in the applicable market, regular way, without the right to receive such rights.

In addition, if we, at any time while the public warrants are outstanding and unexpired, pay a dividend or make a distribution in cash, securities or other assets to the holders of common stock on account of such shares of common stock (or other shares of our capital stock into which the public warrants are convertible), other than (i) as described above; (ii) certain ordinary cash dividends; (iii) to satisfy the redemption rights of the holders of common stock in connection with a proposed initial business combination; (iv) to satisfy the redemption rights of the holders of common stock in connection with a stockholder vote to amend our current certificate of incorporation to modify the substance or timing of our obligation to redeem 100% of our public shares if we do not complete a business combination within 24 months from the closing of the CMLS IPO, or (v) in connection with the redemption of our public shares upon our failure to complete our initial business combination, then the warrant exercise price will be decreased, effective immediately after the effective date of such event, by the amount of cash and/or the fair market value of any securities or other assets paid on each share of common stock in respect of such event.

If the number of outstanding shares of our common stock is decreased by a consolidation, combination, reverse stock split or reclassification of shares of common stock or other similar event, then, on the effective date of such consolidation, combination, reverse stock split, reclassification or similar event, the number of shares of common stock issuable on exercise of each public warrant will be decreased in proportion to such decrease in outstanding shares of common stock.

Whenever the number of shares of common stock purchasable upon the exercise of the public warrants is adjusted, as described above, the warrant exercise price will be adjusted by multiplying the warrant exercise price immediately prior to such adjustment by a fraction (x) the numerator of which will be the number of shares of

common stock purchasable upon the exercise of the public warrants immediately prior to such adjustment, and (y) the denominator of which will be the number of shares of common stock so purchasable immediately thereafter.

In case of any reclassification or reorganization of the outstanding shares of common stock (other than those described above or that solely affects the par value of such shares of common stock), or in the case of any merger or consolidation of us with or into another corporation (other than a consolidation or merger in which we are the continuing corporation and that does not result in any reclassification or reorganization of our outstanding shares of common stock), or in the case of any sale or conveyance to another corporation or entity of the assets or other property of us as an entirety or substantially as an entirety in connection with which we are dissolved, the holders of the public warrants will thereafter have the right to purchase and receive, upon the basis and upon the terms and conditions specified in the public warrants and in lieu of the shares of our common stock immediately theretofore purchasable and receivable upon the exercise of the rights represented thereby, the kind and amount of shares of stock or other securities or property (including cash) receivable upon such reclassification, reorganization, merger or consolidation, or upon a dissolution following any such sale or transfer, that the holder of the public warrants would have received if such holder had exercised their public warrants immediately prior to such event. Additionally, if less than 70% of the consideration receivable by the holders of common stock in such a transaction is payable in the form of common stock in the successor entity that is listed for trading on a national securities exchange or is quoted in an established over-the-counter market, or is to be so listed for trading or quoted immediately following such event, and if the registered holder of the public warrant properly exercises the public warrant within 30 days following public disclosure of such transaction, the warrant exercise price will be reduced as specified in the warrant agreement based on the per share consideration minus Black-Scholes Warrant Value

The public warrants have been issued in registered form under a warrant agreement between Continental Stock Transfer & Trust Company, as warrant agent, and us. You should review a copy of the warrant agreement, which is filed as an exhibit to the registration statement pertaining to the CMLS IPO, for a complete description of the terms and conditions applicable to the public warrants. The warrant agreement provides that the terms of the public warrants may be amended without the consent of any holder to cure any ambiguity or correct any defective provision, but requires the approval by the holders of at least 50% of the then outstanding public warrants to make any change that adversely affects the interests of the registered holders of public warrants.

The public warrants may be exercised upon surrender of the warrant certificate on or prior to the expiration date at the offices of the warrant agent, with the exercise form on the reverse side of the warrant certificate completed and executed as indicated, accompanied by full payment of the exercise price (or on a cashless basis, if applicable), by certified or official bank check payable to us, for the number of public warrants being exercised. The warrant holders do not have the rights or privileges of holders of common stock and any voting rights until they exercise their public warrants and receive shares of common stock. After the issuance of shares of common stock upon exercise of the public warrants, each holder will be entitled to one vote for each share held of record on all matters to be voted on by stockholders.

Warrants may be exercised only for a whole number of shares of common stock. No fractional shares will be issued upon exercise of the public warrants. If, upon exercise of the public warrants, a holder would be entitled to receive a fractional interest in a share, we will, upon exercise, round down to the nearest whole number the number of shares of common stock to be issued to the warrant holder. As a result, warrant holders not purchasing public warrants in multiples of three warrants will not obtain value from the fractional interest that will not be issued.

Private Placement Warrants

The Sponsor and Mr. Islam and Dr. Leproust purchased an aggregate of 7,236,667 private placement warrants at a price of \$1.50 per warrant for an aggregate purchase price of \$10,855,000 in a private placement. The private placement warrants (including the common stock issuable upon exercise of the private placement warrants) will not be transferable, assignable or salable until 30 days after the completion of our initial business combination. Otherwise, the private placement warrants have terms and provisions that are identical to those of the warrants sold as part of the units in our IPO, including as to exercisability and exercise period.

The Private Placement Warrants are identical to the Public Warrants underlying the Units sold in the CMLS Initial Public Offering, except that (1) the Private Placement Warrants and the Class A common stock issuable upon the exercise of the Private Placement Warrants will not be transferable, assignable or saleable until 30 days after the completion of a Business Combination, subject to certain limited exceptions, (2) the Private Placement Warrants will be exercisable on a cashless basis, (3) the Private Placement Warrants will be non-redeemable (except as described above in "Redemption of Warrants When the Price per Share of Class A common stock Equals or Exceeds \$10.00") so long as they are held by the initial purchasers or their permitted transferees, and (4) the holders of the Private Placement Warrants and the Class A common stock issuable upon the exercise of the Private Placement Warrants will have certain registration rights. If the Private Placement Warrants are held by someone other than the initial purchasers or their permitted transferees, the Private Placement Warrants will be redeemable by us and exercisable by such holders on the same basis as the Public Warrants.

Dividends

We have not paid any cash dividends on our common stock to date and do not intend to pay cash dividends prior to the completion of a business combination. The payment of cash dividends in the future will be dependent upon our revenues and earnings, if any, capital requirements and general financial condition subsequent to completion of a business combination. The payment of any cash dividends subsequent to a business combination will be within the discretion of our Board at such time. In addition, our Board is not currently contemplating and does not anticipate declaring any stock dividends in the foreseeable future. Further, if we incur any indebtedness, our ability to declare dividends may be limited by restrictive covenants we may agree to in connection therewith.

Transfer Agent and Warrant Agent

The Transfer Agent for our common stock and warrant agent for our warrants is Continental Stock Transfer & Trust Company. We have agreed to indemnify Continental Stock Transfer & Trust Company in its roles as transfer agent and warrant agent, its agents and each of its stockholders, directors, officers and employees against all liabilities, including judgments, costs and reasonable counsel fees that may arise out of acts performed or omitted for its activities in that capacity, except for any liability due to any gross negligence, willful misconduct or bad faith of the indemnified person or entity.

Certain Anti-Takeover Provisions of Delaware Law and Our Amended and Restated Certificate of Incorporation and Bylaws

Provisions of the DGCL and our Amended and Restated Certificate of Incorporation could make it more difficult to acquire us by means of a tender offer, a proxy contest or otherwise, or to remove incumbent officers and directors. These provisions, summarized below, are intended to discourage coercive takeover practices and inadequate takeover bids and to encourage persons seeking to acquire control of us to first negotiate with the board of directors. We believe that the benefits of these provisions outweigh the disadvantages of discouraging certain takeover or acquisition proposals because, among other things, negotiation of these proposals could result in an improvement of their terms and enhance the ability of our Board to maximize stockholder value. However, these provisions may delay, deter or prevent a merger or acquisition of us that a stockholder might consider is in its best interest, including those attempts that might result in a premium over the prevailing market price of the common stock.

In addition, our Amended and Restated Certificate of Incorporation provide for certain other provisions that may have an anti-takeover effect:

- There is no cumulative voting with respect to the election of directors.
- Our Board is empowered to elect a director to fill a vacancy created by the expansion of the Board or the resignation, death, or removal of a director
 in certain circumstances.
- Directors may only be removed from the Board for cause.

- Our Board will be classified into three classes of directors. As a result, in most circumstances, a person can gain control of our Board by successfully
 engaging in a proxy contest at two or more annual meetings.
- A prohibition on stockholder action by written consent, which forces stockholder action to be taken at an annual or special meeting of our stockholders.
- A prohibition on stockholders calling a special meeting and the requirement that a meeting of stockholders may only be called by members of our Board, which may delay the ability of our stockholders to force consideration of a proposal or to take action, including the removal of directors.
- Our authorized but unissued common stock and preferred stock are available for future issuances without stockholder approval and could be utilized for a variety of corporate purposes, including future offerings to raise additional capital, acquisitions and employee benefit plans. Our Board is entitled, without further stockholder approval, to designate one or more series of preferred stock and the associated voting rights, preferences and privileges of such series of preferred stock. The existence of authorized but unissued and unreserved common stock and preferred stock could render more difficult or discourage an attempt to obtain control of us by means of a proxy contest, tender offer, merger or otherwise.

Forum Selection Clause

Our Amended and Restated Certificate of Incorporation includes a forum selection clause. The Amended and Restated Certificate of Incorporation provides that, subject to limited exceptions, the Court of Chancery of the State of Delaware and federal court within the State of Delaware will be exclusive forums for any

- derivative action or proceeding brought on our behalf;
- action asserting a claim of breach of a fiduciary duty owed by, or other wrongdoing by, any of our directors, officers, stockholders, employees or agents to us or our stockholders;
- action asserting a claim against us or any of our directors, officers, stockholders, employees or agents arising pursuant to any provision of the DGCL, our Amended and Restated Certificate of Incorporation or Bylaws or as to which the DGCL confers jurisdiction on the Court of Chancery of the State of Delaware:
- · action to interpret, apply, enforce or determine the validity of our Amended and Restated Certificate of Incorporation or the Bylaws; or
- other action asserting a claim against us or any of our directors, officers, stockholders, employees or agents that is governed by the internal affairs
 doctrine.

This choice of forum provision does not apply to actions brought to enforce a duty or liability created by the Exchange Act or any other claim for which federal courts have exclusive jurisdiction. Furthermore, in accordance with our Bylaws, unless we consent in writing to the selection of an alternative forum, the federal district courts of the United States will be, to the fullest extent permitted by law, the exclusive forum for the resolution of any complaint asserting a cause of action arising under the Securities Act. We intend for this provision to apply to any complaints asserting a cause of action under the Securities Act despite the fact that Section 22 of the Securities Act creates concurrent jurisdiction for the federal and state courts over all actions brought to enforce any duty or liability created by the Securities Act or the rules and regulations promulgated thereunder. Please see "Risk Factors — The Amended and Restated Certificate of Incorporation designates the Court of Chancery of the State of Delaware and federal court within the State of Delaware as the exclusive forum for certain types of actions and proceedings that our stockholders may initiate, which could limit a stockholder's ability to obtain a favorable judicial forum for disputes with us or our directors, officers or employees." for additional information.

Rule 144 and Restrictions on the Use of Rule 144 by Shell Companies or Former Shell Companies

In general, Rule 144 of the Securities Act, which we refer to as "Rule 144", permits the resale of restricted securities without registration under the Securities Act if certain conditions are met. Rule 144 is not available for the resale of restricted securities initially issued by shell companies (other than business combination related shell

companies) or issuers that have been at any time previously a shell company, including us. However, Rule 144 also includes an important exception to this prohibition if the following conditions are met at the time of such resale:

- the issuer of the securities that was formerly a shell company has ceased to be a shell company;
- the issuer of the securities is subject to the reporting requirements of Section 13 or 15(d) of the Exchange Act;
- the issuer of the securities has filed all Exchange Act reports and material required to be filed, as applicable, during the preceding 12 months (or such shorter period that the issuer was required to file such reports and materials), other than Form 8-K reports; and
- at least one year has elapsed from the time that the issuer filed current Form 10 type information with the SEC reflecting its status as an entity that is not a shell company.

We anticipate that following the consummation of the Business Combination, we will no longer be a shell company, and as long as the conditions set forth in the exceptions listed above are satisfied, Rule 144 will become available for the resale of our restricted securities.

If the above conditions have been met and Rule 144 is available, a person who has beneficially owned restricted shares of our common stock or warrants for at least one year would be entitled to sell their securities pursuant to Rule 144, *provided* that such person is not deemed to have been one of our affiliates at the time of, or at any time during the three months preceding, a sale. If such persons are our affiliates at the time of, or at any time during the three months preceding, a sale, such persons would be subject to additional restrictions, by which such person would be entitled to sell within any three-month period only a number of securities that does not exceed the greater of:

- 1% of the total number of shares of common stock or warrants, as applicable, then outstanding; or
- the average weekly reported trading volume of the common stock or warrants, as applicable, during the four calendar weeks preceding the filing of a
 notice on Form 144 with respect to the sale.

Sales by affiliates under Rule 144, when available, will also limited by manner of sale provisions and notice requirements.

As of July 22, 2021, we had 240,190,402 shares of common stock outstanding, of which 44,264,812 shares are freely tradable without restriction or further registration under the Securities Act, except for any shares purchased by one of our affiliates. All of the 11,068,750 Founder Shares owned by our Initial Stockholders are restricted securities under Rule 144, in that they were issued in private transactions not involving a public offering. In connection with the Business Combination, the PIPE Investors purchased an aggregate of 35,000,000 shares of common stock at \$10.00 per share, for an aggregate purchase price of \$350,000,000. The issuance of the common stock in this PIPE Financing was not registered under the Securities Act, and instead was issued in reliance upon the exemption provided in Section 4(a)(2) of the Securities Act. We granted the PIPE Investors certain customary registration rights.

As of the Closing, there were 21,995,000 of our warrants outstanding, consisting of 14,758,333 public warrants originally sold as part of the units issued in the CMLS IPO and 7,236,667 private placement warrants that were sold by us to the Sponsor and certain of the other Initial Stockholders in a private sale concurrently with the CMLS IPO. Each warrant is exercisable for three-quarters of one share of our common stock, in accordance with the terms of the warrant agreement governing the warrants. The public warrants and are freely tradable, except for any warrants purchased by one of our affiliates within the meaning of Rule 144 under the Securities Act.

We expect Rule 144 to be available for the resale of the above noted restricted securities as long as the conditions set forth in the exceptions listed above are satisfied following the Business Combination.

Registration Rights

CMLS Registration Rights

The holders of the Founder Shares, private placement warrants (and any shares of common stock issuable upon the exercise of the private placement warrants), and securities that may be issued upon conversion of working capital loans are entitled to registration rights pursuant to a registration rights agreement signed February 9, 2021, requiring us to register such securities for resale. The holders of the majority of these securities are entitled to make up to three demands, excluding short form demands, that we register such securities. In addition, the holders have certain "piggy-back" registration rights with respect to registration statements filed subsequent to the completion of a business combination and rights to require us to register for resale such securities pursuant to Rule 415 under the Securities Act. However, the registration rights agreement provides that we will not permit any registration statement filed under the Securities Act to become effective until termination of the applicable lock-up period. We will bear the expenses incurred in connection with the filing of any such registration statements.

Demand Registration Rights

Following the expiration of the Founder Shares Lock-Up Period, the Private Placement Lock-Up Period or any other applicable lock-up period, holders of at least a majority in interest of the then-outstanding number of registrable securities held by the holders or any holder expecting to sell registrable securities yielding aggregate gross proceeds in excess of \$50,000,000 may make a written demand for registration of all or part of their registrable securities. We will within five days of our receipt of the demand, notify, in writing all other Holders of registrable securities of such demand. Each holder who will want to participate in the registration will notify us, in writing, within five days after the receipt by the holder of the notice from us. Upon receipt by us of any such written notification from a holder(s) to us such holder(s) will be entitled to have their registrable securities included in a registration more than 60 days immediately after our receipt of the demand.

Under no circumstances will we be obligated to effect more than an aggregate of three registrations pursuant to a demand by the existing holders and an aggregate of five registrations pursuant to a demand by the new holders with respect to any or all registrable securities.

Notwithstanding the foregoing, (i) we shall not be required to give effect to a demand from a holder if we have registered registrable securities pursuant to a demand (which has become effective) from such holder in the preceding 120 days, and (ii) our obligations with respect to any demand will be deemed satisfied so long as the registration statement filed includes all of such holder's registrable securities and is effective.

Piggyback Registration Rights

If we propose to file a registration statement under the Securities Act with respect to an offering of equity securities, or securities or other obligations exercisable or exchangeable for, or convertible into equity securities, for its own account or for the account of our stockholders, other than a registration statement (a) filed in connection with any employee stock option or other benefit plan, (b) for an exchange offer or offering of securities solely to our existing stockholders, (c) for an offering solely of debt that is convertible into our equity securities, (d) for a dividend reinvestment plan, (e) for any issuances of securities in connection with a transaction involving a merger, consolidation, sale, exchange, issuance, transfer, reorganization or other extraordinary transaction between us or any of our affiliates and any third party, or (f) filed pursuant to subsection 2.1.1 of the registration rights agreement, then, we shall give written notice of such proposed filing to all of the holders of registrable securities (excluding the Sponsor with respect to any Registrable Securities (as defined in the Merger Agreement) distributed by the Sponsor to its members following the expiration of the Founder Shares Lock-up Period or the Private Placement Lock-up Period, as applicable) as soon as practicable but not less than 20 days before the anticipated filing date of such Registration Statement. This notice will offer to all of the Holders of Registrable Securities the opportunity to register the sale of such number of Registrable Securities as such Holders may request in writing within five days after receipt of such written notice.

We shall, in good faith, cause such Registrable Securities identified in a Holder's response to be included in such Piggyback Registration and shall use its commercially reasonable efforts to cause the managing underwriter or

underwriters of a proposed Underwritten Offering, if any, to permit the Registrable Securities requested by the Holders to be included in a Piggyback Registration on the same terms and conditions as any of our similar securities or our stockholder(s) for whose account the Registration Statement is to be filed included in such Registration and to permit the sale or other disposition of such Registrable Securities in accordance with the intended method(s) of distribution thereof. All such Holders proposing to distribute their Registrable Securities through an Underwritten Offering will enter into an underwriting agreement in customary form with the underwriter(s) selected for such Underwritten Offering by us.

Listing of Securities

Our common stock and warrants are listed on Nasdaq under the symbols "SMFR" and "SMFRW," respectively.

SELLING SECURITYHOLDERS

The Selling Securityholders may offer and sell, from time to time, any or all of the shares of common stock or warrants being offered for resale by this prospectus, which consists of:

- up to 35,000,000 PIPE Shares;
- up to 11,068,750 Founder Shares;
- up to 182,918,105 shares of Class A common stock issued or issuable to the Sema4 equity holders in connection with or as a result of the consummation of the Business Combination, consisting of:
 - up to 149,856,840 shares of our Class A common stock ("Sema4 Holder Shares");
 - up to 14,039,689 shares of Class A common stock issuable upon the exercise or vesting of certain equity awards ("Sema4 Holder Equity Award Shares"); and
 - up to 19,021,576 Earn-Out Shares.
- up to 7,236,667 shares of common stock issuable upon the exercise of private placement warrants; and
- up to 7,236,667 private placement warrants.

The term "Selling Securityholders" includes the securityholders listed in the tables below and their permitted transferees.

The following tables provide, as of the date of this prospectus, information regarding the beneficial ownership of our common stock and warrants of each Selling Securityholder, the number of shares of common stock and number of warrants that may be sold by each Selling Securityholder under this prospectus and that each Selling Securityholder will beneficially own after this offering.

Pursuant to the earn-out provisions of the Merger Agreement, we may issue an aggregate of up to 19,021,576 shares of common stock upon the occurrence of certain triggering events provided for in the Merger Agreement, which shares are comprised of initial Earn-Out Shares issuable to pre-closing Sema4 equity holders and shares of Class A common stock ("Earn-Out RSU Shares") issuable upon the vesting of certain RSU awards ("Earn-Out RSUs") that are expected to be granted to certain pre-closing Sema4 equity holders. As of the Closing, the initial allocation of such shares comprises up to 16,331,812 Earn-Out Shares and up to 2,689,764 Earn-Out RSU Shares. We expect to issue the Earn-Out RSUs on or after September 27, 2021. In the event any Earn-Out RSUs are forfeited following the Closing (for example, as a result of a Sema4 equity holder no longer being an employee of our company), the Merger Agreement provides for a forfeiture pool in respect of the Earn-Out RSU Shares that were originally allocated to such forfeited Earn-Out RSUs, with such Earn-Out RSU Shares becoming available for issuance to the other recipients of Earn-Out Shares and Earn-Out RSUs. In the case of a Selling Securityholder that is entitled to receive Earn-Out Shares pursuant to the Merger Agreement, the table below includes such Selling Securityholder's pro rata portion of the initial allocation of Earn-Out Shares (such Selling Securityholder's "Allocated Earn-Out Shares"), as well as such Selling Securityholder's pro rata portion of the reallocated Earn-Out RSU Shares (such Selling Securityholder's "Reallocated Earn-Out Shares"), assuming that 100% of the Earn-Out RSUs are forfeited after the Closing.

Because each Selling Securityholder may dispose of all, none or some portion of their securities, no estimate can be given as to the number of securities that will be beneficially owned by a Selling Securityholder upon termination of this offering. For purposes of the tables below, however, we have assumed that after termination of this offering none of the securities covered by this prospectus will be beneficially owned by the Selling Securityholders and further assumed that the Selling Securityholders will not acquire beneficial ownership of any additional securities during the offering. In addition, the Selling Securityholders may have sold, transferred or otherwise disposed of, or may sell, transfer or otherwise dispose of, at any time and from time to time, our securities in transactions exempt from the registration requirements of the Securities Act after the date on which the information in the tables is presented.

We may amend or supplement this prospectus from time to time in the future to update or change this Selling Securityholders list and the securities that may be resold.

Please see the section titled "Plan of Distribution" for further information regarding the Selling Securityholders' method of distributing these shares and warrants.

	Shares of Class A Common Stock						
Name	Number Beneficially Owned Prior to Offering ⁽¹⁾	Number Registered for Sale Hereby	Number Beneficially Owned After Offering	Percent Owned After Offering (2)			
Entities affiliated with Avidity (3)	950,000	950,000	_	_			
Entities affiliated with BlackRock, Inc. (4)	9,469,514	9,469,514	_	_			
Entities affiliated with Corvex (5)	4,000,000	4,000,000	_	_			
JS Capital LLC (6)	1,500,000	1,500,000	_	_			
Entities affiliated with D.E. Shaw Group (7)	200,000	200,000	_	_			
Entities affiliated with Deerfield (8)	15,069,320	15,069,320		_			
Entities managed by Driehaus Capital Management LLC (9)	1,000,000	1,000,000		_			
Entities affiliated with Fidelity (10)	2,500,000	2,500,000	_	_			
Entities affiliated with Morgan Stanley (11)	2,000,000	2,000,000	_	_			
Entities affiliated with Moore (12)	1,619,851	1,619,851	_	_			
M. Munib Z. Islam (13)	291,666	291,666	_	_			
Perceptive Life Sciences Master Fund (14)	2,500,000	2,500,000	_	_			
Entities affiliated with RTW (15)	400,000	400,000	_	_			
Entities affiliated with Sachem Head (16)	500,000	500,000	_	_			
SB Northstar LP (17)	2,500,000	2,500,000	_	_			
Entities affiliated with T. Rowe Price Associates, Inc. (18)	750,000	750,000	_	_			
Entities affiliated with Third Point Loan LLC (19)	1,500,000	1,500,000	_	_			
TBC 222 LLC (20)	300,000	300,000	_	_			
GCT Investment Holdings LLC (21)	300,000	300,000	_	_			
Entities affiliated with Viking Global (22)	3,000,000	3,000,000	_	_			
Icahn School of Medicine at Mount Sinai (23)	99,952,671	99,952,671	_	_			
Entities affiliated with Blackstone (24)	28,345,879	28,345,879	_	_			
Section 32 Fund 2, L.P. (25)	8,268,643	8,268,643	_	_			
Oak HC/FT Partners II, L.P. ⁽²⁶⁾	6,302,462	6,302,462	_	_			
Decheng Capital China Life Sciences USD Fund III, L.P. (27)	3,795,012	3,795,012	_	_			
Connecticut Innovations, Incorporated (28)	588,722	588,722	_	_			
Joel Sendek ⁽²⁹⁾	755,957	755,957	_	_			
Mary Joy Chavez Pineda (30)	57,667	57,667	_	_			
Jyoti Roy (31)	6,186	6,186	_	_			
Wang Zichen (32)	4,295	4,295	_	_			
William Laughlin (33)	10,513	10,513	_	_			
Lauren Peters ⁽³⁴⁾	38,811	38,811	_	_			
Todd Arnold (35)	165,743	165,743	_	_			
Gregory T. Zalecki (36)	13,401	13,401	_	_			
Eunjee Lee (37)	8,934	8,934	_	_			

Shares of Class A Common Stock

		Shares of Cla	ss A Common Stock	
Name	Number Beneficially Owned Prior to Offering ⁽¹⁾	Number Registered for Sale Hereby	Number Beneficially Owned After Offering	Percent Owned After Offering (2)
Amanda B. Zheutlin (38)	643	643		
Shinichiro J. Takiguchi (39)	3,486	3,486	_	_
R. Martin Chavez (40)	183,187	183,187	_	_
Ling Feng Pu (41)	6,701	6,701		- —
Mitchell Dillon (42)	857	857		
Ming Xue (43)	8,934	8,934	_	_
Rong Chen (44)	4,811	4,811	_	_
Meng Ma ⁽⁴⁵⁾	13,744	13,744	_	_
Richie Casimir (46)	1,786	1,786	_	_
Dalia Herrera ⁽⁴⁷⁾	1,526	1,526	_	_
Kathleen Moscarda-Cruz (48)	1,786	1,786	_	_
Xin Sui (49)	6,701	6,701	_	_
Huan Wang (50)	6,872	6,872	_	_
Kejian Zhang (51)	38,518	38,518	_	_
Avram Billig ⁽⁵²⁾	5,498	5,498	_	_
Carol R. Gottesman (53)	2,680	2,680	_	_
Emmett Higgins (54)	6,443	6,443	_	_
Shilong Li (55)	566	566	_	_
Olga Lukatskaya ⁽⁵⁶⁾	6,701	6,701	_	_
Milind C. Mahajan (57)	50,859	50,859	_	_
Frank Makosiej ⁽⁵⁸⁾	5,151	5,151	_	_
Sanjaya W. Punyasena ⁽⁵⁹⁾	11,371	11,371	_	_
Molly Madden (60)	2,680	2,680	_	_
Bino Mathew (61)	8,248	8,248	_	_
Daniel Sisco (62)	20,619	20,619	_	_
Patricia Taik ⁽⁶³⁾	4,467	4,467	_	_
Anthony Prentice (64)	2,178,183	2,178,183	_	_
Daniel Clark (65)	1,400,191	1,400,191	_	_
Eric Schadt (66)	7,440,351	7,440,351	_	_
James M. Coffin (67)	2,726,477	2,726,477	_	_
Karen White ⁽⁶⁸⁾	90,174	90,174	_	_
Rachel Sherman (69)	204,313	204,313	_	_
Eli D. Casdin ⁽⁷⁰⁾	22,730,419	22,730,419		— %
Nat Turner (71)	191,666	191,666	_	_
Emily Leproust (72)	191,666	191,666		
TOTALS	236,223,522	236,223,522	_	_

Warrants to Purchase Common Stock

Name	Number Beneficially Owned Prior to Offering	Number Registered for Sale Hereby	Number Beneficially Owned After Offering	Percent Owned After Offering (2)
CMLS Holdings LLC (70)	6,736,669	6,736,669	_	_
Nat Turner ⁽⁷¹⁾	166,666	166,666	_	_
Emily Leproust (72)	166,666	166,666	_	_
M. Munib Z. Islam (13)	166,666	166,666	_	_
TOTALS	7,236,667	7,236,667	_	_

* Less than 1%

- (1) The first table includes PIPE Shares, Founder Shares, Sema4 Holder Shares, Sema4 Holder Equity Award Shares (including both shares beneficially owned as determined in accordance with Rule 13d-3 of the Exchange Act and additional shares underlying options to purchase common stock or RSUs which may be exercisable or vest within one year following the Closing), Earn-Out Shares (includes both shares beneficially owned as determined in accordance with Rule 13d-3 of the Exchange Act and shares which the holder has a contingent right to receive), and shares of common stock issuable upon exercise of the private placement warrants, and the second table includes the private placement warrants included in this table (collectively, the "Resale Securities"). We do not know when or in what amounts the Selling Securityholders will offer the Resale Securities for sale, if at all.
- The percentage of shares or warrants to be beneficially owned after completion of the offering is calculated on the basis of 53,305,417 shares of Class A common stock outstanding, assuming the issuance of all Earn-Out Shares, and the exercise of all currently outstanding warrants, and the sale of all Resale Securities by the selling securityholders.
 Shares hereby offered consist of 107,000 PIPE Shares held by Avidity Capital Fund II LP ("Avidity Capital") and 843,000 PIPE Shares held by Avidity Master Fund LP ("Avidity Master") as
- (3) Shares hereby offered consist of 107,000 PIPE Shares held by Avidity Capital Fund II LP ("Avidity Capital") and 843,000 PIPE Shares held by Avidity Master Fund LP ("Avidity Master") as of the close of business on July 22, 2021.
- Shares hereby offered consist of 169,202 PIPE Shares held by Blackrock Capital Allocation Trust, 221,910 Sema4 Holder Shares, 92,813 PIPE Shares and 24,410 Earn-out Shares (consisting of 20,957 Allocated Earn-Out Shares and 3,453 Reallocated Earn-Out Shares) held by BlackRock Global Allocation Collective Fund, 36,407 Sema4 Holder Shares and 4,005 Earn-out Shares (consisting of 3,438 Allocated Earn-Out Shares and 567 Reallocated Earn-Out Shares) held by BlackRock Global Allocation Fund (Australia), 2,124,370 Sema4 Holder Shares, 929,830 PIPE Shares and 233,680 Earn-out Shares (consisting of 200,637 Allocated Earn-Out Shares and 33,043 Reallocated Earn-Out Shares) held by BlackRock Global Allocation Fund, Inc., 16,717 Sema4 Holder Shares, 7,236 PIPE Shares and 1,840 Earn-out Shares (consisting of 1,579 Allocated Earn-Out Shares and 261 Reallocated Earn-Out Shares) held by BlackRock Global Allocation Portfolio of BlackRock Series Fund, Inc., 743,993 Sema4 Holder Shares, 308,766 PIPE Shares and 81,840 Earn-out Shares (consisting of 70,268 Allocated Earn-Out Shares and 11,572 Reallocated Earn-Out Shares) held by BlackRock Global Allocation V.I. Fund of BlackRock Variable Series Funds, Inc., 1,284,776 Sema4 Holder Shares, 574,384 PIPE Shares and 141,325 Earn-out Shares (consisting of 121,342 Allocated Earn-Out Shares and 19,983 Reallocated Earn-Out Shares) held by BlackRock Global Funds - Global Allocation Fund, 112,069 Sema4 Holder Shares, 22,482 PIPE Shares and 12,328 Earn-out Shares (consisting of 10,584 Allocated Earn-Out Shares and 1,744 Reallocated Earn-Out Shares) held by BlackRock Global Funds - Global Dynamic Equity Fund, 1,513,373 Sema4 Holder Shares, 645,287 PIPE Shares and 166,471 Earn-out Shares (consisting of 142,931 Allocated Earn-Out Shares) held by BlackRock Strategic Income Opportunities Portfolio of BlackRock Funds V. The registered holders of the referenced shares to be registered are the following funds and accounts under management by subsidiaries of BlackRock, Inc.: BlackRock Strategic Income Opportunities Portfolio of BlackRock Funds V; BlackRock Global Allocation Collective Fund; BlackRock Global Funds - Global Dynamic Equity Fund; BlackRock Global Allocation Portfolio of BlackRock Series Fund, Inc.; BlackRock Global Allocation Fund, Inc.; BlackRock Global Funds - Global Allocation Fund; BlackRock Global Allocation V.I. Fund of BlackRock Variable Series Funds, Inc.; and BlackRock Global Allocation Fund (Aust). BlackRock, Inc. is the ultimate parent holding company of such subsidiaries. On behalf of such subsidiaries, the applicable portfolio managers, as managing directors (or in other capacities) of such entities, and/or the applicable investment committee members of such funds and accounts, have voting and investment power over the shares held by the funds and accounts which are the registered holders of the referenced shares. Such portfolio managers and/or investment committee members expressly disclaim beneficial ownership of all shares held by such funds and accounts. The address of such funds and accounts, such subsidiaries and such portfolio managers and/or investment committee members is 55 East 52nd Street, New York, NY 10055. Shares shown include only the securities being registered for resale and may not incorporate all shares deemed to be beneficially held by the registered holders or BlackRock, Inc.
- (5) Shares hereby offered consist of 64,000 PIPE Shares held by Corvex Dynamic Equity Select Master Fund LP ("Corvex Dynamic Fund"), 240,000 PIPE Shares held by Corvex Master Fund LP ("Corvex Master Fund") as of the close of business on July 22, 2021.
- (6) Shares hereby offered consist of 1,500,000 PIPE Shares held by JS Capital LLC.
- (7) Shares hereby offered consist of 50,000 PIPE Shares held by D. E. Shaw Oculus Portfolios, L.L.C. and 150,000 PIPE Shares held by D. E. Shaw Valence Portfolios, L.L.C. (together with D. E. Shaw Oculus Portfolios, L.L.C., the "D. E. Shaw Entities") as of the close of business on July 22, 2021. Each of the D. E. Shaw Entities has the power to vote or to direct the vote of (and the power to dispose or direct the disposition of) the shares directly owned by it. D. E. Shaw & Co., L.P. ("DESCO LP"), as the investment adviser of the D. E. Shaw Entities, may be deemed to have the shared power to vote or direct the vote of (and the shared power to dispose or direct the disposition of) the shares owned by the D. E. Shaw Entities. D. E. Shaw & Co., L.L.C. ("DESCO LLC"), as the manager of the D. E. Shaw Entities, may be deemed to have the shared power to vote or direct the vote of (and the shared power to dispose or direct the disposition of) the shares owned

by the D. E. Shaw Entities. Julius Gaudio, Maximilian Stone, and Eric Wepsic, or their designees, exercise voting and investment control over the shares owned by the D. E. Shaw Entities on DESCO LP's and DESCO LLC's behalf. D. E. Shaw & Co., Inc. ("DESCO Inc."), as general partner of DESCO LP, may be deemed to have the shared power to vote or direct the vote of (and the shared power to dispose or direct the disposition of) the shared power to vote or direct the vote of (and the shared power to dispose or direct the disposition of) the shares owned by the D. E. Shaw Entities. Desco LLC, may be deemed to have the shared power to vote or direct the vote of (and the shared power to dispose or direct the disposition of) the shares owned by the D. E. Shaw Entities. David E. Shaw does not own any shares of the Company directly, and each such entity disclaims beneficial ownership of the shares owned by the D. E. Shaw Entities. David E. Shaw does not own any shares of the Company directly. By virtue of David E. Shaw's position as President and sole shareholder of DESCO Inc., which is the general partner of DESCO LP, and by virtue of David E. Shaw's position as President and sole shareholder of DESCO LLC, David E. Shaw may be deemed to have the shared power to vote or direct the vote of (and the shared power to dispose or direct the disposition of) the shares owned by the D. E. Shaw Entities. David E. Shaw may be deemed to be the beneficial ownership of the shares owned by the D. E. Shaw Entities.

- (8) Shares hereby offered consist of 1,375,000 PIPE Shares, 5,549,244 Sema4 Holder Shares and 610,416 Earn-out Shares (consisting of 524,100 Allocated Earn-Out Shares and 86,316 Reallocated Earn-Out Shares) held by Deerfield Partners, L.P. ("Deerfield Partners") and 1,375,000 PIPE Shares, 5,549,244 Sema4 Holder Shares and 610,416 Earn-out Shares (consisting of 524,100 Allocated Earn-Out Shares and 86,316 Reallocated Earn-Out Shares) held by Deerfield Private Design Fund V, L.P. ("Deerfield Private Design") as of the close of business on July 22, 2021.
- (9) Shares hereby offered consist of 489,000 PIPE Shares held by Destinations Multi Strategy Alternatives Fund, a series of Brinker Capital Destinations Trust ("Destination"), 67,000 PIPE Shares held by Driehaus Event Driven Fund, a series of Driehaus Multual Funds ("Driehaus Event Driven Fund") and 444,000 PIPE Shares held by Driehaus Life Sciences Master Fund, L.P. ("Driehaus Life Sciences Fund") as of the close of business on July 22, 2021.
- (10) Shares hereby offered consist of 518,000 PIPE Shares held by Mag & Co fbo Fidelity Securities Fund: Fidelity Blue Chip Growth Fund, 18,500 PIPE Shares held by Fidelity Blue Chip Growth Commingled Pool, 1,200 PIPE Shares held by Booth & Co FBO Fidelity Securities Fund: Fidelity Flex Large Cap Growth Fund, 57,700 PIPE Shares held by Booth & Co FBO Fidelity Securities Fund: Fidelity Blue Chip Growth Fund, 57,700 PIPE Shares held by Booth & Co FBO Fidelity Securities Fund: Fidelity Series Blue Chip Growth Fund, 41,100 PIPE Shares held by FLAPPER CO fbo Fidelity Blue Chip Growth Commingled Pool, 136,000 PIPE Shares held by Fidelity Mt. Vernon Street Trust: Fidelity Series Blue Chip Growth Company Fund, 641,900 PIPE Shares held by Powhatan & Co., LLC fbo Fidelity Mt. Vernon Street Trust: Fidelity Growth Company Fund, 649,200 PIPE Shares held by Mag & Co fbo Fidelity Growth Company Commingled Pool, 99,400 PIPE Shares held by Powhatan & Co., LLC fbo Fidelity Mt. Vernon Street Trust: Fidelity Growth Company K6 Fund, 30,200 PIPE Shares held by Booth & Co., LLC fbo Variable Insurance Products Fund III: Growth Opportunities Portfolio, 217,600 PIPE Shares held by Mag & Co fbo Fidelity Advisor Series I: Fidelity Advisor Growth Opportunities Fund, 7,600 PIPE Shares held by WARMWIND + CO fbo Fidelity Advisor Series I: Fidelity Advisor Series Growth Opportunities Fund, 2,800 PIPE Shares held by THISBE & CO fbo Fidelity U.S. Growth Opportunities Investment Trust, and 17,187 PIPE Shares held by THISBE & CO fbo Fidelity NorthStar Fund as of the close of business on July 22, 2021.
- (11) Shares hereby offered consist of 595,228 PIPE Shares held by Inception Trust ("MSIM Inception Trust"), 1,079,306 PIPE Shares held by Morgan Stanley Institutional Fund, Inc. Inception Portfolio ("MSIM MSIF Inception"), 2,349 PIPE Shares held by Morgan Stanley Institutional Fund, Inc. Counterpoint Global Portfolio ("MSIM MSIF Counterpoint"), 322,168 PIPE Shares held by EQ Advisors Trust EQ/Morgan Stanley Small Cap Growth Portfolio ("MSIM EQ Advisors") and 949 PIPE Shares held by Morgan Stanley Investment Funds Counterpoint Global Fund ("MSIM MSINVF Counterpoint") as of the close of business on July 22, 2021.
- (12) Shares hereby offered consist of 500,000 PIPE Shares held by MMF LT LLC ("MMF"), 1,008,874 Sema4 Holder Shares, and 110,977 Earn-out Shares (consisting of 95,283 Allocated Earn-Out Shares and 15,694 Reallocated Earn-Out Shares) held by Moore Strategic Ventures, LLC ("Moore Ventures") as of the close of business on July 22, 2021. Moore Capital Management, LP ("MCM LP"), the investment manager of MMF, has voting and investment control over the shares held by MMF. Louis M. Bacon controls the general partner of MCM LP and may be deemed the beneficial owner of the shares held by MMF. Mr. Bacon is also the indirect majority owner of MSV LLC, has voting and investment control over the shares held by MSV LLC, and may be deemed the beneficial owner of the shares held by MSV LLC. The address of MMF, MCM LP, MSV LLC and Mr. Bacon is 11 Times Square, 38th Floor, New York, New York 10036.
- (13) For purposes of the first table, shares hereby offered consist of 100,000 PIPE Shares and 166,666 shares of common stock underlying warrants that will become exercisable within 60 days of the Closing held by M. Munib Z. For the purposes of the second table, consists of 166,666 warrants. The first table assumes the exercise in full of the warrants held by M. Munib Z., and the second table assumes no exercise of the warrants held by M. Munib Z.
- (14) Shares hereby offered consist of 2,500,000 PIPE Shares held by Perceptive Life Sciences Master Fund.
- (15) Shares hereby offered consist of 400,000 PIPE Shares held by the entities affiliated with RTW as of the close of business on July 22, 2021. "RTW" means RTW Innovation Master Fund, Ltd., RTW Master Fund, Ltd., and RTW Venture Fund Limited.
- (16) Shares hereby offered consist of 297,650 PIPE Shares held by Sachem Head LP and 202,350 PIPE Shares held by Sachem Head Master LP as of the close of business on July 22, 2021.
- (17) Shares hereby offered consist of 2,500,000 PIPE Shares held by SB Northstar LP. SB Management Limited is the investment manager of SB Northstar LP and as such may be deemed to have voting and investment power over the securities held by SB Northstar LP. SB Management Limited is owned by Softbank Group Corp. The principal business address of SB Northstar LP is 190 Elgin Avenue, George Town, Grand Cayman KY1-9008, Cayman Islands.
- (18) Shares hereby offered consist of 666,431 PIPE Shares held by T. Rowe Price Health Sciences Fund ("T. Rowe Health Sciences Fund"), 53,808 PIPE Shares held by TD Mutual Funds TD Health Sciences Fund ("TD Health Sciences Fund") and 29,761 PIPE Shares held by T. Rowe Price Health Sciences Portfolio ("T. Rowe Health Sciences Portfolio") as of the close of business on July 22, 2021.
- (19) Shares hereby offered consist of 1,500,000 PIPE Shares held by Third Point Loan LLC. ("TP Loan"). TP Loan holds the securities listed herein as nominee for funds managed and/or advised by Third Point LLC (Third Point") and not in its individual capacity. Daniel S. Loeb is the Chief Executive Officer of Third Point. By reason of the provisions of Rule 13d-3 under the Securities Exchange Act of 1934, as

amended, Third Point and Mr. Loeb may be deemed to be the beneficial owners of the securities beneficially owned by TP Loan. Third Point and Mr. Loeb hereby disclaim beneficial ownership of all such securities, except to the extent of any indirect pecuniary interest therein. The business address for Mr. Loeb and the entities identified in this footnote is c/o Third Point LLC, 55 Hudson Yards, 51st Floor, New York, NY 10001.

- (20) Shares hereby offered consist of 300,000 PIPE Shares held by TBC 222 LLC.
- (21) Shares hereby offered consist of 300,000 PIPE Shares held by GCT Investment Holdings LLC.
 (22) Shares hereby offered consist of 2,187,500 PIPE Shares held by Viking Global Equities Master Ltd. ("VGEM"), 44,643 PIPE Shares held by Viking Global Equities II LP ("VGE II") and 767,857 PIPE Shares held by Viking Long Fund Master Ltd. ("VLFM" and together with VGEM and VGE II, the "Viking Funds") as of business on July 22, 2021. O. Andreas Halvorsen, David C. Ott and Rose S. Shabet are Executive Committee members of certain management entities, including Viking Global Partners LLC, the general partner of Viking Global Investors LP ("VGI"), Viking Global Performance LLC ("VGP") and Viking Long Fund GP LLC ("VLFGP"). VGI provides managerial services to various investment funds, including each of the Viking Funds. VGP serves as the investment manager of VGEM and is the general partner of VGE II. VLFGP serves as the investment manager of VLFM. Each of the Viking Funds, VGI, VGP, VLFGP, Mr. Halvorsen, Mr. Ott and Ms. Shabet may be deemed to beneficially own the shares reported in this prospectus.
- (23) Shares hereby offered consist of 88,355,473 Sema4 Holder Shares and 11,597,198 Earn-out Shares (consisting of 9,957,284 Allocated Earn-Out Shares and 1,639,914 Reallocated Earn-Out Shares). The shares are held by ISMMS, a New York Education Corporation. The responsibility and authority for the voting and investment decisions with respect to the shares held by ISMMS is vested in those persons who from time to time are the executive officers of ISMMS under the oversight and direction of its board of directors and its sole member, Mount Sinai Health System, Inc., a New York Not-for-Profit Corporation. The address for Icahn School of Medicine at Mount Sinai is One Gustave L. Levy Place, New York, New York 10029.
- (24) Shares hereby offered consist of 24,404,324 Sema4 Holder Shares and 3,203,218 Earn-out Shares (consisting of 2,750,264 Allocated Earn-Out Shares and 452,954 Reallocated Earn-Out Shares) held by BTO Sema4 Holdings L.P. ("BTO Sema4 Holdings"), 505,095 Sema4 Holder Shares and 66,297 Earn-out Shares (consisting of 56,922 Allocated Earn-Out Shares and 9,375 Reallocated Earn-Out Shares) held by Blackstone Tactical Opportunities Fund - FD L.P. ("Blackstone Opportunities Fund") and 147,574 Sema4 Holder Shares and 19,371 Earn-out Shares (consisting of 16,632 Allocated Earn-Out Shares and 2,739 Reallocated Earn-Out Shares) held by Blackstone Family Tactical Opportunities Investment Partnership III ESC L.P. ("Blackstone Opportunities Partnership").
- Shares hereby offered consist of 7,449,227 Sema4 Holder Shares and 819,416 Earn-out Shares (consisting of 703,545 Allocated Earn-Out Shares and 115,871 Reallocated Earn-Out Shares).
- (26) Shares hereby offered consist of 5,571,207 Sema4 Holder Shares and 731,255 Earn-Out Shares (consisting of 627,851 Allocated Earn-Out Shares and 103,404 Reallocated Earn-Out Shares).
- (27) Shares hereby offered consist of 3,418,929 Sema4 Holder Shares and 376,083 Earn-out Shares (consisting of 322,902 Allocated Earn-Out Shares and 53,181 Reallocated Earn-Out Shares).
- (28) Shares hereby offered consist of 530,380 Sema4 Holder Shares and 58,342 Earn-out Shares (consisting of 50,093 Allocated Earn-Out Shares and 8,249 Reallocated Earn-Out Shares). (29) Shares hereby offered consist of 681,043 Sema4 Holder Shares and 74,914 Earn-out Shares (consisting of 64,321 Allocated Earn-Out Shares and 10,593 Reallocated Earn-Out Shares).
- (30) Shares hereby offered consist of 51,172 Sema4 Holder Shares and 6,495 Earn-out Shares (consisting of 5,578 Allocated Earn-Out Shares and 917 Reallocated Earn-Out Shares).
- (31) Shares hereby offered consist of 5,572 Sema4 Holder Shares and 614 Earn-out Shares (consisting of 527 Allocated Earn-Out Shares and 87 Reallocated Earn-Out Shares).
- Shares hereby offered consist of 3,869 Sema4 Holder Shares and 426 Earn-Out Shares Earn-Out Shares (consisting of 366 Allocated Earn-Out Shares and 60 Reallocated Earn-Out Shares).
- (33) Shares hereby offered consist of 9,470 Sema4 Holder Shares and 1,043 Earn-out Shares Earn-Out Shares (consisting of 894 Allocated Earn-Out Shares and 149 Reallocated Earn-Out Shares).
- (34) Shares hereby offered consist of 34,965 Sema4 Holder Shares and 3,846 Earn-out Shares (consisting of 3,303 Allocated Earn-Out Shares and 543 Reallocated Earn-Out Shares).
- (35) Shares hereby offered consist of 146.512 Sema4 Holder Shares and 19.231 Earn-out Shares Earn-Out Shares (consisting of 16.512 Allocated Earn-Out Shares and 2.719 Reallocated Earn-Out Shares E
- Shares hereby offered consist of 12,073 Sema4 Holder Shares and 1,328 Earn-out Shares (consisting of 1,139 Allocated Earn-Out Shares and 189 Reallocated Earn-Out Shares).
- (37) Shares hereby offered consist of 8,049 Sema4 Holder Shares and 885 Earn-out Shares (consisting of 761 Allocated Earn-Out Shares and 124 Reallocated Earn-Out Shares).
- (38) Shares hereby offered consist of 580 Sema4 Holder Shares and 63 Earn-out Shares (consisting of 54 Allocated Earn-Out Shares and 9 Reallocated Earn-Out Shares).
- (39) Shares hereby offered consist of 3,141 Sema4 Holder Shares and 345 Earn-out Shares Earn-Out Shares (consisting of 297 Allocated Earn-Out Shares and 48 Reallocated Earn-Out Shares). (40) Shares hereby offered consist of 161,933 Sema4 Holder Shares and 21,254 Earn-out Shares (consisting of 18,250 Allocated Earn-Out Shares and 3,004 Reallocated Earn-Out Shares).
- (41) Shares hereby offered consist of 6,036 Sema4 Holder Shares and 665 Earn-out Shares (consisting of 570 Allocated Earn-Out Shares and 95 Reallocated Earn-Out Shares).
- (42) Shares hereby offered consist of 773 Sema4 Holder Shares and 84 Earn-out Shares (consisting of 72 Allocated Earn-Out Shares and 12 Reallocated Earn-Out Shares).
- Shares hereby offered consist of 8,049 Sema4 Holder Shares and 885 Earn-out Shares (consisting of 761 Allocated Earn-Out Shares and 124 Reallocated Earn-Out Shares).
- (44) Shares hereby offered consist of 4,334 Sema4 Holder Shares and 477 Earn-Out Shares Earn-Out Shares (consisting of 410 Allocated Earn-Out Shares and 67 Reallocated Earn-Out Shares).

- (45) Shares hereby offered consist of 12,383 Sema4 Holder Shares and 1,361 Earn-out Shares (consisting of 1,169 Allocated Earn-Out Shares and 192 Reallocated Earn-Out Shares).
- (46) Shares hereby offered consist of 1,609 Sema4 Holder Shares and 177 Earn-out Shares Earn-Out Shares (consisting of 153 Allocated Earn-Out Shares and 24 Reallocated Earn-Out Shares).
- Shares hereby offered consist of 1,349 Sema4 Holder Shares and 177 Earn-out Shares (consisting of 153 Allocated Earn-Out Shares and 24 Reallocated Earn-Out Shares).
- (48) Shares hereby offered consist of 1,609 Sema4 Holder Shares and 177 Earn-out Shares (consisting of 153 Allocated Earn-Out Shares and 24 Reallocated Earn-Out Shares).
 (49) Shares hereby offered consist of 6,036 Sema4 Holder Shares and 665 Earn-Out Shares Earn-Out Shares (consisting of 570 Allocated Earn-Out Shares and 95 Reallocated Earn-Out Shares).
- (50) Shares hereby offered consist of 6,191 Sema4 Holder Shares and 681 Earn-out Shares (consisting of 585 Allocated Earn-Out Shares and 96 Reallocated Earn-Out Shares)
- (51) Shares hereby offered consist of 34,049 Sema4 Holder Shares and 4,469 Earn-out Shares (consisting of 3,837 Allocated Earn-Out Shares and 632 Reallocated Earn-Out Shares)
- (52) Shares hereby offered consist of 4,953 Sema4 Holder Shares and 545 Earn-out Shares (consisting of 468 Allocated Earn-Out Shares and 77 Reallocated Earn-Out Shares).
- (53) Shares hereby offered consist of 2,414 Sema4 Holder Shares and 266 Earn-out Shares (consisting of 228 Allocated Earn-Out Shares and 38 Reallocated Earn-Out Shares).
- (54) Shares hereby offered consist of 5,805 Sema4 Holder Shares and 638 Earn-out Shares (consisting of 548 Allocated Earn-Out Shares and 90 Reallocated Earn-Out Shares)
- (55) Shares hereby offered consist of 503 Sema4 Holder Shares and 63 Earn-out Shares Earn-Out Shares (consisting of 54 Allocated Earn-Out Shares and 9 Reallocated Earn-Out Shares).
- (56) Shares hereby offered consist of 6,036 Sema4 Holder Shares and 665 Earn-out Shares (consisting of 570 Allocated Earn-Out Shares and 95 Reallocated Earn-Out Shares).
- (57) Shares hereby offered consist of 45,818 Sema4 Holder Shares and 5,041 Earn-out Shares (consisting of 4,328 Allocated Earn-Out Shares and 713 Reallocated Earn-Out Shares).
- (58) Shares hereby offered consist of 4,641 Sema4 Holder Shares and 510 Earn-out Shares (consisting of 438 Allocated Earn-Out Shares and 72 Reallocated Earn-Out Shares). Shares hereby offered consist of 10,244 Sema4 Holder Shares and 1,127 Earn-out Shares Earn-Out Shares (consisting of 968 Allocated Earn-Out Shares and 159 Reallocated Earn-Out Shares).
- (60) Shares hereby offered consist of 2,414 Sema4 Holder Shares and 266 Earn-out Shares (consisting of 228 Allocated Earn-Out Shares and 38 Reallocated Earn-Out Shares).
- (61) Shares hereby offered consist of 7,430 Sema4 Holder Shares and 818 Earn-out Shares (consisting of 701 Allocated Earn-Out Shares and 117 Reallocated Earn-Out Shares). (62) Shares hereby offered consist of 18,575 Sema4 Holder Shares and 2,044 Earn-out Shares (consisting of 1,754 Allocated Earn-Out Shares and 290 Reallocated Earn-Out Shares).
- (63) Shares hereby offered consist of 4,024 Sema4 Holder Shares and 443 Earn-out Shares (consisting of 380 Allocated Earn-Out Shares and 63 Reallocated Earn-Out Shares).
- (64) Shares hereby offered consist of 2,178,183 shares underlying options to purchase common stock that are exercisable within one year of the Closing.
- (65) Shares hereby offered consist of 1,400,191 shares underlying options to purchase common stock that are exercisable within one year of the Closing.
- Shares hereby offered consist of 7,440,351 shares underlying options to purchase common stock that are exercisable within one year of the Closing. Mr. Schadt is member of Sema4 Holdings' board of directors.
- (67) Shares hereby offered consist of 2,726,477 shares underlying options to purchase common stock that are exercisable within one year of the Closing.
- (68) Shares hereby offered consist of 90,174 shares underlying options to purchase common stock that are exercisable within one year of the Closing.
- (69) Shares hereby offered consist of 204,313 shares underlying options to purchase common stock that are exercisable within one year of the Closing. Ms. Sherman is member of Sema4 Holdings'
- (70) For the purposes of the first table, shares hereby consists of 5,000,000 PIPE Shares held by Casdin Partners Master Fund L.P., and 10,993,750 Founder Shares and 6,736,669 shares of common stock underlying warrants that will become exercisable within 60 days of the Closing held indirectly by the Sponsor. For the purposes of the second table, consists of 6,736,669 warrants held indirectly by the Sponsor. The first table assumes the exercise in full of the warrants held by the Sponsor, and the second table assumes no exercise of the warrants held by the Sponsor. The Board of Managers of the Sponsor, or CMLS Holdings LLC, is comprised of Mr. Eli Casdin and Mr. Keith Meister who share voting and investment discretion with respect to the common stock held of record by CMLS Holdings LLC. Mr. Casdin is a member of Sema4 Holdings' board of directors. C-LSH LLC and M-LSH LLC are the members of CMLS Holdings LLC, and Mr. Casdin and Mr. Meister are the managing members of C-LSH LLC and M-LSH LLC, respectively. As such, each of the foregoing may be deemed to have or share beneficial ownership of the common stock held directly by CMLS Holdings LLC. The business address of the Sponsor is c/o Corvex Management LP, 667 Madison Avenue, New York, NY 10065.
- (71) For purposes of the first table, shares hereby offered consist of 166,666 shares of common stock underlying warrants that will become exercisable within 60 days of the Closing held by Nat Turner and 25,000 Founder Shares. For the purposes of the second table, consists of 166,666 warrants. The first table assumes the exercise in full of the warrants held by Mr. Turner, and the second table assumes no exercise of the warrants held by Mr. Turner is member of Sema4 Holdings' board of directors.
- (72) For purposes of the first table, shares hereby offered consist 166,666 shares of common stock underlying warrants that will become exercisable within 60 days of the Closing held by Emily Leproust and 25,000 Founder Shares. For the purposes of the second table, consists

of 166,666 warrants. The first table assumes the exercise in full of the warrants held by Ms. Leproust, and the second table assumes no exercise of the warrants held by Ms. Leproust. Ms. Leproust is member of Sema4 Holdings' board of directors.

SECURITIES ACT RESTRICTIONS ON RESALE OF OUR SECURITIES

Pursuant to Rule 144 under the Securities Act ("Rule 144"), a person who has beneficially owned shares of our common stock or warrants that were acquired from us in an unregistered, private sale ("restricted securities") for at least six months would be entitled to sell their securities provided that (i) such person is not deemed to have been an affiliate of ours at the time of, or at any time during the three months preceding, a sale and (ii) we are subject to the Exchange Act periodic reporting requirements for at least three months before the sale and have filed all required reports under Section 13 or 15(d) of the Exchange Act during the 12 months (or such shorter period as we were required to file reports) preceding the sale.

Persons who have beneficially owned restricted securities for at least six months but who are affiliates of ours at the time of, or at any time during the three months preceding, a sale, or who otherwise beneficially own shares of our common stock or warrants ("control securities"), would be subject to additional restrictions, by which such person would be entitled to sell within any three-month period only a number of securities that does not exceed the greater of:

- 1% of the total number of shares or other units of the class then outstanding; or
- the average weekly reported trading volume of such securities during the four calendar weeks preceding the filing of a notice on Form 144 with respect to the sale.

Sales by our affiliates under Rule 144 are also limited by manner of sale provisions and notice requirements and to the availability of current public information about us.

Restrictions on the Use of Rule 144 by Shell Companies or Former Shell Companies

Rule 144 is not available for the resale of securities initially issued by shell companies (other than business combination related shell companies) or issuers that have been at any time previously a shell company. However, Rule 144 also includes an important exception to this prohibition if the following conditions are met:

- the issuer of the securities that was formerly a shell company has ceased to be a shell company;
- the issuer of the securities is subject to the reporting requirements of Section 13 or 15(d) of the Exchange Act;
- the issuer of the securities has filed all Exchange Act reports and material required to be filed, as applicable, during the preceding twelve months (or such shorter period that the issuer was required to file such reports and materials), other than Form 8-K reports; and
- at least one year has elapsed from the time that the issuer filed current Form 10 type information with the SEC reflecting its status as an entity that is not a shell company.

As a result, our affiliates will be able to sell their shares of common stock and warrants, and any shares of common stock received upon exercise of the warrants, as applicable, pursuant to Rule 144 without registration one year after the filing of our "Super" Form 8-K with Form 10 type information, which was filed on July 28, 2021. Absent registration under the Securities Act, our affiliates will not be permitted to sell their control securities under Rule 144 earlier than one year after the filing of the "Super" Form 8-K.

We are no longer a shell company, and as a result, once the conditions set forth in the exceptions listed above are satisfied, Rule 144 will become available for the resale of restricted securities and control securities.

PLAN OF DISTRIBUTION

The Selling Securityholders, which as used herein includes donees, pledgees, transferees, distributees or other successors-in-interest selling shares of our common stock or warrants or interests in our common stock or warrants received after the date of this prospectus from the Selling Securityholders as a gift, pledge, partnership distribution or other transfer, may, from time to time, sell, transfer, distribute or otherwise dispose of certain of their shares of common stock or warrants or interests in our common stock or warrants on any stock exchange, market or trading facility on which shares of our common stock or warrants, as applicable, are traded or in private transactions. These dispositions may be at fixed prices, at prevailing market prices at the time of sale, at prices related to the prevailing market price, at varying prices determined at the time of sale, or at negotiated prices.

The Selling Securityholders may use any one or more of the following methods when disposing of their shares of common stock or warrants or interests therein:

- ordinary brokerage transactions and transactions in which the broker-dealer solicits purchasers;
- · one or more underwritten offerings;
- block trades (which may involve crosses) in which the broker-dealer will attempt to sell the shares of common stock or warrants as agent, but may position and resell a portion of the block as principal to facilitate the transaction;
- purchases by a broker-dealer as principal and resale by the broker-dealer for its accounts;
- an exchange distribution and/or secondary distribution in accordance with the rules of the applicable exchange;
- privately negotiated transactions;
- distributions to their employees, partners, members or stockholders;
- short sales (including short sales "against the box") effected after the date of the registration statement of which this prospectus is a part is declared effective by the SEC;
- through the writing or settlement of standardized or over-the-counter options or other hedging transactions, whether through an options exchange or otherwise:
- in market transactions, including transactions on a national securities exchange or quotations service or over-the-counter market;
- by pledge to secure debts and other obligation;
- directly to purchasers, including our affiliates and stockholders, in a rights offering or otherwise;
- · through agents;
- broker-dealers may agree with the Selling Securityholders to sell a specified number of such shares of common stock or warrants at a stipulated price per share or warrant; and
- through a combination of any of these methods or any other method permitted by applicable law.

The Selling Securityholders may effect the distribution of our common stock and warrants from time to time in one or more transactions either:

- · at a fixed price or prices, which may be changed from time to time;
- at market prices prevailing at the time of sale;
- · at prices relating to the prevailing market prices; or

· at negotiated prices.

The Selling Securityholders may, from time to time, pledge or grant a security interest in some shares of our common stock or warrants owned by them and, if a Selling Securityholder defaults in the performance of its secured obligations, the pledgees or secured parties may offer and sell such shares of common stock or warrants, as applicable, from time to time, under this prospectus, or under an amendment or supplement to this prospectus under Rule 424(b) (3) or other applicable provision of the Securities Act amending the list of the Selling Securityholders to include the pledgee, transferee or other successors in interest as the Selling Securityholders under this prospectus. The Selling Securityholders also may transfer shares of our common stock or warrants in other circumstances, in which case the transferees, pledgees or other successors in interest will be the selling beneficial owners for purposes of this prospectus.

We and the Selling Securityholders may agree to indemnify an underwriter, broker-dealer or agent against certain liabilities related to the sale of our common stock and warrants, including liabilities under the Securities Act. The Selling Securityholders have advised us that they have not entered into any agreements, understandings or arrangements with any underwriters or broker-dealers regarding the sale of their common stock and warrants. Upon our notification by a Selling Securityholder that any material arrangement has been entered into with an underwriter or broker-dealer for the sale of common stock and warrants through a block trade, special offering, exchange distribution, secondary distribution or a purchase by an underwriter or broker-dealer, we will file a supplement to this prospectus, if required, pursuant to Rule 424(b) under the Securities Act, disclosing certain material information, including:

- the name of the selling security holder;
- the number of common stock and warrants being offered;
- the terms of the offering;
- the names of the participating underwriters, broker-dealers or agents;
- any discounts, commissions or other compensation paid to underwriters or broker-dealers and any discounts, commissions or concessions allowed or reallowed or paid by any underwriters to dealers;
- the public offering price;
- the estimated net proceeds to us from the sale of the common stock and warrants;
- · any delayed delivery arrangements; and
- · other material terms of the offering.

In addition, upon being notified by a Selling Securityholder that a donee, pledgee, transferee or other successor-in-interest intends to sell common stock and warrants, we will, to the extent required, promptly file a supplement to this prospectus to name specifically such person as a Selling Securityholder.

Agents, broker-dealers and underwriters or their affiliates may engage in transactions with, or perform services for, the Selling Securityholders (or their affiliates) in the ordinary course of business. The Selling Securityholders may also use underwriters or other third parties with whom such selling stockholders have a material relationship. The Selling Securityholders (or their affiliates) will describe the nature of any such relationship in the applicable prospectus supplement.

There can be no assurances that the Selling Securityholders will sell, nor are the Selling Securityholders required to sell, any or all of the common stock and warrants offered under this prospectus.

In connection with the sale of shares of our common stock or warrants or interests therein, the Selling Securityholder may enter into hedging transactions with broker-dealers or other financial institutions, which may in turn engage in short sales of our common stock or warrants in the course of hedging the positions they assume. The

Selling Securityholders may also sell shares of our common stock or warrants short and deliver these securities to close out their short positions, or loan or pledge shares of our common stock or warrants to broker-dealers that in turn may sell these securities. The Selling Securityholders may also enter into option or other transactions with broker-dealers or other financial institutions or the creation of one or more derivative securities that require the delivery to such broker-dealer or other financial institution of shares of our common stock or warrants offered by this prospectus, which shares or warrants such broker-dealer or other financial institution may resell pursuant to this prospectus (as supplemented or amended to reflect such transaction).

The aggregate proceeds to the Selling Securityholders from the sale of shares of our common stock or warrants offered by them will be the purchase price of such shares of our common stock or warrants less discounts or commissions, if any. The Selling Securityholders reserve the right to accept and, together with their agents from time to time, to reject, in whole or in part, any proposed purchase of share of our common stock or warrants to be made directly or through agents. We will not receive any of the proceeds from any offering by the Selling Securityholders.

The Selling Securityholders also may in the future resell a portion of our common stock or warrants in open market transactions in reliance upon Rule 144 under the Securities Act, provided that they meet the criteria and conform to the requirements of that rule, or pursuant to other available exemptions from the registration requirements of the Securities Act.

The Selling Securityholders and any underwriters, broker-dealers or agents that participate in the sale of shares of our common stock or warrants or interests therein may be "underwriters" within the meaning of Section 2(11) of the Securities Act. Any discounts, commissions, concessions or profit they earn on any resale of shares of our common stock or warrants may be underwriting discounts and commissions under the Securities Act. If any Selling Securityholder is an "underwriter" within the meaning of Section 2(11) of the Securities Act, then the Selling Securityholder will be subject to the prospectus delivery requirements of the Securities Act. Underwriters and their controlling persons, dealers and agents may be entitled, under agreements entered into with us and the Selling Securityholders, to indemnification against and contribution toward specific civil liabilities, including liabilities under the Securities Act.

To the extent required, our common stock or warrants to be sold, the respective purchase prices and public offering prices, the names of any agent, dealer or underwriter, and any applicable discounts, commissions, concessions or other compensation with respect to a particular offer will be set forth in an accompanying prospectus supplement or, if appropriate, a post-effective amendment to the registration statement that includes this prospectus.

To facilitate the offering of shares of our common stock and warrants offered by the Selling Securityholders, certain persons participating in the offering may engage in transactions that stabilize, maintain or otherwise affect the price of our common stock or warrants. This may include over-allotments or short sales, which involve the sale by persons participating in the offering of more shares of common stock or warrants than were sold to them. In these circumstances, these persons would cover such over-allotments or short positions by making purchases in the open market or by exercising their over-allotment option, if any. In addition, these persons may stabilize or maintain the price of our common stock or warrants by bidding for or purchasing shares of common stock or warrants in the open market or by imposing penalty bids, whereby selling concessions allowed to dealers participating in the offering may be reclaimed if shares of common stock or warrants sold by them are repurchased in connection with stabilization transactions. The effect of these transactions may be to stabilize or maintain the market price of our common stock or warrants at a level above that which might otherwise prevail in the open market. These transactions may be discontinued at any time. These transactions may be effected on any exchange on which the securities are traded, in the over-the-counter market or otherwise.

Under the Amended and Restated Registration Rights Agreement and the Subscription Agreements, we have agreed to indemnify the applicable Selling Securityholders party thereto against certain liabilities that they may incur in connection with the sale of the securities registered hereunder, including liabilities under the Securities Act, and to contribute to payments that the Selling Securityholders may be required to make with respect thereto. In addition, we and the Selling Securityholders may agree to indemnify any underwriter, broker-dealer or agent against certain liabilities related to the selling of the securities, including liabilities arising under the Securities Act.

Under the Amended and Restated Registration Rights Agreement, we have agreed to use our commercially reasonable efforts to cause the registration statement of which this prospectus forms a part to remain effective with respect to any securities registered hereunder pursuant to such agreement until: (i) such securities have been sold, transferred, disposed of or exchanged in accordance with such registration statement; (ii) such securities have ceased to be outstanding; (iii) such securities have been otherwise transferred, new certificates for such securities not bearing a legend restricting further transfer will have been delivered by us and subsequent public distribution of such securities will not require registration under the Securities Act; (iv) with respect to a Selling Securityholder party to such agreement, all such securities held by such Selling Securityholder could be sold pursuant to Rule 144 without restriction on volume or manner of sale in any three-month period and without the requirement for us to be in compliance with the public information required under Rule 144; or (v) such securities have been sold to, or through, a broker, dealer or underwriter in a public distribution or other public securities transaction. Under each Subscription Agreement, we have agreed to our commercially reasonable efforts to maintain the continuous effectiveness of the registration statement of which this prospectus forms a part with respect to any securities registered hereunder pursuant to such agreement until: (A) with respect to a Selling Securityholder party to such agreement, such Selling Securityholder ceases to hold any such securities; (B) the date all such securities held by such Selling Securityholder may be sold without restriction under Rule 144, including without limitation, any volume and manner of sale restrictions which may be applicable to affiliates under Rule 144, and without the requirement for us to be in compliance with the current public information required under Rule 144; or (C) when such securities shall have ceased to be outstanding or three years from the date of effectiveness of such registration statement; or (B) such shorter period upon which such Selling Securityholder has notified us that such securities have actually been sold. Under the Warrant Agreement, we have agreed to maintain the effectiveness of this registration statement in respect of the shares of common stock issuable upon the exercise of the public warrants and the private placement warrants until the expiration or redemption of such warrants. We have agreed to pay all expenses in connection with this offering, other than underwriting fees, discounts, selling commissions, stock transfer taxes and certain legal expenses. The Selling Securityholders will pay, on a pro rata basis, any underwriting fees, discounts, selling commissions, stock transfer taxes and certain legal expenses relating to the offering.

Selling Securityholders may use this prospectus in connection with resales of shares of our common stock and warrants. This prospectus and any accompanying prospectus supplement will identify the Selling Securityholders, the terms of our common stock or warrants and any material relationships between us and the Selling Securityholders. Selling Securityholders may be deemed to be underwriters under the Securities Act in connection with shares of our common stock or warrants they resell and any profits on the sales may be deemed to be underwriting discounts and commissions under the Securities Act. Unless otherwise set forth in a prospectus supplement, the Selling Securityholders will receive all the net proceeds from the resale of shares of our common stock or warrants.

A Selling Securityholder that is an entity may elect to make an in-kind distribution of common stock or warrants to its members, partners or stockholders pursuant to the registration statement of which this prospectus is a part by delivering a prospectus, as amended or supplemented. To the extent that such transferees are not affiliates of ours, such transferees will receive freely tradable shares of common stock or warrants pursuant to the distribution effected through this registration statement.

LEGAL MATTERS

The validity of the securities offered hereby will be passed upon for us by Fenwick & West LLP. Any underwriters or agents will be advised about other issues relating to the offering by counsel to be named in the applicable prospectus supplement.

EXPERTS

The financial statements of CM Life Sciences, Inc. as of December 31, 2020, and for the period from July 10, 2020 (inception) through December 31, 2020, appearing in this prospectus have been audited by WithumSmith+Brown, PC, independent registered public accounting firm, as set forth in their report thereon, appearing elsewhere in this prospectus, and are included in reliance on such report given on the authority of such firm as an experts in auditing and accounting.

The financial statements of Mount Sinai Genomics, Inc. at December 31, 2020 and 2019, and for each of the three years in the period ended December 31, 2020, appearing in this prospectus and in the registration statement of which this prospectus forms part have been audited by Ernst & Young LLP, independent registered public accounting firm, as set forth in their report thereon (which contains an explanatory paragraph describing conditions that raise substantial doubt about Sema4's ability to continue as a going concern as described in Note 2 to the financial statements) appearing elsewhere herein, and are included in reliance upon such report given on the authority of such firm as experts in accounting and auditing.

WHERE YOU CAN FIND MORE INFORMATION

We have filed with the SEC a registration statement on Form S-1 under the Securities Act with respect to the shares of common stock and warrants offered hereby. This prospectus, which constitutes part of the registration statement, does not contain all of the information set forth in the registration statement and the exhibits and schedules thereto. For further information with respect to our company, our common stock and warrants, reference is made to the registration statement and the exhibits and any schedules filed therewith. Statements contained in this prospectus as to the contents of any contract or any other document referred to are not necessarily complete, and in each instance, we refer you to the copy of the contract or other document filed as an exhibit to the registration statement. Each of these statements is qualified in all respects by this reference.

You can read our SEC filings, including the registration statement, over the internet at the SEC's website at www.sec.gov.

We are subject to the information reporting requirements of the Exchange Act and we are required to file reports, proxy statements and other information with the SEC. These reports, proxy statements, and other information are available for inspection and copying at the SEC's website referred to above. We also maintain a website at www.sema4.com, at which you may access these materials free of charge as soon as reasonably practicable after they are electronically filed with, or furnished to, the SEC. Information contained on or accessible

Mount Sinai Genomics, Inc.

Financial Statements

Years Ended December 31, 2020, 2019 and 2018 $\,$

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Report of Independent Registered Public Accounting Firm

To the Shareholders and the Board of Directors of Mount Sinai Genomics, Inc.

Opinion on the Financial Statements

We have audited the accompanying balance sheets of Mount Sinai Genomics, Inc. (the Company) as of December 31, 2020 and 2019, the related statements of operations and comprehensive loss, redeemable convertible preferred stock and stockholders' deficit and cash flows for each of the three years in the period ended December 31, 2020, and the related notes (collectively referred to as the "financial statements"). In our opinion, the financial statements present fairly, in all material respects, the financial position of the Company at December 31, 2020 and 2019, and the results of its operations and its cash flows for each of the three years in the period ended December 31, 2020, in conformity with U.S. generally accepted accounting principles.

Basis for Opinion

These financial statements are the responsibility of the Company's management. Our responsibility is to express an opinion on the Company's financial statements based on our audits. We are a public accounting firm registered with the Public Company Accounting Oversight Board (United States) (PCAOB) and are required to be independent with respect to the Company in accordance with the U.S. federal securities laws and the applicable rules and regulations of the Securities and Exchange Commission and the PCAOB.

We conducted our audits in accordance with the standards of the PCAOB and in accordance with auditing standards generally accepted in the United States of America. Those standards require that we plan and perform the audit to obtain reasonable assurance about whether the financial statements are free of material misstatement, whether due to error or fraud. The Company is not required to have, nor were we engaged to perform, an audit of its internal control over financial reporting. As part of our audits we are required to obtain an understanding of internal control over financial reporting but not for the purpose of expressing an opinion on the effectiveness of the Company's internal control over financial reporting. Accordingly, we express no such opinion.

Our audits included performing procedures to assess the risks of material misstatement of the financial statements, whether due to error or fraud, and performing procedures that respond to those risks. Such procedures included examining, on a test basis, evidence regarding the amounts and disclosures in the financial statements. Our audits also included evaluating the accounting principles used and significant estimates made by management, as well as evaluating the overall presentation of the financial statements. We believe that our audits provide a reasonable basis for our opinion.

The Company's Ability to Continue as a Going Concern

The accompanying financial statements have been prepared assuming that the Company will continue as a going concern. As discussed in Note 2 to the financial statements, the Company has suffered recurring losses, and expects to continue to do so, has an accumulated deficit and has stated that substantial doubt exists about the Company's ability to continue as a going concern. Management's evaluation of the events and conditions and management's plans regarding these matters are also described in Note 2. The financial statements do not include any adjustments that might result from the outcome of this uncertainty. Our opinion is not modified with respect to this matter.

/s/ Ernst & Young LLP

We have served as the Company's auditor since 2018.

New York, New York May 6, 2021

Mount Sinai Genomics, Inc. Balance Sheets (in thousands, except share and per share amounts)

	December 31,			
		2020		2019
Assets				
Current assets:				
Cash and cash equivalents	\$	108,132	\$	115,006
Accounts receivable		32,044		21,433
Due from related parties		289		204
Inventory		24,962		15,983
Prepaid expenses and other current assets		8,681		11,179
Total current assets		174,108		163,805
Property and equipment, net		63,110		35,263
Restricted cash		10,828		_
Other assets		3,596		4,771
Total assets	\$	251,642	\$	203,839
Liabilities, Redeemable Convertible Preferred Stock and Stockholders' Deficit				
Current liabilities:				
Accounts payable	\$	26,737	\$	17,475
Accrued expenses		11,854		6,250
Due to related parties		1,425		1,782
Current portion of capital lease obligations		3,506		2,713
Current contract liabilities		1,783		1,559
Other current liabilities		28,137		10,407
Total current liabilities		73,442		40,186
Long-term debt, net of current portion		18,971		5,000
Stock-based compensation liabilities		131,989		11,758
Capital lease obligations, net of current portion		20,778		17,276
Contract liabilities, net of current portion		_		783
Other liabilities		2,074		432
Total liabilities		247,254		75,435
Commitments and contingencies (Note 8)				
Redeemable convertible preferred stock:				
Series A-1 redeemable convertible preferred stock \$0.00001 par value: 447,373 shares authorized, issued and outstanding at December 31, 2020 December 31, 2020 and 2019; aggregate liquidation preference of \$55,000 at December 31, 2020 and 2019		51,811		51,811
Series A-2 redeemable convertible preferred stock, \$0.0001 par value: 522,627 shares authorized at December 31, 2020 December 31, 2020 and 2019; 401,347 shares authorized, issued and outstanding at December 31, 2020 and 2019; aggregate liquidation preference of \$49,342 at December 31, 2020 and 2019		46.480		46.480
Series B redeemable convertible preferred stock, \$0.00001 par value: 338,663 shares authorized, issued and outstanding at December 31, 2020 and 2019; aggregate liquidation preference of \$204,302 at December 31, 2020 and 2019		118,824		118,824
Series C redeemable convertible preferred stock, \$0.00001 par value: 197,824 shares authorized at December 31, 2020 and no shares authorized at December 31, 2019; 197,821 shares issued and outstanding at December 31, 2020 and no shares issued and outstanding at December 31, 2019; aggregate liquidation preference of \$121,397 at December 31, 2020	i	117,324		_
Redeemable convertible preferred stock		334,439		217,115
Stockholders' deficit:				
Class A common stock, \$0.00001 par value: 2,500,000 shares authorized at December 31, 2020 and 2019; 1 share issued and outstanding at December 31, 2020 and 2019		_		_
Class B convertible common stock, \$0.00001 par value: 15,000,000 shares authorized at December 31, 2020 and 2019; 105,429 shares issued and outstanding at December 31, 2020 and no shares issued and outstanding at December 31, 2019		_		_
Additional paid-in capital		_		_
Accumulated deficit		(330,051)		(88,711)
Total stockholders' deficit		(330,051)		(88,711)
Total liabilities, redeemable convertible preferred stock and stockholders' deficit	\$	251,642	\$	203,839

Mount Sinai Genomics, Inc. Statements of Operations and Comprehensive Loss (in thousands, except share amounts)

	Year Ended December 31,				
		2020	2019		2018
Revenue					
Diagnostic test revenue (including related party revenue of \$285 \$0 and \$0 for the years ended December 31, 2020, 2019, and 2018, respectively)	\$	175,351	\$ 191,667	\$	132,970
Other revenue (including related party revenue of \$3, \$1,180 and \$254 for the years ended December 31, 2020, 2019, and 2018, respectively)		3,971	4,507		371
Total revenue		179,322	196,174		133,341
Cost of services (including related party expenses of \$2,189, \$1,859 and \$4,122 for the years ended December 31, 2020, 2019, and 2018, respectively)		184,648	119,623		92,093
Gross (loss) profit		(5,326)	76,551		41,248
Research and development		72,700	34,910		21,383
Selling and marketing		53,831	33,118		19,947
General and administrative		100,742	29,484		19,449
Related party expenses		9,395	9,452		9,132
Loss from operations		(241,994)	(30,413)		(28,663)
Other income (expense):			•		
Interest income		506	988		_
Interest expense		(2,474)	(783)		(248)
Gain on extinguishment of debt		_	_		4,500
Other income, net		2,622	504		539
Total other income, net		654	709		4,791
Loss before income taxes		(241,340)	(29,704)		(23,872)
Income tax provision		_			_
Net loss and comprehensive loss	\$	(241,340)	\$ (29,704)	\$	(23,872)
Redeemable convertible preferred stock dividends		_	3,039		2,951
Net loss attributable to common stockholders	\$	(241,340)	\$ (32,743)	\$	(26,823)
Weighted average shares outstanding of Class A common stock		1	1		1
Basic and diluted net loss per share, Class A common stock	\$	(5,824)	\$ (32,743)	\$	(26,823)
Weighted average shares outstanding of Class B common stock		4,044			
Basic and diluted net loss per share, Class B common stock		(58)			

Mount Sinai Genomics, Inc. Statement of Redeemable Convertible Preferred Stock and Stockholders' Deficit (in thousands, except share amounts)

	Redeemable Con St	vertil ock	ble Preferred	Class A Common Stock		Class B Common Stock							
	Shares		Amount	Shares		Per Value	Shares		Per Value	A	accumulated deficit	st	Total ockholders' deficit
Balance at December 31, 2017	800,000	\$	36,768	1	(\$ —	_	\$	_	\$	(29,145)	\$	(29,145)
Net loss			_	_					_		(23,872)		(23,872)
Preferred Series A dividend	24,000		2,951	_		_	_		_		(2,951)		(2,951)
Capital contributions	_		24,636	_		_	_		_		_		_
Balance at December 31, 2018	824,000	\$	64,355	1	:	\$ —	_	\$		\$	(55,968)	\$	(55,968)
Net loss	_		_	_		_	_		_		(29,704)		(29,704)
Preferred Series A dividend	24,720		3,039	_		_	_		_		(3,039)		(3,039)
Capital contributions	_		30,897	_		_	_		_		_		_
Issuance of Preferred Series B, net of issuance costs	338,663		118,824	_		_	_		_		_		_
Balance at December 31, 2019	1,187,383	\$	217,115	1	:	\$ —	_	\$		\$	(88,711)	\$	(88,711)
Net loss	_		_	_		_	_		_		(241,340)		(241,340)
Common stock class B issued pursuant to stock options	l		_			_	105,429		_		_		_
Issuance of Preferred Series C, net of issuance costs	197,821		117,324	_					_		_		_
Balance at December 31, 2020	1,385,204	\$	334,439	1		\$ —	105,429	\$		\$	(330,051)	\$	(330,051)

Mount Sinai Genomics, Inc. Statements of Cash Flows (in thousands, except share amounts)

			Year I	Ended December 31,		
		2020		2019		2018
Operating activities						
Net loss	\$	(241,340)	\$	(29,704)	\$	(23,872)
Adjustments to reconcile net loss to net cash used in operating activities:						
Depreciation and amortization expense		11,734		6,407		5,433
Stock-based compensation expense		120,231		5,482		5,605
Non-cash lease expense		2,400		(176)		437
Gain on extinguishment of debt		_		_		(4,500)
Loss from sale of lab equipment		_		_		105
Change in operating assets and liabilities:						
Accounts receivable		(10,611)		(4,567)		(4,743)
Inventory		(8,979)		(7,970)		(4,929)
Prepaid expenses and other current assets		2,498		(2,526)		(1,534)
Due to/from related parties		(442)		(919)		(2,817)
Other assets		1,175		(4,395)		(53)
Accounts payable and accrued expenses		14,805		12,847		2,311
Contract liabilities		(559)		2,342		_
Other current liabilities		15,960		4,451		3,873
Net cash used in operating activities		(93,128)		(18,728)		(24,684)
Investing activities						
Purchases of property and equipment		(24,094)		(11,923)		(2,183)
Proceeds from sale of equipment		_		_		125
Development of internal-use software assets		(7,880)		(3,533)		(1,745)
Net cash used in investing activities		(31,974)		(15,456)		(3,803)
Financing activities					-	<u> </u>
Proceeds from issuance of Series B redeemable convertible preferred stock, net of issuance costs		_		118,824		_
Proceeds from issuance of Series C redeemable convertible preferred stock, net of issuance costs		117,324		· —		_
Capital contributions from ISMMS				30,897		24,636
Proceeds from long-term debt		15,928		_		4,500
Long-term debt principal payments		(186)		_		_
Capital lease principal payments		(4,010)		(1,709)		(2,071)
Net cash provided by financing activities		129,056		148,012		27,065
Net increase (decrease) in cash, cash equivalents and restricted cash		3,954		113,828		(1,422)
Cash, cash equivalents and restricted cash, at beginning of year		115,006		1,178		2,600
Cash, cash equivalents and restricted cash, at end of year	\$	118,960	\$	115,006	\$	1,178
Supplemental disclosures of cash flow information	-	110,500	<u> </u>	113,000	<u> </u>	1,170
Interest expense paid	\$	1,745	\$	305	\$	260
Purchases of property and equipment in accounts payable and accrued expenses	\$	447	\$	818	\$	
Software development costs in accounts payable and accrued expenses	\$	1,473	\$	1,040	\$	334
Non-cash Series A redeemable convertible preferred stock dividends declared and paid	\$	1,4/3	\$	3,039	\$	2,951
Forgiveness of principal on long-term debt	\$		\$	3,039	\$	4,500
	\$	7,546	\$	9,796	\$	5,670
Assets acquired under capital leases obligations	Э	7,546	Ф	9,796	Þ	5,6/0

Mount Sinai Genomics, Inc.

Notes to Financial Statements

1. Organization and Description of Business

Mount Sinai Genomics, Inc., d/b/a Sema4 (the "Company") provides genomics-related diagnostic and information services and pursues genomics medical research. The Company utilizes an integrated portfolio of laboratory processes, software tools and informatics capabilities to process DNA-containing samples, analyze information about patient-specific genetic variation and generate test reports for clinicians and their patients. The Company provides a variety of genetic diagnostic tests and information with focus on reproductive health, pediatric, oncology and other conditions. In 2020, the Company began to provide diagnostic testing services in response to the recent novel coronavirus ("COVID-19") outbreak. The Company serves patients and bills third party payors across the United States, with a substantial portion of its diagnostic testing volume occurring in the states of New York, California, Florida, Connecticut, and New Jersey.

The Company was incorporated in the State of Delaware as a for-profit corporation on October 16, 2015, with limited operations focused on establishing the Company as a capitalized, standalone entity. On June 1, 2017, the Company signed a contribution and funding agreement (the "Contribution Agreement") and other agreements with Icahn School of Medicine at Mount Sinai ("ISMMS"), whereby ISMMS contributed certain assets and liabilities related to the Company's operations, provided certain services to the Company, and also committed to fund the Company up to \$55.0 million in future capital contributions (see Note 6) in exchange for equity in the Company (the "Spin-out"). Following the Spin-out, the Company commenced operations and began providing the services and performing research.

The Company remained a wholly-owned subsidiary of ISMMS until August 2, 2019, when the Company issued its Series B redeemable convertible preferred stock (see Note 10). ISMMS provided its remaining committed funding to the Company, pursuant to the Contribution Agreement, prior to the Series B redeemable convertible preferred stock issuance. ISMMS continues to maintain majority control of the Company following the Series B and Series C redeemable convertible preferred stock issuances.

2. Summary of Significant Accounting Policies

Basis of Presentation

The accompanying financial statements have been prepared in conformity with accounting principles generally accepted in the United States of America ("U.S. GAAP").

Assets and liabilities transferred to the Company in the Spin-out were accounted for at ISMMS's historical book basis as the transaction represented a transfer of net assets between entities under common control. The Company's historical financial information includes costs of certain services historically provided by ISMMS pursuant to a Transition Services Agreement ("TSA") and service agreements ("Service Agreements"). The Company's historical results are not necessarily indicative of what its results of operations, financial position, cash flows, or costs and expenses would have been had the Company been an independent entity during the historical periods presented or what its results of operations, financial position, cash flows, or costs and expenses will be in the future when it is a publicly traded, stand-alone company.

Liquidity and Going Concern

The Company has evaluated whether there are certain conditions and events, considered in the aggregate, that raise substantial doubt about the Company's ability to continue as a going concern within one year after the date that the financial statements are issued.

Through December 31, 2020, the Company has funded its operations primarily with proceeds from the issuance of its redeemable convertible preferred stock and the issuance of long-term debt. The Company has incurred recurring losses since its inception, including net losses of \$241.3 million, \$29.7 million and \$23.9 million for the years ended December 31, 2020, 2019 and 2018, respectively. As of December 31, 2020, the Company had an accumulated

deficit of \$330.1 million. The Company expects to continue to generate significant operating losses for the foreseeable future. As of May 6, 2021, the issuance date of the financial statements for the year ended December 31, 2020, the Company expects that its existing cash and cash equivalents of \$108.1 million (excluding restricted cash) will be sufficient to fund its operating expenses and capital expenditure requirements into the second half of 2021. The future viability of the Company beyond that point is dependent on its ability to raise additional capital to finance its operations.

The Company is seeking to merge with CM Life Sciences, Inc. (see Note 15). In the event the Company does not complete this transaction, the Company expects to seek additional funding through an initial public offering of its common shares, private equity financings, debt financings or other capital sources, including collaborations with other companies or other strategic transactions. The Company may not be able to obtain financing on acceptable terms, or at all. The terms of any financing may adversely affect the holdings or the rights of the Company's stockholders.

If the Company is unable to obtain funding, the Company will be forced to delay, reduce or eliminate some or all of its research and development programs, product portfolio expansion or commercialization efforts, which could adversely affect its business prospects, or the Company may be unable to continue operations. Although management continues to pursue these plans, there is no assurance that the Company will be successful in obtaining sufficient funding on terms acceptable to the Company to fund continuing operations, if at all.

Based on its recurring losses from operations incurred since inception, expectation of continuing operating losses for the foreseeable future, and the need to raise additional capital to finance its future operations, as of May 6, 2021, the issuance date of the accompanying financial statements, the Company has concluded that there is substantial doubt about its ability to continue as a going concern for a period of one year from the date that these financial statements were issued.

The accompanying financial statements do not include any adjustments that might result from the outcome of this uncertainty. Accordingly, the financial statements have been prepared on a basis that assumes the Company will continue as a going concern and which contemplates the realization of assets and satisfaction of liabilities and commitments in the ordinary course of business.

Use of Estimates

The preparation of financial statements in conformity with U.S. GAAP requires management to make certain estimates, judgments and assumptions that affect the reported amounts of assets and liabilities and the related disclosures at the date of the financial statements as well as the reported amounts of revenues and expenses during the periods presented. The Company bases these estimates on current facts, historical and anticipated results, trends and various other assumptions that it believes are reasonable in the circumstances, including assumptions as to future events. These estimates include, but are not limited to, the transaction price for certain contracts with customers, the capitalization of software costs and the valuation of stock-based awards. Actual results could differ materially from those estimates, judgments and assumptions.

Concentration of Credit Risk and Other Risks and Uncertainties

Financial instruments that potentially subject the Company to concentrations of credit risk consist primarily of cash and cash equivalents and accounts receivable.

The Company's cash and cash equivalents are deposited with high-quality financial institutions. The Company has balances in financial institutions that exceed federal depository insurance limits. Management believes these financial institutions are financially sound and, accordingly, that minimal credit risk exists. The Company has not experienced any losses on its deposits of cash and cash equivalents.

The Company assesses both the customer and, if applicable, the third party payor that reimburses the Company on the customer's behalf when evaluating concentration of credit risk. Significant customers and payors are those that represent more than 10% of the Company's total annual revenues or accounts receivable balance at each respective balance sheet date. The significant concentrations of accounts receivable at December 31, 2020 and 2019

were primarily from large managed care insurance companies and a reference laboratory. There was no individual customer that accounted for 10% or more of revenue or accounts receivable for any of the years presented. The Company does not require collateral as a means to mitigate customer credit risk.

For each significant payor, revenue as a percentage of total revenues and accounts receivable as a percentage of total accounts receivable are as follows:

		Revenue		Accounts F	teceivable	
	Y	Year Ended December 31, As of December 31,				
	2020	2019	2018	2020	2019	
Payor A	27%	36%	37%	10%	33%	
Payor B	14%	*	*	*	*	
Payor C	*	*	*	20%	*	
Payor D	*	24%	27%	*	12%	
Payor E	*	*	13%	*	21%	

^{*} less than 10%

The Company is subject to a concentration of risk from a limited number of suppliers for certain reagents and laboratory supplies. One supplier accounted for approximately 11% 15% and 14% of purchases of lab supplies, reagents and kits for the years ended December 31, 2020, 2019 and 2018, respectively. Another supplier accounted for approximately 10%, 12% and 13% of purchases of lab supplies, reagents and kits for the years ended December 31, 2020, 2019 and 2018, respectively. This risk is managed by maintaining a target quantity of surplus stock.

Impact of COVID-19

In March 2020, the World Health Organization declared the COVID-19 outbreak a pandemic. COVID-19 has had, and continues to have, an extensive impact on the global health and economic environments. Many jurisdictions, including those in which the Company has locations, have implemented measures to combat the outbreak, such as travel restrictions and shelter in place orders. In addition, the healthcare sector generally experienced a decline in discretionary care services at the onset of the pandemic.

Beginning in April 2020, the Company's diagnostic test volumes decreased significantly as compared to the prior year as a result of COVID-19 and the related limitations and priorities across the healthcare system. In response, beginning in May 2020, the Company entered into several service agreements with state governments and healthcare institutions to provide testing for the presence of COVID-19 infection. While test volumes improved in the second half of 2020, the Company continued to experience changes in the mix of tests due to the impact of COVID-19. COVID-19 could continue to have a material impact on the Company's results of operations, cash flows and financial condition for the foreseeable future.

In March 2020, the Coronavirus Aid, Relief and Economic Security Act ("CARES Act") was signed into law which was a stimulus bill that, among other things, provided assistance to qualifying businesses and individuals and included funding for the healthcare system. The Company received \$5.4 million in 2020 as part of the stimulus, comprised of \$2.6 million received under the Provider Relief Fund ("PRF") distribution and \$2.8 million received under the Employee Retention Credit ("ERC") distribution.

PRF distributions to healthcare providers are not loans and will not be required to be repaid; however, as a condition to receiving these payments, providers must agree to certain terms and conditions and submit sufficient documentation demonstrating that the funds are being used for healthcare-related expenses or lost revenue attributable to the COVID-19 pandemic. The Company concluded it is probable that all terms and conditions associated with the PRF distribution have been met. As a result, the Company recorded the PRF distribution in other income, net in the statements of operations and comprehensive loss.

ERC distributions are refundable tax credits for 50% of qualified wages paid to employees during the pandemic. A company is eligible for the ERC if it has not received a Paycheck Protection Program loan under the Cares Act and (1) its operations have been fully or partially suspended because of COVID-19 or (2) its gross receipts in a calendar quarter in 2020 declined by more than 50% from the same period in 2019. At the time of applying for the ERC, the Company concluded that it was reasonably possible the eligibility requirements would be met; however, due to a change in circumstances, the Company reevaluated its position, deferred the recognition of the ERC distribution and recorded the proceeds in other liabilities as of December 31, 2020.

At this time, the Company is not certain of the availability, extent or impact of any future relief provided under the CARES Act or other stimulus initiatives.

Cash, Cash Equivalents and Restricted Cash

The Company considers all highly liquid investments with original maturities of three months or less from the date of purchase to be cash equivalents. Cash equivalents consist of amounts invested in money market funds. Carrying values of cash equivalents approximate fair value due to the short-term nature of these instruments.

The following table provides a reconciliation of cash, cash equivalents and restricted cash reported on the balance sheets that sum to the total of the same amounts shown on the statements of cash flows (in thousands):

	As of December 31,				
	 2020		2019		
Cash and cash equivalents	\$ 108,132	\$	115,006		
Restricted cash	10,828		_		
Total	\$ 118,960	\$	115,006		

Restricted cash as of December 31, 2020 consists of money market deposit accounts that secure irrevocable standby letters of credit that serve as collateral for security deposits for financing obligations and operating leases (see Note 7 and Note 8, respectively).

Accounts Receivable

Accounts receivable consists of amounts due from customers for services performed and reflect the consideration to which the Company expects to be entitled in exchange for providing those services. Accounts receivable are estimated and recorded in the period the related revenue is recorded. During the years ended December 31, 2020, 2019 and 2018, the Company did not record provisions for doubtful accounts. The Company wrote off accounts receivable balances of \$0.2 million for the year ended December 31, 2020 and did not write off any accounts receivable balances for the years ended December 31, 2019 and 2018.

Inventory

Inventory, which primarily consists of testing supplies and reagents, is capitalized when purchased and expensed when used in performing services. Inventory is stated at the lower of cost or net realizable value. Cost is determined using actual costs on a first-in, first-out basis. The Company periodically performs obsolescence assessments and writes off any inventory that is no longer usable. Any write-down of inventory to net realizable value creates a new cost basis. During the years ended December 31, 2020, 2019 and 2018, the Company did not write off any inventory.

Property and Equipment, net

Property and equipment, including equipment contributed by ISMMS on the date of the Spin-out (see Note 5), are stated at cost less accumulated depreciation and amortization. Equipment includes assets under capital lease. Improvements are capitalized, while maintenance and repairs are expensed as incurred. When assets are retired or otherwise disposed of, the cost and accumulated depreciation and amortization are removed from the balance sheets and any resulting gain or loss is reflected in the statements of operations and comprehensive loss in the period realized.

Capital leases and leasehold improvements are amortized straight-line over the shorter of the term of the lease or the estimated useful life. All other property and equipment assets are depreciated using the straight-line method over the estimated useful life of the asset, which ranges from three to five years.

The Company reviews the recoverability of its long-lived assets when events or changes in circumstances occur that indicate that the carrying value of the asset or asset group may not be recoverable. An impairment loss is recognized when the total estimated future undiscounted cash flows expected to result from the use of the asset and its eventual disposition are less than its carrying amount. Impairment, if any, is assessed using discounted cash flows or other appropriate measures of fair value. There were no long-lived asset impairment losses recorded for any periods presented.

Capitalized Software

Costs incurred for computer software developed or obtained for internal use are capitalized for application development activities and expensed as incurred for preliminary project activities and post-implementation activities. Capitalization of such costs ceases when the project is substantially complete and ready for its intended purpose. Costs for maintenance and training are expensed as incurred.

Capitalized software costs are amortized using the straight-line method over an estimated useful life of three years. Capitalized software is reviewed for impairment whenever events or changes in circumstances may indicate that the carrying amount of an asset may not be recoverable.

Fair Value Measurements

Financial assets and liabilities are recorded at fair value. Fair value is defined as the price that would be received to sell an asset or paid to transfer a liability in an orderly transaction between market participants at the measurement date.

The Company utilizes valuation techniques that maximize the use of observable inputs and minimize the use of unobservable inputs to the extent possible. The Company determines the fair value of its financial instruments based on assumptions that market participants would use in pricing an asset or liability in the principal or most advantageous market. The following hierarchy lists three levels of fair value based on the extent to which inputs used in measuring fair value are observable in the market:

- Level 1: Observable inputs such as quoted prices (unadjusted) in active markets that are accessible at the measurement date for identical assets or liabilities.
- Level 2: Observable inputs such as quoted prices for similar instruments in active markets, quoted prices for identical or similar instruments in markets that are not active or model-derived valuations whose significant inputs are observable.
- Level 3: Unobservable inputs that are significant to the measurement of fair value but are supported by little to no market data.

The Company's financial assets and liabilities consist of cash and cash equivalents, restricted cash, accounts receivable, accounts payable, accrued liabilities, capital leases and long-term debt. The Company's cash and cash equivalents, restricted cash, accounts receivable, accounts payable and accrued liabilities approximate their fair value due to the relatively short-term nature of these accounts.

The Company's capital leases and long-term debt are classified within level 1 of the fair value hierarchy because such long-term debt and capital lease agreements bear interest at rates for instruments with similar characteristics; accordingly, the carrying value of these liabilities approximate their fair values.

Stock-based Compensation

The Company records incentive stock options ("ISO") and non-qualified stock options ("NSO") offered to employees, consultants and directors of the Company based on the estimated fair value of the awards and recognizes

compensation expense over the requisite service period for each separate vesting portion of the award as if the award was, in-substance, multiple awards. The Company uses the Black-Scholes option-pricing model to estimate the fair value of its stock option awards. Terms of the ISO and NSO stock options include a provision whereby the Company has a call option to repurchase the award for cash upon termination of employment or termination of the consulting agreement. The Company has concluded that it is probable it will continue to exercise its call option prior to the award holder being subject to the risks and rewards of equity ownership. As a result, stock options are classified as liabilities in the accompanying balance sheets.

ISO and NSO stock options granted vest solely based upon continued employment or service over a specific period of time. As such, the Company recognizes stock-based compensation liabilities only for those stock-based awards that are ultimately vested over their requisite service periods based on the vesting provisions of the individual grant awards, net of the shares exercised and forfeitures realized. Determination of fair value requires input of highly subjective assumptions.

The Company accounts for forfeitures as they occur.

Income Taxes

Income taxes are accounted for under the asset and liability method. The provision for income taxes represents income taxes paid or payable for the current year plus the change in deferred taxes during the year. Current and deferred income taxes are measured based on the tax laws that are enacted as of the balance sheet date of the relevant reporting period. Deferred tax assets and liabilities are recognized for the expected future tax consequences of temporary differences between the carrying amounts of assets and liabilities and their respective tax bases using tax rates in effect for the year in which the differences are expected to reverse. The effect on deferred tax assets and liabilities of a change in tax rates is recognized in the statements of operations and comprehensive loss in the period when the change is enacted. A valuation allowance is established when it is more likely than not that some or all of the deferred tax assets will not be realized. Based on the Company's historical operating losses, the Company has recorded a valuation allowance to reduce deferred tax assets to the amount that is more likely than not to be realized.

The Company recognizes the effect of a tax position when it is more likely than not, based on technical merits, that the position will be sustained upon examination by the appropriate taxing authorities. The amount of tax benefit recognized for an uncertain tax position is the largest amount of benefit with a greater than 50 percent likelihood of being realized. Unrecognized tax benefits are included within other liabilities if recognized and are charged to earnings in the period that such determination is made. The Company records interest and penalties related to tax uncertainties, if applicable, as a component of income tax expense.

Leases

The Company categorizes lease agreements at their inception as either operating or capital leases.

For operating leases, the Company recognizes related rent expense on a straight-line basis over the term of the applicable lease agreement. Certain lease agreements contain rent holidays, scheduled rent increases and lease incentives. Rent holidays and scheduled rent increases are included in the determination of rent expense to be recorded over the lease term. Lease incentives are recognized as a reduction of rent expense on a straight-line basis over the term of the lease. The Company recognizes rent expense beginning on the date it obtains the legal right to use and control the leased space.

For capital leases, the Company records a leased asset with a corresponding liability. Payments are recorded as reductions to the liability with an interest charge recorded based on the remaining liability.

Sale-leaseback arrangements characterized as "failed" due to the Company's continuing involvement with the "sold" assets are accounted for as financing obligations. Specifically, in a failed sale-leaseback transaction, the Company does not derecognize the transferred assets and accounts for the proceeds as a financing obligation. The financing obligation is decreased over time by the Company's lease payments, less the portion considered interest expense.

Contingencies

Amounts related to contingencies are accrued if it is probable that a liability has been incurred and an amount can be reasonably estimated.

Revenue Recognition

The Company adopted Accounting Standards Codification ("ASC") Topic 606 ("ASC 606"), *Revenue from Contracts with Customers*, on January 1, 2019 using the modified retrospective method applied to contracts which were not completed as of the adoption date. As a result, upon the adoption of ASC 606, the majority of what was previously classified as the provision for doubtful accounts recorded in general and administrative expense is now reflected as an implicit price concession and, therefore, is included as a reduction to diagnostic test revenue in the statements of operations and comprehensive loss. The Company recognizes any changes in customer credit issues not assessed at the date of service as provisions for doubtful accounts. Upon the adoption of ASC 606, the Company recognizes revenue when control of the promised goods or services is transferred to the customer in an amount that reflects the consideration which the Company expects to be entitled to in exchange for those goods or services.

The majority of revenue is generated from diagnostic services provided to three groups of customers: patients with third-party insurance coverage; patients without third-party insurance coverage or those who elect to self-pay; and institutional clients, such as hospitals, clinics and reference laboratories. The Company also recognizes revenue from collaboration service agreements with pharmaceutical companies and other third parties pursuant to which the Company provides diagnostic testing and related data aggregation reporting services.

Diagnostic test revenue

The Company's diagnostic test revenue contracts typically consist of a single performance obligation to deliver diagnostic testing services to the ordering facility or patient. Control over diagnostic testing services is transferred at a point in time. Specifically, the Company determined the customer obtains control of the promised service upon delivery of the test results.

Revenue from diagnostic testing services is recorded at the estimated transaction price, subject to the constraint for variable consideration, upon transfer of control of the service.

Diagnostic test revenues consist primarily of services reimbursed by third-party insurance payors. Third-party insurance payors include managed care health plans and commercial insurance companies, including plans offered through the health insurance exchanges, and employers. In these arrangements, the customer is the patient. In arrangements with third-party insurance payors, the transaction price is stated within the contract, however, the Company accepts payments from third-party payors that are less than the contractually stated price and is therefore variable consideration.

When determining the transaction price, the Company uses a portfolio approach as a practical expedient to account for categories of diagnostic test contracts as collective groups rather than on an individual contract basis. The portfolio consists of major payor classes based on third-party payors. Based on historical collection trends and other analyses, the Company believes that revenue recognized by utilizing the portfolio approach approximates the revenue that would have been recognized if an individual contract approach was used.

Estimates of allowances for third-party insurance payors that impact the estimated transaction price are based upon the pricing and payment terms specified in the related contractual agreements. Contractual pricing and payment terms in third-party insurance agreements are generally based upon predetermined rates per diagnosis, per diem rates or discounted fee-for-service rates. In addition, for third-party payors in general, the estimated transaction price is impacted by factors such as historical collection experience, contractual provisions and insurance reimbursement policies, payor mix, and other relevant information for applicable payor portfolios. The estimates for implicit price concessions require significant judgment and are based upon management's assessment of expected net collections, business and economic conditions, historical trends, trends in federal, state and private employer health care coverage and other collection indicators.

The Company monitors these accrual estimates at each reporting period based on actual cash collections in order to assess whether a revision to the estimate is required. Both the initial estimate and any subsequent revision to the estimate contain uncertainty and require the use of judgment in the estimation of the transaction price and application of the constraint for variable consideration. If actual results in the future vary from the Company's estimates, the Company will adjust these estimates, which would affect revenue and earnings in the period such variances become known.

For self-pay patients, the Company determines the transaction price associated with services rendered in consideration of implicit price concessions that are granted to such patients. The estimates for implicit price concessions require significant judgment and are based upon management's assessment of expected net collections, business and economic conditions, historical trends, trends in federal, state and private employer health care coverage and other collection indicators.

For institutional clients, the customer is the institution. The Company determines the transaction price associated with services rendered in accordance with the contractual rates established with each customer.

Payment terms and conditions vary by contract and customer. The Company's standard payment terms are generally less than 60 days from the invoice date. In instances where the timing of the Company's revenue recognition differs from the timing of its invoicing, the Company does not assess whether a contract has a significant financing component if the expectation at contract inception is such that the period between payment by the customer and the transfer of the promised services to the customer will be one year or less.

Other revenue

The Company enters into both short-term and long-term project-based collaboration service agreements with third parties, whereby the Company provides diagnostic testing, research and related data aggregation reporting services. Certain of these contracts include the transfer of a license to the Company's intellectual property or participation by the Company on joint steering committees with the customer, which was considered to be immaterial in the context of the contract. The Company concludes that the goods and services transferred to our customers pursuant to these agreements generally comprise a single performance obligation on the basis that such goods and services are not distinct within the context of the contract. This is because the goods and services are highly interdependent and interrelated such that the Company would not be able to fulfill its underlying promise to our customers by transferring each good or service independently.

The consideration to which the Company is entitled pursuant to its collaboration service agreements generally includes non-refundable upfront payments and variable payments based upon the achievement of certain milestones during the contract term. Non-refundable upfront payments are generally received in advance of performing the services and, therefore, are recorded as a contract liability upon receipt. Milestone payments are included in the transaction price only when it is probable that doing so will not result in a significant reversal of cumulative revenue recognized when the uncertainty associated with the milestone is subsequently resolved. For longer-term contracts, the Company does not account for a significant financing component since a substantial amount of the consideration promised by the customer is variable and the amount or timing of that consideration varies on the basis of a future event that is not substantially within the control of either party.

The Company satisfies its performance obligations pursuant to its collaboration service agreements over time as the customer simultaneously receives and consumes the benefits provided by the Company's services as the Company performs those services. The Company recognizes revenue over time using an input measure based on costs incurred on the basis that this measure best reflects the pattern of transfer of control of the services to the customer. In some contracts, the Company subcontracts certain services to other parties for which the Company is ultimately responsible. Costs incurred for such subcontracted services are included in the Company's measure of progress for satisfying its performance obligation and are recorded in cost of services in the statements of operations and comprehensive loss. Changes in the total estimated costs to be incurred in measuring the Company's progress toward satisfying its performance obligation may result in adjustments to cumulative revenue recognized at the time the change in estimate occurs.

Revenue recognition

The Company recognized revenue pursuant to ASC Topic 605 ("ASC 605"), Revenue recognition, for the year ended December 31, 2018 prior to the adoption of ASC 606. Under ASC 605, diagnostic test revenue was recognized when persuasive evidence of a final agreement existed; delivery had occurred or services were rendered; the price of the product or service was fixed or determinable; and collectability from the customer was reasonably assured. The criterion for whether the price was fixed or determinable and whether collectability was reasonably assured were based on management's judgments. When evaluating collectability, in situations where reimbursement coverage did not exist, the Company considered whether a sufficient history to reliably estimate a payer's individual payment patterns existed. For most uninsured customers, the Company was not able to demonstrate a predictable pattern of collectability and, therefore, recognized revenue when payment was received. For customers who had demonstrated a consistent pattern of payment of tests billed at the appropriate amounts, the Company recognized revenue at estimated realizable amounts upon delivery of test results.

Revenues from providing diagnostic testing and related data aggregation reporting services pursuant to collaboration service agreements were recognized when the contractual obligations were met based on the terms of the respective agreements.

Cost of Services

Cost of services reflects the aggregate costs incurred in performing diagnostic testing and collaboration services. These costs include expenses for reagents and laboratory supplies, personnel-related expenses (comprising salaries and benefits), stock-based compensation, shipping and handling fees, costs of third-party reference lab testing and third-party providers of genetic counseling and phlebotomy services, amortization of software development costs and equipment and allocated facility costs associated with testing. Allocated facility costs include depreciation of laboratory equipment, facility occupancy and information technology costs. Cost of services are recorded as the services are performed.

Research and Development

Research and development expenses represent costs incurred to develop technology and future test offerings. These costs are principally associated with the Company's efforts to develop the software used to analyze data and process customer orders. These costs primarily consist of personnel-related expenses (comprising salaries and benefits), stock-based compensation, costs of reagents and laboratory supplies, costs of consultants and third-party services, equipment and related depreciation expenses, non-capitalizable software development costs and allocated facility and information technology costs associated with genomics medical research. Research and development costs are expensed as incurred.

Selling and Marketing

Selling and marketing expenses primarily consist of personnel-related expenses (comprising salaries, and benefits) and stock-based compensation for employees performing commercial sales, account management, marketing and medical education. Selling and marketing costs are expensed as incurred.

General and Administrative

General and administrative expenses primarily consist of personnel-related expenses (comprising salaries and benefits) and stock-based compensation for employees in executive leadership, legal, finance and accounting, human resources, information technology, strategy and other administrative functions. In addition, these expenses include office occupancy and information technology costs. General and administrative costs are expensed as incurred.

Other Income, Net

Other income, net primarily consists of certain funding received under the CARES Act in 2020, sales and use taxes and gains and losses on equipment disposals. The Company recognized \$2.6 million of the \$5.4 million of funding received under the CARES Act as other income, net on the statements of operations and comprehensive loss during the year ended December 31, 2020.

Net Loss per Share

For the years ended December 31, 2020 and 2019, basic and diluted net loss per share attributable to common stockholders is presented in conformity with the two-class method required for companies with participating securities. The Company considers all redeemable convertible preferred stock issued on and after August 2, 2019 to be participating securities as the holders are entitled to receive dividends on an as-converted to Class A common stock basis in the event that a dividend is paid on common stock.

Under the two-class method, the net loss attributable to common stockholders was not allocated to the redeemable convertible preferred stock, as holders of the redeemable convertible preferred stock did not have a contractual obligation to share in losses. The net loss attributable to common stockholders is allocated to Class A and Class B common stockholders based on the proportion to which each class of common stock shares in losses of the Company. This proportion is based on the rights of the holders of Class B common stock relative to those of the holders of Class A common stock (see Note 11 and Note 13). Basic net loss per share attributable to common stockholders is calculated by dividing the net loss attributable to common stockholders by the weighted-average number of shares of common stock outstanding for the period.

Diluted net loss per share attributable to common stockholders is computed by dividing the net loss attributable to common stockholders by the weighted-average number of shares of common stock outstanding in the basic net loss per share calculation plus the number of shares of common stock that would be issued assuming exercise or conversion of all potentially dilutive instruments. For purposes of this calculation, common stock options and redeemable convertible preferred stock have been excluded as their effect is anti-dilutive.

Segment Information

The Company operates and manages its business as one reportable operating segment based on the manner in which the Chief Executive Officer, who is the Company's chief operating decision maker ("CODM"), assesses performance and allocates resources across the business.

Emerging Growth Company

The Company is an "emerging growth company" as defined in the Jumpstart Our Business Startups Act of 2012. As such, the Company is eligible for exemptions from various reporting requirements applicable to other public companies that are not emerging growth companies, including reduced reporting and extended transition periods to comply with new or revised accounting standards for public business entities. The Company has elected to avail itself of this exemption and, therefore, will not be subject to the same new or revised accounting standards as other public companies that are not emerging growth companies.

Recently Adopted Accounting Pronouncements

Effective January 1, 2020, the Company adopted ASU 2018-13, *Changes to the Disclosure Requirements for Fair Value Measurement* ("ASU 2018-13"). This ASU removes requirements to disclose the amount of and reasons for transfers between Level 1 and Level 2 of the fair value hierarchy, the policy for timing of transfers between levels, and the valuation processes for Level 3 fair value measurements. ASU 2018-13 clarifies that disclosure regarding measurement uncertainty is intended to communicate information about the uncertainty in measurement as of the reporting date. ASU 2018-13 adds certain disclosure requirements, including disclosure of changes in unrealized gains and losses for the period included in other comprehensive income for recurring Level 3 fair value measurements held at the end of the reporting period and the range and weighted average of significant unobservable inputs used to develop Level 3 fair value measurements. ASU 2018-13 also requires entities that use the practical expedient to measure the fair value of certain investments at their net asset values to disclose (1) the timing of liquidation of an investee's assets and (2) the date when redemption restrictions will lapse, but only if the investee has communicated this information to the entity or announced it publicly Adoption of ASU 2018-13 did not have a material impact on the Company's financial statements.

Effective January 1, 2020, the Company adopted ASU 2018-07, Compensation – Stock Compensation (Topic 718), Improvements to Nonemployee Share-Based Payment Accounting ("ASU 2018-07"), which was issued to

simplify accounting for nonemployee share-based payment transactions by making the treatment of nonemployee share-based compensation similar to that of employee share-based compensation. Adoption of ASU 2018-07 did not have a material impact on the Company's financial statements.

Recently Issued Accounting Pronouncements Not Yet Adopted

In February 2016, the FASB issued ASU 2016-02, *Leases* ("ASU 2016-02"), which requires lessees to recognize right-of-use assets and lease liabilities for most leases on their balance sheets. Expense recognition for lessees under ASU 2016-02 is similar to current lease accounting. ASU 2016-02 will require enhanced disclosures to help the financial statement users better understand the amount, timing, and uncertainty of cash flows arising from leases. The recognition, measurement and presentation of expenses and cash flows arising from a lease will primarily depend on its classification as a finance or operating lease. As an emerging growth company, the provisions of ASU 2016-02 are effective for the Company for annual and interim periods beginning after December 15, 2021. Early adoption is permitted. The Company is evaluating the transition options permissible under ASU 2016-02 and plans to adopt through a cumulative adjustment to retained earnings on the date of adoption. Significant implementation matters being addressed by the Company include documenting the new lease accounting process. The Company is evaluating the effect this ASU will have on its financial statements, related disclosures and ongoing financial reporting. The Company expects implementation of this ASU to result in the recognition of right-of-use assets and corresponding lease liabilities in its balance sheets, principally related to office and facility leases.

In June 2016, the FASB issued ASU 2016-13, *Financial Instruments – Credit Losses (Topic 326): Measurement of Credit Losses on Financial Instruments* ("ASU 2016-13"). The new credit losses standard changes the impairment model for most financial assets and certain other instruments. For trade and other receivables, contract assets recognized as a result of applying ASC 606, loans and certain other instruments, entities will be required to use a new forward looking "expected loss" model that generally will result in earlier recognition of credit losses than under today's incurred loss model. As an emerging growth company, ASU 2016-13 is effective for annual periods beginning after December 31, 2022, with early adoption permitted. Application of the amendments is through a cumulative-effect adjustment to the opening retained earnings as of the beginning of the first reporting period in which the guidance is effective. The Company is currently evaluating the impact of the new guidance on its financial statements and related disclosures.

In August 2018, the FASB issued ASU 2018-15, Intangibles – Goodwill and Other – Internal-Use Software (Subtopic 350-40): Customer's Accounting for Implementation Costs Incurred in a Cloud Computing Arrangement That Is a Service Contract ("ASU 2018-15"), which aligns the requirements for capitalizing implementation costs incurred in a hosting arrangement that is a service contract with the requirements for capitalizing implementation costs incurred to develop or obtain internal-use software (and hosting arrangements that include an internal use software license). The accounting for the service element of a hosting arrangement that is a service contract is not affected by the standard. ASU 2018-15 will require an entity (customer) in a hosting arrangement that is a service contract to follow the guidance in Subtopic 350-40 to determine which implementation costs to capitalize as an asset related to the service contract and which costs to expense. ASU 2018-15 also requires the entity (customer) to expense the capitalized implementation costs of a hosting arrangement that is a service contract over the term of the hosting arrangement, ASU 2018-15 also requires the entity to present the expense related to the capitalized implementation costs in the same line item in the statement of income as the fees associated with the hosting element (service) of the arrangement and classify payments for capitalized implementation costs in the statement of cash flows in the same manner as payments made for fees associated with the hosting element. The entity is also required to present the capitalized implementation costs on the balance sheets in the same line item that a prepayment for the fees of the associated hosting arrangement would be presented. The amendments in ASU 2018-15 are effective for the Company in annual reporting periods beginning after December 15, 2020 and interim periods beginning after December 15, 2021. Early adoption is permitted. The Company is evaluating the transition options permissible under ASU 2018-15 of either (1) retrospectively adjusting prior periods presented or (2) prospectively applying amendments to all implementation costs incurred after the date of adoption. The Company is currently evaluating the impact of ASU 2018-15 will have on its financial statements and related disclosures.

In November 2018, the FASB issued ASU 2018-18, *Collaborative Arrangements: Clarifying the Interaction between Topic 808 and Topic 606* ("ASU 2018-18"), which clarifies that certain transactions between participants in

a collaborative arrangement should be accounted for under ASC 606 when the counterparty is a customer. In addition, ASC Topic 808 ("ASC 808"), *Collaborative Arrangements* precludes an entity from presenting consideration from a transaction in a collaborative arrangement as revenue from contracts with customers if the counterparty is not a customer for that transaction. The provisions of ASU 2018-18 are effective for the Company for annual and interim periods beginning after December 15, 2020. Early adoption is permitted. The amendments in ASU 2018-18 are to be applied retrospectively through a cumulative effect adjustment to the opening balance of retained earnings of the later of (1) the earliest annual period presented and (2) the annual period that includes the date of the entity's initial application of ASC 606. Permissible transition options include the election to retrospectively apply the amendments to either (1) all contracts or (2) only the contracts that are not completed at the date of initial application of Topic 606. The Company is not currently a participant in any such collaborative arrangements that are accounted for under ASC 808 and will evaluate the impact the adoption of this standard for any potential collaborative arrangements the Company enters into in the future.

In December 2019, the FASB issued ASU 2019-12, *Income Taxes (Topic 740): Simplifying the Accounting for Income Taxes* ("ASU 2019-12"). ASU 2019-12 simplifies the accounting for income taxes by removing certain exceptions to the general principles in ASC 740 and clarifying and amending existing guidance to improve consistent application. ASU 2019-12 is effective for fiscal years beginning after December 15, 2021. Early adoption is permitted. The Company is currently assessing the impact of adopting this new accounting guidance will have on its financial statements and related disclosures.

3. Revenue Recognition

As described in Note 2, the Company adopted ASC 606 on January 1, 2019 using the modified retrospective method applied to contracts which were not completed as of the adoption date. The only impact as a result of the adoption of ASC 606 was the change in presentation of bad debt expense from general and administrative expense to a reduction of diagnostic test revenue. The adoption of ASC 606 did not have a material impact on the Company's financial statements.

Disaggregated revenue

The following table summarizes the Company's revenue disaggregated by type of customer (in thousands):

	Year Ended December 31,						
		2020	2019			2018	
Diagnostic test revenue:							
Patients with third-party insurance	\$	138,153	\$	169,538	\$	112,542	
Institutional customers		35,200		20,888		19,606	
Self-pay patients		1,998		1,241		822	
Total diagnostic test revenue		175,351		191,667		132,970	
Other revenue		3,971		4,507		371	
Total	\$	179,322	\$	196,174	\$	133,341	

Reassessment of variable consideration

Subsequent changes to the estimate of the transaction price, determined on a portfolio basis when applicable, are generally recorded as adjustments to revenue in the period of the change. The Company updates variable consideration estimated quarterly. The quarterly changes in estimates did not result in material adjustments to the Company's previously reported revenue or accounts receivable amounts for the years ended December 31, 2020, 2019 and 2018.

Remaining performance obligations

Due to the long-term nature of some collaboration service agreements, the Company's obligations pursuant to such agreements represent partially unsatisfied performance obligations at year-end. The revenues under existing

collaboration service agreements with original expected durations of more than one year are estimated to be approximately \$12.0 million. The Company expects to recognize the majority of this revenue over the next 4 years.

Contract assets and liabilities

Contract assets consist of the Company's right to consideration that is conditional upon its future performance. Contract assets arise in collaboration service agreements for which revenue is recognized over time but the Company's right to bill the customer is contingent upon the achievement of contractually-defined milestones.

Contract liabilities consist of customer payments in excess of revenues recognized. For collaboration service agreements, the Company assesses the performance obligations and recognizes contract liabilities as current or non-current based upon forecasted performance.

A reconciliation of the beginning and ending balances of contract assets and contract liabilities is shown in the table below (in thousands):

	Contract Assets		Cor	Contract Liabilities	
December 31, 2018	\$	_	\$	_	
Contract asset additions		1,057		_	
Customer prepayments		_		3,754	
Revenue recognized				(355)	
December 31, 2019	\$	1,057	\$	3,399	
Contract asset additions		1,097			
Amounts transferred to receivables		(126)		_	
Customer prepayments				874	
Revenue recognized		_		(462)	
December 31, 2020	\$	2,028	\$	3,811	

The increase in contract assets and contract liabilities as of December 31, 2020 and 2019 is primarily due to the execution of a collaboration service agreement with a customer. The Company presents contracts assets and contract liabilities arising from this customer contract on a net basis on its balance sheets. As of December 31, 2020, \$1.8 million is recorded as current contract liabilities. As of December 31, 2019, \$1.5 million and \$0.8 million are recorded as current contract liabilities and contract liabilities, net of current portion, respectively.

Costs to fulfill contracts

Costs associated with fulfilling the Company's performance obligations pursuant to its collaboration service agreements include costs for services that are subcontracted to ISMMS. Amounts are generally prepaid and then expensed in line with the pattern of revenue recognition. Prepayment of amounts prior to the costs being incurred are recognized on the balance sheets as current or non-current based upon forecasted performance.

As of December 31, 2020 and 2019, the Company had outstanding deferred costs to fulfill contracts of \$3.0 million and \$1.1 million, respectively. As of December 31, 2020, all outstanding deferred costs were recorded as prepaid expenses and other current assets. As of December 31, 2019, \$0.9 million and \$0.2 million were recorded as prepaid expenses and other current assets, respectively.

Amortization of deferred costs was \$0.9 million, \$0.7 million and \$0 for the years ended December 31, 2020, 2019 and 2018, respectively. The amortization of these costs is recorded in cost of services on the statements of operations and comprehensive loss.

4. Fair Value Measurements

The following tables set forth the fair value of financial instruments that were measured at fair value on a recurring basis (in thousands):

	December 31, 2020								
	Total			Level 1		Level 2		Level 3	
Financial Assets:									
Money market funds	\$	92,940	\$	92,940	\$	_	\$		-
Total financial assets	\$	92,940	\$	92,940	\$		\$	_	

	December 31, 2019									
	Total		Level 1		Level 2		Level 3			
Financial Assets:										
Money market funds	\$	100,272	\$	100,272	\$	_	\$		_	
Total financial assets	\$	100,272	\$	100,272	\$	_	\$		_	

Money market funds are classified within Level 1 of the fair value hierarchy as the fair value is based on quoted prices in active markets.

There were no transfers between Level 1, Level 2 and Level 3 during the periods presented.

5. Property and Equipment

Property and equipment consisted of the following (in thousands):

As of December 31,			
2020		2019	
\$ 22,818	\$	14,907	
20,743		13,197	
6,276		6,276	
4,673		5,959	
14,631		6,319	
4,118		3,188	
3,214		1,658	
16,736		2,124	
 93,209		53,628	
(30,099)		(18,365)	
\$ 63,110	\$	35,263	
\$	\$ 22,818 20,743 6,276 4,673 14,631 4,118 3,214 16,736 93,209 (30,099)	\$ 22,818 \$ 20,743 6,276 4,673 14,631 4,118 3,214 16,736 93,209 (30,099)	

For the years ended December 31, 2020, 2019 and 2018, depreciation and amortization expense was \$11.7 million, \$6.4 million and \$5.4 million, respectively, which included software amortization expense of \$3.0 million, \$1.2 million and \$0.4 million for the years ended December 31, 2020, 2019 and 2018, respectively. Depreciation

and amortization expense is included within the statements of operations and comprehensive loss as follows (in thousands):

	Year Ended December 31,							
		2020		2019		2018		
Cost of services	\$	9,055	\$	4,752	\$	4,223		
Research and development		1,040		821		722		
Selling and marketing		_		_		_		
General and administrative		1,639		834		488		
Total depreciation and amortization expenses	\$	11,734	\$	6,407	\$	5,433		

During 2018, the Company sold laboratory equipment to ISMMS for \$0.1 million and realized a loss of \$0.1 million, which is included in other income, net in the statements of operations and comprehensive loss. During 2020 and 2019, there were no sales of property and equipment made by the Company.

6. Related Party Transactions

On June 1, 2017, the Company and ISMMS entered into the Contribution Agreement, pursuant to which certain assets and liabilities were contributed to the Company by ISMMS in exchange for common and preferred stock of the Company with dividends accrued at 3% per annum. In accordance with the Contribution Agreement, ISMMS committed to fund \$55.0 million to the Company, of which \$55.0 million was drawn as of December 31, 2019. ISMMS also assigned a loan funding commitment to the Company, for which ISMMS is the guarantor. See Note 7 and Note 10 for further information.

Related party revenues

The Company provides diagnostic testing services to entities within the Mount Sinai Health Network. Related party diagnostic testing revenues recognized totaled \$0.3 million for the year ended December 31, 2020. The Company did not recognize any related party diagnostic testing revenues during the years ended December 31, 2019 and 2018.

The Company entered into collaboration service agreements with ISMMS and other entities within the Mount Sinai Health Network pursuant to which the Company performed various diagnostic testing, research and related data aggregation reporting services. Revenues recognized under these agreements were nominal for the year ended December 31, 2020. Revenues recognized under these agreements totaled \$1.2 million and \$0.3 million for the years ended December 31, 2019 and 2018, respectively. These amounts are presented in other revenue on the statements of operations and comprehensive loss.

The Company had amounts due from ISMMS and other entities within the Mount Sinai Health Network for revenues earned of \$0.3 million and \$0.2 million as of December 31, 2020 and 2019, respectively. These amounts are presented as due from related parties on the Company's balance sheets.

Related party costs

The TSA with ISMMS. The TSA was established to facilitate the continuity of the Company's operations following the Spin-out. The TSA includes financial guarantees on debt and lease obligations (as further discussed in Note 7 and Note 8, respectively); rental of certain office spaces; and accounting, finance, billing, compliance, information technology and insurance services. Expenses recognized under this agreement totaled \$7.2 million, \$7.8 million and \$6.0 million for the years ended December 31, 2020, 2019 and 2018, respectively, and are presented within related party expenses in the statements of operations and comprehensive loss. The Company had TSA payables due to ISMMS of \$0.6 million and \$0.5 million at December 31, 2020 and 2019, respectively. These amounts are included within due to related parties on the Company's balance sheets.

The Company is also party to the Service Agreements with ISMMS, whereby ISMMS provides services for the Company, including certain revenue collection efforts, procurement efforts, office space, administrative and other

services that are not covered under the TSA. ISMMS also provides personnel through employee lease arrangements pursuant to the Service Agreements. In addition, the Company incurs costs for research and development and other support provided by related parties, including costs for services that are subcontracted to related parties that support the Company in fulfilling its performance obligations with our customers. Expenses recognized pursuant to the Service Agreements and other service arrangements with ISMMS totaled \$4.4 million, \$3.5 million and \$7.3 million for the years ended December 31, 2020, 2019 and 2018, respectively. These amounts are included in either cost of services or related party expenses on the statements of operations and comprehensive loss depending on the particular activity to which the costs relate. The Company had payables due to ISMMS for the Service Agreements and other service arrangements of \$0.8 million and \$1.3 million at December 31, 2020 and 2019, respectively. These amounts are included within due to related parties on the Company's balance sheets.

Total related party costs are included within cost of services and related party expenses in the statements of operations and comprehensive loss as follows (in thousands):

	Year Ended December 31,						
		2020		2019		2018	
Costs of services	\$	2,189	\$	1,859	\$	4,122	
Related party expenses		9,395		9,452		9,132	
Total related party costs	\$	11,584	\$	11,311	\$	13,254	

7. Long-Term Debt

2016 Funding Commitment

In April 2016, ISMMS received a \$5.0 million loan funding commitment (the "DECD Loan Agreement") from the Connecticut Department of Economic and Community Development ("DECD") to support the Genetic Sequencing Laboratory Project in Branford, Connecticut (the "Project"). The DECD made a commitment to offer a total of \$9.5 million in loan funding for leasehold improvements, construction, equipment, research and development, and administrative expenses over a period of ten years at an annual interest rate of 2.0% (collectively, "Phase 1" and "Phase 2" of funding for the Project). On June 1, 2017, as part of the Spin-out, ISMMS assigned both the agreement underlying the Project and the DECD Loan Agreement to the Company. ISMMS guaranteed and continues to guarantee the Company's obligation to repay the DECD.

In June 2018, the Company amended the existing \$9.5 million DECD Loan Agreement (the "Amended DECD Loan Agreement") with the DECD by increasing the total loan commitment to \$15.5 million at the same fixed annual interest rate of 2.0% for a term of 10 years from the date the new funds are disbursed ("Phase 3" of funding for the Project).

The terms of the Amended DECD Loan Agreement require the Company to make interest-only payments through July 2023 and principal and interest payments commencing in August 2023. The final payment of principal and interest is due in July 2028.

In addition, under the terms of the Amended DECD Loan Agreement, the DECD may grant partial principal loan forgiveness of up to \$12.3 million in the aggregate. Such forgiveness is contingent upon the Company achieving job creation and retention milestones, specifically:

- \$4.5 million of Phase 1 funding will be forgiven based on creating and maintaining 35 new full-time positions in Connecticut, with a combined annual average compensation of \$70,000 for a period of 24 continuous months by December 31, 2017;
- \$2.8 million of Phase 2 funding will be forgiven based on creating 228 new full-time positions in Connecticut, with a combined annual average compensation of \$83,000, and maintaining an average of 269 full-time positions for a period of 24 continuous months by December 31, 2021;

- \$3.0 million of Phase 3 funding will be forgiven based on creating an additional 181 full-time positions in Connecticut, with a combined annual average compensation of \$83,000, and maintaining an average of 450 full-time positions for a period of 24 continuous months by December 31, 2022; and
- An additional \$2.0 million of funding will be forgiven based on creating an additional 103 full-time positions in Connecticut, with a combined annual average compensation of \$83,000, and maintaining an average of 553 full-time positions for a period of 24 continuous months by December 31, 2023

The Amended DECD Loan Agreement terms require the completion of an employment audit by a certified public accountant and acceptance by the DECD to achieve principal loan forgiveness.

The following summarizes the phased funding and potential loan forgiveness milestones set forth in the Amended DECD Loan Agreement (in millions):

	Funding		Potential Loan Forgiveness
Phase 1	\$ 5.0	0 \$	4.5
Phase 2	4.	5	2.8
Phase 3	6.0	0	3.0
Final	_	_	2.0
Total	\$ 15.	5 \$	12.3

In September 2018, the Company received an official letter from the DECD stating that in accordance with the Amended DECD Loan Agreement and following its Phase 1 employment audit, the Company met the job creation and retention milestones for Phase 1 and earned the related \$4.5 million principal loan forgiveness credit. Accordingly, the Company recorded a \$4.5 million gain on extinguishment of debt in the statements of operations and comprehensive loss for the year ended December 31, 2018.

The Company received \$4.5 million in loan funding for Phase 2 and \$6.0 million in loan funding for Phase 3 in September 2018 and March 2020, respectively. The outstanding loan balance from the DECD was \$11.0 million and \$5.0 million at December 31, 2020 and 2019, respectively.

Debt due to the DECD is collateralized by providing a security interest in certain machinery and equipment the Company acquired from ISMMS, as defined in a separate security agreement (the "DECD Security Agreement"). The DECD Security Agreement provides a security for the payment and performance of meeting the Company's obligations to the DECD until the obligations have been fully satisfied.

2020 Master Loan Agreement

In August 2020, the Company entered into a Master Loan and Security Agreement ("Master Loan Agreement") with a bank, which was assigned to a separate lender in September 2020. The Master Loan Agreement set forth terms and conditions between the Company and the bank, inclusive of certain representations and covenants. In October 2020, the Company entered into an equipment security note ("Equipment Note"), subject to all terms in the Master Loan Agreement, in which the Company received a loan of \$6.3 million and deposited the proceeds into a deposit account held by the bank. The funds deposited into the account remain in the Company's name; however, release of the funds is controlled by the bank, as agreed upon under a separate deposit control agreement. Per the terms of the Master Loan Agreement, on an annual basis upon each anniversary of the executed Master Loan Agreement, funds in the deposit account will be released to the Company in such manner that the remaining balance in the deposit account is equal to 110% of the current principal balance of the outstanding loan. Once the funds are released, the Company can use the proceeds without any restrictions. The terms of the Equipment Note require the Company to make sixty consecutive monthly payments of principal and interest at a fixed monthly amount of \$0.1 million beginning in November 2020. Interest payments are fixed at an annual interest rate of 4.75%. The Company granted the bank a security interest in the equipment listed in the Equipment Note as collateral for the loan financing arrangement. The Company retains the title to all equipment listed in the Equipment Note and fulfillment of the arrangement is not dependent on the use of the specified equipment. As such, the Company accounts for the

financing arrangement as debt. The Company recorded the \$6.3 million proceeds as restricted cash on the balance sheet at December 31, 2020. The outstanding loan balance was \$6.1 million at December 31, 2020 following monthly payments made in November and December 2020.

In a separate subordination agreement between the bank and the DECD, the DECD agreed that any present or future security interests in collateral would be subordinate to the security interests of the bank.

2020 Master Lease Agreement

In December 2020, the Company entered into a Master Lease Agreement ("Master Lease Agreement") with a lender whereby the Company agreed to sell certain equipment and immediately leaseback the equipment, resulting in proceeds of \$3.6 million. The transaction does not qualify as a sale-leaseback transaction as there is a \$1.00 repurchase option at the end of the lease term that does not represent the fair value of the underlying assets. Accordingly, the Company continues to reflect the transferred assets on the balance sheets and recorded the proceeds as a financing obligation.

The terms of the Master Lease Agreement require the Company to make sixty consecutive monthly payments of principal and interest at a fixed monthly amount of \$0.1 million beginning in February 2021. Interest payments are fixed at an annual interest rate of 3.54%.

Per the terms of the Master Lease Agreement and a separate Letter of Credit Agreement ("LOC Agreement"), the Company was required to deliver a letter of credit, from a financial institution deemed satisfactory, equal to the amount of the transferred assets. Accordingly, in December 2020, a financial institution issued an irrevocable standby letter of credit to the lender for \$3.6 million. The Company deposited the funds in an account held by the financial institution and, in accordance with the terms of a separate agreement with the financial institution, the Company must maintain an aggregate amount on deposit equal to at least 105% of the value of any outstanding letters of credit issued by the financial institution on the Company's behalf. Per the terms of the LOC Agreement with the lender, the letter of credit must be in place until all obligations have been paid in full. Beginning in June 2021 and every December and June thereafter, the letter of credit will be reduced to the then outstanding balance of the obligation. In addition, beginning in June 2022 and continuing each fiscal year thereafter, the lender will consent to a 33% reduction of the then current balance of the letter of credit provided that certain conditions and covenants have been met. Further, the Company must furnish annual audited financial statements and other financial information to the lender on a regular basis. The Company was in compliance with the above covenants as of December 31, 2020.

The Company recorded the \$3.6 million proceeds as restricted cash on the balance sheet at December 31, 2020. The outstanding loan balance was also \$3.6 million at December 31, 2020.

In a separate intercreditor agreement between the lender and the DECD, the DECD agreed that any present or future security interests in collateral would be subordinate to the security interests of the lender.

Maturities of Long-Term Debt

As of December 31, 2020, long-term debt matures as follows (in thousands):

2021	\$	1,770
2022		1,906
2023		2,865
2024		4,208
2025		4,106
Thereafter	_	5,886
Total maturities of long-term debt		20,741
Less: Current portion of long-term debt		(1,770)
Total long-term debt, net of current portion	\$	18,971

8. Commitments and Contingencies

Operating Leases

The Company entered into an agreement with ISMMS to sublease office space in Connecticut with a remaining term of approximately 13 years as of December 31, 2020. The lease is subject to escalating rent and rent-free period provisions and require the Company to pay additional amounts for operating expenses. In addition, the Company leased certain lab and office spaces in New York from ISMMS on a month-to-month basis during the years ended December 31, 2020, 2019 and 2018. See Note 6 for additional information.

In April 2019, the Company entered into a sublease agreement to rent a building located in Stamford, Connecticut to be used for office and laboratory space. As the land is more than 25% of the total value, the building is accounted for as a capital lease and the land as an operating lease.

In November 2019, the Company entered into a lease agreement with a third party for office space in Connecticut. The Company took occupancy of the facility and the lease commenced in November 2019 and has a remaining term of 13 years as of December 31, 2020. The lease provides for escalating rent over the lease term and requires the Company to pay additional amounts for operating expenses. Per the terms of the lease agreement, the Company was required to deliver a letter of credit from a financial institution equal to the amount of the security deposit on the office space. Accordingly, in February 2020, a financial institution issued an irrevocable standby letter of credit to the third party for \$0.9 million. The Company recorded \$0.9 million as restricted cash on the balance sheet as of December 31, 2020.

In January 2020, the Company entered into a lease agreement with a third party for lab space in Branford, Connecticut. The Company took occupancy of the facility and the lease commenced in February 2020 and has a remaining term of 9 years as of December 31, 2020. The lease provides for escalating rent over the lease term and requires the Company to pay additional amounts for operating expenses.

Future minimum payments under non-cancelable operating leases as of December 31, 2020 are as follows (in thousands):

2021	\$ 3,840
2022	3,975
2023	4,080
2024	4,182
2025	4,577
Thereafter	 52,653
Total operating lease obligations	\$ 73,307

Rent expense related to non-cancelable operating leases was \$5.3 million, \$0.8 million and \$0.9 million for the years ended December 31, 2020, 2019 and 2018, respectively. Rent expense related to month-to-month operating leases was \$3.2 million, \$2.8 million, and \$3.2 million for the years ended December 31, 2020, 2019 and 2018, respectively.

Capital Leases

The Company entered into various capital lease agreements to obtain laboratory equipment which contain bargain purchase commitments at the end of the lease term. The terms of the capital leases range from 3 to 5 years with interest rates ranging from 1.9% to 12.0% The leases are secured by the underlying equipment.

In April 2019, the Company entered into a sublease agreement to rent a building to be used for office and laboratory space for a base term of 325 months. The building is accounted for as a capital lease and the land as an operating lease.

The Company has the option to renew the lease at the end of the initial base term for either one period of 10 years, or two periods of 5 years. There is also an early termination option in which the Company may cancel the lease after the 196th month with a cancellation charge of \$8.4 million. The Company has no intent to exercise the renewal nor early termination options.

The building lease is amortized on a straight-line basis over 325 months. The interest rate related to the lease obligation is 13.1% and the maturity date is October 30, 2046.

The Company also incurs other lease-related expenses such as real estate taxes, operating expenses and maintenance that are generally based on the Company's pro-rata share of the total square footage of the property being leased.

Property and equipment under capital leases was \$27.0 million and \$19.5 million as of December 31, 2020 and 2019, respectively. Accumulated amortization on capital lease assets was \$9.7 million and \$6.3 million at December 31, 2020 and 2019, respectively.

For all capital leases, the portion of the future payments designated as principal repayment is recorded as a capital lease obligation on the Company's balance sheets in accordance with repayment terms. Future payments under capital leases at December 31, 2020, are as follows (in thousands):

2021	\$ 5,165
2022	4,702
2023	3,479
2024	2,658
2025	2,344
Thereafter	51,869
Total capital lease obligations	 70,217
Less: amounts representing interest	 (45,933)
Present value of net minimum capital lease payments	24,284
Less: current portion	(3,506)
Capital lease obligations, net of current portion	\$ 20,778

Interest expense related to capital leases was \$2.2 million, \$0.7 million and \$0.1 million for the years ended December 31, 2020, 2019 and 2018, respectively.

Contingencies

The Company may, from time to time, become involved in legal proceedings arising out of the normal course of its operations. For instance, the Company may be subject to lawsuits alleging negligence or other similar legal claims related to its provision of genetic testing and/or information services. The Company establishes reserves for specific legal matters when it determines that the likelihood of an unfavorable outcome is probable and the loss is reasonably estimable. The Company has also identified certain other legal matters where it believes an unfavorable outcome is not probable and, therefore, no reserve is established. Although management currently believes that resolving claims against the Company, including claims where an unfavorable outcome is reasonably possible, will not have a material impact on the liquidity, results of operations, or financial condition of the Company, these matters are subject to inherent uncertainties and management's view of these matters may change in the future. It is possible that an unfavorable outcome of one or more of these lawsuits or other contingencies could have a material impact on the liquidity, results of operations, or financial condition of the Company.

Significant judgment is required in both the determination of probability of loss and the determination as to whether the amount can be reasonably estimated. Accruals are based only on information available at the time of the assessment, due to the uncertain nature of such matters. As additional information becomes available, management reassesses potential liabilities related to pending claims and litigation and may revise its previous estimates, which could materially affect the Company's results of operations in a given period.

The Company maintains various liability insurance coverages for, among other things, claims that could result from providing, or failing to provide diagnostic testing services, including inaccurate testing results, and other exposures. The Company's insurance coverage limits its maximum exposure on claims; however, the Company is responsible for any uninsured portion of losses. Management believes that present insurance coverage is sufficient to cover potential exposures.

The Company was not a party to any material legal proceedings at December 31, 2020, nor is it a party to any legal proceedings as of the date of issuance of these financial statements.

9. Stock-Based Compensation

In April 2017, the Company adopted the 2017 Stock Incentive Plan (the "2017 Plan"), effectively replacing the 2016 Stock Incentive Plan, for which no shares had vested, therefore, resulting in no obligation to the Company. In February 2018, the Board of Directors approved a resolution to amend the 2017 Plan, whereby awards are to be granted for Class A common stock and/or Class B common stock of the Company. The 2017 Plan is intended to qualify as an incentive stock option under the section 422 of Internal Revenue Service code, however certain non-qualified stock options and stock appreciation rights have been awarded under the 2017 Plan.

The 2017 Plan offers total aggregate shares of up to 279,192 shares of Class A common stock and Class B common stock, collectively, on an as-converted to Class A common stock basis. Following the amendment to the 2017 Plan in February 2018, the Company intends to use available shares to grant Class B common stock awards.

Awards could be granted to directors, officers, employees and consultants (collectively referred to as Employees) at the discretion of the Company and under terms and provisions established by the Board of Directors. Under the terms of the 2017 Plan, options may be granted at an exercise price not less than fair value. For employees holding more than 10% of the voting rights of all classes of stock of the Company, the per share exercise price must be at least 110% of fair value of the common stock on the date of grant, as determined by the Board of Directors. The terms of the awards granted may not exceed ten years from the date of grant.

The 2017 Plan awards granted generally vest in tranches with different vesting dates over a period of four years solely based upon continued employment or engagement under a consulting agreement over a specific period of time. Generally, the options granted to newly hired employees vest in equal monthly or quarterly installments over the four-year vesting schedule.

Under the 2017 Plan, the Company has a call option to repurchase awards for cash from the plan participants. upon termination of the participant's employment or consulting agreement. The Company concludes that it is probable it will exercise its call option prior to the award holder being subject to the risks and rewards of equity ownership. As a result, the Company's stock-based compensation awards are classified as a liability.

The initial measurement of fair value and subsequent change in fair value are recognized as compensation expense over the requisite service period from grant date to settlement date for all awards that vest with a corresponding adjustment to stock-based compensation liabilities on the Company's balance sheets. Shares of common stock issued upon settlement of an award continue to be classified as a liability and remeasured to fair value each reporting period until the stockholder bears the risks and rewards of equity ownership for a reasonable period of time, which the Company concludes is a period of at least six months.

In 2018, the Company granted stock appreciation rights ("SAR") to one employee and one consultant. In 2019 and 2020, the Company did not grant SARs to any employees or consultants. The awards granted vest in tranches with different vesting dates over a period of four years solely based upon continued employment or engagement under consulting agreement and vest in equal quarterly installments over the four-year vesting schedule. The SAR can only be exercised upon a liquidation event as defined in the related SAR agreement, which includes liquidations, mergers, and an initial public offering. The Company concluded that such liquidation events are not probable of occurring and, as such, no expense related to the SAR was recognized by the Company for the years ended December 31, 2020, 2019 and 2018.

At December 31, 2020 and 2019, stock-based compensation liabilities were \$132.0 million and \$11.8 million, respectively. Stock-based compensation expense is included within the statements of operations and comprehensive loss as follows (in thousands):

	Year Ended December 31,				
		2020		2019	2018
Cost of services	\$	13,947	\$	710	\$ 748
Research and development		26,650		1,281	1,135
Selling and marketing		10,750		650	416
General and administrative		68,884		2,841	3,306
Total stock-based compensation expense	\$	120,231	\$	5,482	\$ 5,605

The following summarizes the activity under the 2017 Plan for Class A and Class B common stock options (in thousands, except share and per share amounts):

Class A Common Stock	Shares Available for Grant	Stock Options Outstanding	Weighted- Average Exercise Price	Weighted- Average Remaining Contractual Life (years)	Aggregate Intrinsic Value
Balances at December 31, 2018	_	142,500	18.94	8.57	\$ 5,794
Options forfeited and cancelled	14,000	(14,000)	18.94	_	_
Increase in share reserve for issuance of Class B grants	(14,000)	<u> </u>	<u> </u>		
Balances at December 31, 2019	_	128,500	18.94	7.58	\$ 9,754
Options forfeited and cancelled	6,500	(6,500)	18.94	_	_
Increase in share reserve for issuance of Class B grants	(6,500)				<u> </u>
Balances at December 31, 2020	_	122,000	18.94	6.57	\$ 80,565
Options exercisable at December 31, 2020		115,972	18.94	6.56	\$ 76,584

All outstanding stock options for Class A common stock have an exercise price of \$18.94.

Class B Common Stock	Shares Available for Grant	Stock Options Outstanding	d- Average ise Price	Weighted- Average Remaining Contractual Life (years)	Aggre	egate Intrinsic Value
Balances at December 31, 2018	3,315,972	2,434,028	\$ 0.20	9.27	\$	969
Options granted	(3,247,815)	3,247,815	\$ 0.95	_		_
Options forfeited and cancelled	369,000	(369,000)	\$ 0.23	-		_
Increase in share reserve for issuance under the 2017 Plan	7,529,200	_	_	_		_
Increase in share reserve for issuance of Class B grants	1,400,000	-	-	-		_
Balances at December 31, 2019	9,366,357	5,312,843	\$ 0.65	9.09		1,562
Options granted	(9,245,190)	9,245,190	\$ 1.32	-		
Options forfeited and cancelled	537,000	(537,000)	\$ 0.86	_		
Increase in share reserve for issuance of Class B grants	650,000	-	-	-		_
Options exercised	_	(105,429)	\$ 0.95	_		
Balances at December 31, 2020	1,308,167	13,915,604	\$ 1.09	8.91	\$	79,334
Options exercisable at December 31, 2020		5,615,734	\$ 0.74	8.42	\$	34,005

As of December 31, 2020, stock options outstanding for Class B common stock consisted of the following:

Exercise Prices	Class B Stock Options Outstanding	Weighted- Average Remaining Contractual Life (years)
\$0.1894	1,834,028	7.27
\$0.5960	50,000	7.82
\$0.9485	9,611,633	8.98
\$2.3564	2,419,943	9.89

The aggregate intrinsic value in the tables above calculates the difference between the exercise price of the underlying stock options and the fair value of the Company's common stock for stock options that were in-the-money and represents the value that would have been received by the option holders had all option holders exercised their options on December 31, 2020.

The fair value of each stock option award granted was estimated on the date of grant and remeasured each reporting period using the Black-Scholes option-valuation model based on the following inputs and assumptions:

Expected volatility – Since the Company is privately-held and, therefore, does not have any trading history for its common stock, the expected volatility was estimated based on the average volatility for comparable publicly traded companies over a period equal to the expected term of stock option grants. When selecting these comparable companies, the Company considered the enterprise value, risk profiles, position within the industry, and whether there was sufficient historical share price information to meet the expected life of the stock-based awards. Historical volatility was computed using the daily closing prices for the selected companies' common stock during the equivalent period of the calculated expected term of the stock-based awards.

Expected term – The expected term represents the period that awards are expected to be outstanding. The expected term was determined by the potential timing of a liquidity event since all awards have accelerated vesting features upon a liquidation event and the Company generally does not expect grantees to exercise vested options prior to a liquidation event.

Risk-free interest rate – The risk-free interest rate is based on the U.S. Treasury yield curve in effect for bonds with maturities consistent with the expected holding periods corresponding with the expected term of the option.

Dividend yield – The Company has never paid dividends on its common stock and does not anticipate paying dividends on its common stock in the foreseeable future. Therefore, the Company used an expected dividend yield of zero.

Fair value of common stock —The absence of a public market for the Company's common stock for the years ended December 31, 2020, 2019 and 2018 required the Company's Board of Directors to estimate the fair value of its common stock. The Company considered several objective and subjective factors, including the most recently available valuation of the Company's common stock prepared by an independent third party valuation firm and factors that may have changed from the date of the most recent valuation through the end of the reporting period. In determining the fair value of common stock, the Company considered the valuation of comparable companies, the Company's operating and financial performance, the lack of liquidity of the Company's common stock, transactions in the Company's common stock, general and industry specific economic outlook, amongst other factors.

The estimated fair value of the stock option awards as of December 31, 2020, 2019, and 2018 was estimated using the Black-Scholes option pricing model with the following assumptions:

	2020	2019	2018
Expected volatility	65.80%	60.00%	70.00%
Expected term (in years)	0.50-1.49	3.00-5.00	4.00
Risk-free interest rate	0.10%	1.40%-1.43%	2.68%
Dividend yield		_	_
Fair value of Class A common stock	\$679.31	\$94.85	\$59.60
Fair value of Class B common stock	\$6.7931	\$0.9485	\$0.5960

As of December 31, 2020, the fair value associated with the Company's stock options totaled \$160.6 million. The vested portion of this fair value at December 31, 2020 was \$80.0 million and \$52.0 million for Class A and Class B stock options, respectively, and is included in stock-based compensation liabilities on the Company's balance sheets. As of December 31, 2020, unrecognized stock-based compensation cost related to the unvested portion of the Company's stock options were \$0.5 million and \$28.1 million for Class A and Class B stock options, respectively. The Company expects to recognize the unrecognized compensation cost on a graded-vesting basis over a weighted-average period of 0.3 and 0.9 years for Class A and Class B stock options, respectively. Cash received from stock option exercise for the year ended December 31, 2020 was \$0.1 million. No cash was received from stock option exercise for the years ended December 31, 2019 and 2018.

10. Redeemable Convertible Preferred Stock

Series A Redeemable Convertible Preferred Stock

In June 2017, in connection with the Spin-out, the Company issued 800,000 shares of Series A redeemable convertible preferred stock (the "Series A Preferred Stock") to ISMMS at an original issue price of \$122.94 per share (the "Series A Original Issue Price"). ISMMS's capital contribution to the Company was accounted for at the net book value of the assets transferred to and liabilities assumed by the Company since the Company and ISMMS are entities under common control (see Note 1). As a result, the difference between the fair value of the Series A Preferred Stock at the Series A Original Issue Price and the net book value of the assets and liabilities contributed to the Company as described in Note 6 results in additional preference of \$55.0 million to ISMMS.

The holder of the Series A Preferred Stock was entitled to a number of votes equal to the number of whole shares of Class A common stock into which it is convertible. The Series A Preferred Stock was convertible to Class A common stock at the option of the holder at any time and without the payment of additional consideration and was mandatorily convertible upon the occurrence of certain events.

The holder of the Series A Preferred Stock was entitled to mandatory, cumulative dividends at a rate of 3% per annum that were satisfied through the issuance of additional shares on each anniversary of the issuance of the Series A Preferred Stock. As a result, the Company issued an additional 24,000 and 24,720 shares to the holder of the Series A Preferred Stock on June 1, 2018 and June 1, 2019, respectively.

In the event of a liquidation, dissolution or a deemed liquidation of the Company, the holder of the Series A Preferred Stock was to receive distributions prior to payment to the holder of Class A common stock.

Series A Preferred Stock Modification and Issuances of Redeemable Convertible Series B Preferred Stock and Redeemable Convertible Series C Preferred Stock

In August 2019, the Company amended its certificate of incorporation to change the structure of the redeemable convertible preferred stock by authorizing to issue three series of redeemable convertible preferred stock. Following the amended certificate of incorporation, the Company has authority to issue 1,308,663 shares of redeemable convertible preferred stock with \$0.00001 par value per share, which consists of 447,373 shares designated as Series A-1 redeemable convertible preferred stock (the "Series A-1 Preferred Stock"), 522,627 shares designated as Series A-2 redeemable convertible preferred stock (the "Series B Preferred Stock") and 338,663 shares designated as Series B redeemable convertible preferred stock (the "Series B Preferred Stock"). The original issue price for Series A-1 Preferred Stock and Series A-2 Preferred Stock is the Series A Original Issue Price and the original issue price for Series B Preferred stock is \$376.80 per share (the "Series B Original Issue Price").

In consideration thereof on August 2, 2019, the Company issued 447,373 shares and 401,347 shares of its Series A-1 Preferred Stock and Series A-2 Preferred Stock, respectively, to ISMMS at the Series A Original Issue Price, replacing the Series A Preferred Stock issued and outstanding prior to the amendment to the certificate of incorporation. Also, on August 2, 2019, the Company entered into a stock purchase agreement with third-party investors, whereby the Company issued 338,663 shares of its Series B Preferred Stock at the Series B Original Issue Price, resulting in \$118.8 million in cash proceeds, net of issuance costs.

In July and August 2020, the Company amended its certificate of incorporation to authorize the issuance of additional shares of redeemable convertible preferred stock. Following the amended certificate of incorporation, the Company has authority to issue 197,824 shares of redeemable convertible preferred stock with \$0.00001 par value per share designated as Series C redeemable convertible preferred stock (the "Series C Preferred Stock"). The original issue price for Series C Preferred Stock is \$613.67 per share (the "Series C Original Issue Price"). Concurrently with these amendments to the certificate of incorporation, the Company entered into stock purchase agreements with third-party investors, whereby the Company issued 197,821 shares of its Series C Preferred Stock at the Series C Original Issue Price, resulting in \$117.3 million in cash proceeds, net of issuance costs.

The Series A-1 Preferred Stock, the Series A-2 Preferred Stock, the Series B Preferred Stock and the Series C Preferred Stock are collectively referred to as the "Redeemable Convertible Preferred Stock."

Voting Rights

Holders of the Redeemable Convertible Preferred Stock are entitled to a number of votes equal to the number of whole shares of Class A common stock into which it is convertible.

Dividends

Holders of the Redeemable Convertible Preferred Stock are entitled to receive or participate in dividends to the extent that dividends are declared for holders of Class A common stock and Class B common stock, at which point the holders of the Redeemable Convertible Preferred Stock are entitled to participate on an as-converted to Class A common stock basis.

The Company has not declared any cash or other dividends through December 31, 2020.

Conversion Rights

The Redeemable Convertible Preferred Stock is convertible into Class A common stock at the option of the holder at any time and without the payment of additional consideration and is mandatorily convertible upon the occurrence of certain events. The conversion ratio could be adjusted upon the Company's issuance of shares of common stock below the original issue prices of the Redeemable Convertible Preferred Stock; the issuance of certain options or securities convertible into common stock of the Company; the issuance of certain dividends; and events such as stock splits, merger and reorganization.

There were no conversions of Redeemable Convertible Preferred Stock into Class A common stock during the years ended December 31, 2020, 2019 and 2018. As of December 31, 2020 and 2019, all shares of Redeemable Convertible Preferred Stock were convertible into shares of Class A common stock at a 1:1 ratio.

Liquidation Preference

In the event of a liquidation, dissolution or deemed liquidation of the Company, the holders of the Series A-1 Preferred Stock, Series B Preferred Stock and Series C Preferred Stock are entitled to receive, prior to distribution to the holders of Series A-2 Preferred Stock, Class A common stock and Class B common stock, an amount per share equal to the greater of: (i) the liquidation preference amount for each series of preferred stock plus any accrued but unpaid dividends, or (ii) the amount per share that would have been payable had all shares been converted into Class A common stock immediately prior to such liquidation event. After the required distributions to the holders of the Series A-1 Preferred Stock, Series B Preferred Stock and Series C Preferred Stock, holders of the Series A-2 Preferred Stock are entitled to receive distributions of the remaining assets of the Company prior to the holders of Class A common stock and Class B common stock.

The holders of the Series A-1 Preferred Stock and Series A-2 Preferred Stock are entitled to a liquidation preference equal to the Series A Original Issue Price.

The holders of the Series B Preferred Stock are entitled to a liquidation preference of \$603.26 per share during the period commencing on original issue date of the Series B Preferred Stock (the "Series B Original Issue Date") and ending on the date that is one day prior to the third anniversary of the Series B Original Issue Date; \$612.69 per share during the period commencing on the third anniversary of the Series B Original Issue Date and ending on the date that is one day prior to the fourth anniversary of the Series B Original Issue Date; and \$659.82 per share from and after the fourth anniversary of the Series B Original Issue Date, in each case as such amount is appropriately adjusted in the event of any stock dividend, stock split or other similar recapitalization with respect to the Series B Preferred Stock.

The holders of the Series C Preferred Stock are entitled to a liquidation preference equal to the Series C Original Issue Price.

Classification of Redeemable Convertible Preferred Stock

The Redeemable Convertible Preferred Stock has deemed liquidation provisions which provide the holders the option to redeem the shares upon a change in control or other deemed liquidation event. The deemed liquidation preference provisions of the Redeemable Convertible Preferred Stock are considered contingent redemption provisions that are not solely within the Company's control. Accordingly, the Redeemable Convertible Preferred Stock is presented outside of permanent equity in the mezzanine portion of the Company's balance sheets. No accretion was recorded during the years ended December 31, 2020, 2019 and 2018 as a deemed liquidation event was not considered probable.

Redeemable Convertible Preferred Stock at December 31, 2020 consists of the following (in thousands, except share data):

Redeemable Convertible Preferred Stock	Shares Authorized	Shares Issued and Outstanding	Amount	Agg	gregate Liquidation Preference
Series A-1	447,373	447,373	\$ 51,811	\$	55,000
Series A-2	522,627	401,347	46,480		49,342
Series B	338,663	338,663	118,824		204,302
Series C	197,824	197,821	117,324		121,397
Total Redeemable Convertible Preferred Stock	1,506,487	1,385,204	\$ 334,439	\$	430,041

11. Common Stock

On March 1, 2018, the Company's certificate of incorporation was amended to provide for two classes of common stock, Class A and Class B. The Company converted 57,500 Class A shares to Class B shares at a conversion ratio of 1:100. As a result, the Company has the authority to issue 1,942,500 shares of Class A common stock and 5,750,000 shares of Class B common stock, both at \$0.00001 par value per share.

On August 2, 2019, the Company's certificate of incorporation was amended to increase the number of shares the Company was authorized to issue for both Class A and Class B common stock. As a result of the amended certificate of incorporation, the Company has the authority to issue 2,500,000 shares of Class A common stock and 15,000,000 shares of Class B common stock, both at \$0.00001 par value per share. The Company has authority to convert all Class B common stock to shares of Class A common stock on a basis of 100 shares of Class B common stock for each share of Class A common stock.

The rights of the holders of Class A common stock and Class B common stock are identical, except with respect to voting and conversion. Holders of Class A common stock are entitled to one vote per share and holders of Class B common stock are entitled to one one-hundredth of a vote per share. The Company has the authority at any time by notice given to the holders of Class B common stock to convert all of the Class B common stock to shares of Class A common stock on a basis of 100 shares of Class B common stock for each share of Class A common stock.

There was one share of Class A common stock issued and outstanding at December 31, 2020, 2019 and 2018. There were 105,429 shares of Class B common stock issued and outstanding at December 31, 2020. There were no shares of Class B common stock issued and outstanding at December 31, 2019 and 2018. The shares of Class B common stock issued and outstanding at December 31, 2020 remained liability-classified since the Company concluded that the stockholder did not yet bear the risks and rewards of equity ownership for a reasonable period of time.

12. Income Taxes

For the years ended December 31, 2020, 2019 and 2018, the Company did not have a current or deferred income tax expense or (benefit). Accordingly, the effective tax rate for the Company for the years ended December 31, 2020, 2019 and 2018 was zero percent. A reconciliation of the anticipated income tax expense/

(benefit) computed by applying the statutory federal income tax rate of 21% to income before taxes to the amount reported in the statement of operations and comprehensive loss is as follows:

	Year Ended December 31,				
	2020	2019	2018		
U.S. federal taxes at statutory rate	21.0%	21.0%	21.0%		
State taxes (net of federal benefit)	2.1	3.5	2.1		
Research and development tax credits	0.6	3.4	3.7		
Non-deductible stock-based compensation	(7.8)	(3.3)	(4.3)		
Non-deductible expenses	_	(0.5)	(0.3)		
Change in valuation allowance	(15.9)	(24.1)	(22.2)		
Effective tax rate	—%	—%	—%		

The tax effects of temporary differences and carryforwards that give rise to significant portions of the net deferred tax assets were as follows:

		As of December 31,		
		2020	2019	
Deferred tax assets:				
Net operating loss carryforwards	\$	44,583	\$ 17,599	
Stock-based compensation		7,538	376	
Accrued compensation		2,337	1,331	
Research and development credits		4,667	2,190	
Deferred rent		493	52	
Unearned revenue		186	_	
Deferred employer taxes		1,050	_	
Interest expense		479	10	
Other		23	18	
Gross deferred tax assets		61,356	21,576	
Valuation allowance		(58,264)	(20,082)	
Total deferred tax assets		3,092	1,494	
D. C 14 . 19.1999				
Deferred tax liabilities:		(00 =)	(5.4.0)	
Property and equipment		(685)	(344)	
Capitalized software		(2,407)	(1,150)	
Total deferred tax liabilities	_	(3,092)	(1,494)	
Net deferred tax assets	\$	_	\$ —	

As of December 31, 2020, the Company had the following tax net operating loss carryforwards available to reduce future federal and state taxable income, and tax credit carryforwards available to offset future federal and Connecticut income taxes:

	Amount	Expiration period
Tax net operating loss carryforwards:		
Federal (pre-2018 net operating losses)	33,056	2036-2037
Federal (post-2017 net operating losses)	155,554	No expiration
State	66,937	2028-2042
State	10,356	No expiration
Tax credit carryforwards:		
Federal research and development	3,368	2038-2040
Connecticut research and experimental	762	2034-2035
Connecticut research and development	883	No expiration

The CARES Act, among other things, includes provisions relating to refundable payroll tax credits, net operating loss carryback periods, alternative minimum tax credit refunds, modifications to the net interest deduction limitations and technical corrections to tax depreciation methods for qualified improvement property.

The CARES Act also provides for the elective deferral of the deposit and payment of the employer share of Social Security taxes for the period beginning March 27, 2020 and ending December 31, 2020. Under the CARES Act, 50% percent of the employer portion of Social Security tax is to be remitted no later than December 31, 2021, with the remaining 50% to be remitted no later than December 31, 2022. The Company has evaluated the effect of the elective deferral on its income tax positions and determined that the corresponding deduction related to the employer portion of Social Security tax is not deductible in the year ended December 31, 2020, resulting in a nominal deferred tax asset. The Company continues to evaluate the potential effects the CARES Act may have on its operations and consolidated financial statements in future periods.

Future realization of the tax benefits of existing temporary differences and carryforwards ultimately depends on the existence of sufficient taxable income within the carryforward period. As of December 31, 2020 and 2019, the Company performed an evaluation to determine whether a valuation allowance was needed. Based on the Company's analysis, which considered all available evidence, both positive and negative, the Company determined that it is more likely than not that its net deferred tax assets will not be realized. Accordingly, the Company maintained a full valuation allowance as of December 31, 2020 and 2019. The valuation allowance increased by \$38.2 million in 2020 and \$7.2 million in 2019 primarily due to the increase in net operating loss carryforwards, research and development tax credits, accrued compensation expenses, stock-based compensation and deferred rent expense.

Under Internal Revenue Code Section 382, if a corporation undergoes an "ownership change," the corporation's ability to use its pre-change NOL carryforwards and other pre-change tax attributes to offset its post-change income may be limited. Generally, an ownership change occurs when certain shareholders increase their aggregated ownership by more than 50 percentage points over their lowest ownership percentage in a testing period (typically three years). The Company has not completed a study to assess whether an ownership change has occurred or whether there have been multiple ownership changes since becoming a "loss corporation" as defined in Section 382. Future changes in stock ownership, which may be outside of the Company's control, may trigger an ownership change. In addition, future equity offerings or acquisitions that have an equity component of the purchase price could result in an ownership change. If an ownership change has occurred or does occur in the future, utilization of the NOL carryforwards or other tax attributes may be limited.

ASC 740 addresses the determination of whether tax benefits claimed or expected to be claimed on a tax return should be recorded in the financial statements by prescribing a model for recognizing, measuring, and disclosing

uncertain tax positions. Unrecognized income tax benefits represent income tax positions taken on income tax returns but not yet recognized in the financial statements.

As of December 31, 2020 and 2019, the Company had nominal gross unrecognized tax benefits which, if recognized, would not impact the effective tax rate due to the Company's valuation allowance position. Due to the uncertainties associated with any examinations that may arise with the relevant tax authorities, it is not possible to reasonably estimate the impact of any significant increase or decrease to the unrecognized tax benefits within the next twelve months.

A reconciliation of the beginning and ending amounts of unrecognized tax benefits for the years ended December 31, 2020 and 2019 is as follows:

		As of December 31,			
	2	2020	2019		
Unrecognized tax benefits – January 1	\$	374 \$	195		
Gross increases – tax positions in current period		163	179		
Unrecognized tax benefits – December 31	\$	537 \$	374		

To the extent penalties and interest would be assessed on any underpayment of income tax, the Company's policy is that such amounts would be accrued and classified as a component of income tax expense in the financial statements. As of December 31, 2020 and 2019, the Company had no accrued interest or penalties related to uncertain tax positions.

The Company files U.S federal and multiple state income tax returns as prescribed by the tax laws of the jurisdictions in which it operates. In the normal course of business, the Company is subject to examination by federal and state jurisdictions, where applicable. There are currently no pending federal or state income tax examinations. As a result of the Company's net operating loss carryforwards, the Company's federal and state statutes of limitations remain open for all years until the net operating loss carryforwards are utilized or expire prior to utilization.

As a result of legislation in the state of Connecticut, corporate entities have the opportunity to exchange certain research and development tax credit carryforwards for a cash payment of 65% of the research and development tax credits. The research and development expenses that qualify for Connecticut credits are limited to those costs incurred within Connecticut. The Company has elected to participate in the exchange program and, as a result, has recognized net benefits of \$0.5 million for the year ended December 31, 2019 and \$0.5 million for the year ended December 31, 2018 which is included in non-operating income in the statements of operations and comprehensive loss. The Company was not eligible for the exchange program for the year ended December 31, 2020 because it no longer qualified as a small business for purposes of the exchange program as its gross income exceeded \$70.0 million for the previous tax year.

13. Net Loss per Share

Basic net loss per share is computed by dividing the net loss attributable to common stockholders by the weighted-average number of shares of common stock outstanding for the period. The following table sets forth the computation of basic net loss per share attributable to common stockholders (in thousands, except for share amounts):

	Year Ended December 31,				
		2020		2019	2018
Numerator:					
Net loss attributable to common stockholders	\$	(241,340)	\$	(32,743)	\$ (26,823)
Weighted average Class A shares outstanding used in computing allocation of net loss attributable to common stockholders		1		1	1
Weighted average Class B shares on an as converted to Class A basis used in computing allocation		40		0	0
Allocation of net loss attributable to common stockholders for basic:					
Class A common stock		(5,824)		(32,743)	(26,823)
Class B common stock		(235,516)		_	_
Denominator:					
Weighted average shares used in computing net loss per share attributable to Class A common stockholders		1		1	1
Weighted average shares used in computing net loss per share attributable to Class B common stockholders		4,044		_	<u> </u>
Basic net loss per share attributable to Class A common stockholders	\$	(5,824)	\$	(32,743)	\$ (26,823)
Basic net loss per share attributable to Class B common stockholders	\$	(58)	\$		\$

Diluted net loss per share is computed based on the weighted-average number of shares of common stock, including the dilutive effect of common stock equivalents, outstanding. Basic net loss per share is the same as diluted net loss per share for 2018 and 2019 as the inclusion of potentially dilutive shares would have been anti-dilutive.

For the year ended December 31, 2020, the Company's diluted net loss per share of Class A common stock assumed the conversion of all Class B common stock into Class A common stock in accordance with the if-converted method. For the year ended December 31, 2020, the calculation of diluted net loss per share of Class B common stock did not differ from the calculation of basic net loss per share as the inclusion of potentially dilutive shares would have been anti-dilutive. The following table sets forth the computation of diluted net loss per share of Class A common stock for the year ended December 31, 2020 (in thousands, except for share amounts):

	Year Ended December 31,							
	oss Attributable to A common stock	Weighted average shares outstanding		Loss per share				
Basic net loss per share	\$ (5,824)	1	\$	(5,824)				
Add:The effect of dilutive potential Class A common stock Class B common stock	\$ (235,516)	40						
Diluted net loss per share attributable to Class A common stock	\$ (241,340)	41	\$	(5,824)				

The following table summarizes the outstanding shares of potentially dilutive securities that were excluded from the computation of diluted net loss per share attributable to common stockholders for the period presented because including them would have been anti-dilutive:

	Year Ended December 31,							
	2020	2019	2018					
Outstanding options to purchase Class A common stock	122,000	128,500	142,500					
Outstanding options to purchase Class B common stock	13,915,604	5,312,843	2,434,028					
Redeemable convertible preferred stock (on an if- converted basis)	1,272,821	979,526	814,071					
Total	15,310,425	6,420,869	3,390,599					

14. Supplemental Financial Information

Other current liabilities

Other current liabilities consisted of the following (in thousands):

	As of December 31,				
	 2020		2019		
Other current liabilities:					
Accrued bonus	\$ 9,821	\$	5,296		
Accrued payroll	6,834		1,892		
Accrued benefits	3,663		291		
Accrued commissions	1,540		1,425		
Current portion of long-term debt	1,770		_		
Other	4,509		1,503		
Total current other liabilities	\$ 28,137	\$	10,407		

15. Subsequent Events

The Company has evaluated subsequent events through May 6, 2021, the date the financial statements were available to be issued.

On February 9, 2021, the Company, CM Life Sciences, Inc. ("CMLS"), and S-IV Sub, Inc., a direct and wholly-owned subsidiary of CMLS, entered into an Agreement and Plan of Merger (the "Merger Agreement"), pursuant to which CMLS will acquire the Company through a merger of S-IV Sub, Inc. with and into the Company (the "Merger"), with the Company being the surviving corporation and a wholly-owned subsidiary of CMLS following the Merger. Once effective, all equity securities of the Company will be converted into the right to receive the applicable portion of merger consideration.

Mount Sinai Genomics, Inc. Condensed Balance Sheets (in thousands, except share and per share amounts) (unaudited)

		March 31, 2021	December 31, 2020		
Assets					
Current assets:					
Cash and cash equivalents	\$	58,652	\$	108,132	
Accounts receivable		33,490		32,044	
Due from related parties		349		289	
Inventory		32,969		24,962	
Prepaid expenses and other current assets		15,070		8,681	
Total current assets		140,530		174,108	
Property and equipment, net		64,632		63,110	
Restricted cash		10,828		10,828	
Other assets		3,596		3,596	
Total assets	\$	219,586	\$	251,642	
Liabilities, Redeemable Convertible Preferred Stock and Stockholders' Deficit					
Current liabilities:					
Accounts payable and accrued expenses	\$	41,609	\$	38,591	
Due to related parties		797		1,425	
Current contract liabilities		2,810		1,783	
Other current liabilities		22,991		31,643	
Total current liabilities		68,207		73,442	
Long-term debt, net of current portion		18,502		18,971	
Stock-based compensation liabilities		296,952		131,989	
Other liabilities		22,530		22,852	
Total liabilities		406,191		247,254	
Commitments and contingencies (Note 8)					
Redeemable convertible preferred stock:					
Series A-1 redeemable convertible preferred stock, \$0.00001 par value: 447,373 shares authorized, issued and					
outstanding at March 31, 2021 and December 31, 2020; aggregate liquidation preference of \$55,000 at March 31, 2021 and December 31, 2020		51,811		51,811	
Series A-2 redeemable convertible preferred stock, \$0.00001 par value: 522,627 shares authorized at March 31, 2021 and December 31, 2020; 401,347 shares authorized, issued and outstanding at March 31, 2021 and December 31, 2020; aggregate liquidation preference of \$49,342 at March 31, 2021 and December 31, 2020)	46,480		46,480	
Series B redeemable convertible preferred stock, \$0.00001 par value: 338,663 shares authorized, issued and outstanding at March 31, 2021 and December 31, 2020; aggregate liquidation preference of \$204,302 at March 31, 2021and December 31, 2020		118,824		118,824	
Series C redeemable convertible preferred stock, \$0.00001 par value: 197,824 shares authorized at March 31, 2021 and December 31, 2020; 197,821 shares issued and outstanding at March 31, 2021 and December 31,		,		,	
2020; aggregate liquidation preference of \$121,397 at March 31, 2021 and December 31, 2020		117,324		117,324	
Redeemable convertible preferred stock		334,439		334,439	

Mount Sinai Genomics, Inc. Condensed Balance Sheets (in thousands, except share and per share amounts) (unaudited)

Stockholders' deficit:		
Class A common stock, \$0.00001 par value: 2,500,000 shares authorized at March 31, 2021 and December 31, 2020; 1 share issued and outstanding March 31, 2021 and December 31, 2020	_	_
Class B convertible common stock, \$0.00001 par value: 15,000,000 shares authorized at March 31, 2021 and December 31, 2020 604,649 and 105,429 shares issued and outstanding at March 31, 2021 and December 31, 2020, respectively	_	_
Additional paid-in capital	_	_
Accumulated deficit	(521,044)	(330,051)
Total stockholders' deficit	(521,044)	(330,051)
Total liabilities, redeemable convertible preferred stock and stockholders' deficit	\$ 219,586	\$ 251,642

The accompanying notes are an integral part of these condensed financial statements.

Mount Sinai Genomics, Inc. Condensed Statements of Operations and Comprehensive Loss (in thousands, except share amounts) (unaudited)

	Three months ended March 31,				
	2021		2020		
Revenue					
Diagnostic test revenue (including related party revenue of \$33 and \$61 for the three months ended March 31, 2021 and 2020, respectively)	\$ 62,760	\$	46,070		
Other revenue (including related party revenue of \$27 and \$0 for the three months ended March 31, 2021 and 2020, respectively)	1,591		585		
Total revenue	 64,351		46,655		
Cost of services (including related party expenses of \$278 and \$574 for the three months ended March 31, 2021 and 2020, respectively)	71,812		39,239		
Gross (loss) profit	(7,461)		7,416		
Research and development	53,131		13,096		
Selling and marketing	31,569		11,733		
General and administrative	101,917		7,164		
Related party expenses	1,797		2,195		
Loss from operations	(195,875)		(26,772)		
Other income (expense):					
Interest income	21		334		
Interest expense	(723)		(574)		
Other income, net	5,584		22		
Total other income (expense), net	 4,882		(218)		
Loss before income taxes	 (190,993)		(26,990)		
Income tax provision	_		_		
Net loss and comprehensive loss	\$ (190,993)	\$	(26,990)		
Weighted average shares outstanding of Class A common stock	1		1		
Basic and diluted net loss per share, Class A common stock	\$ (43)	\$	(26,990)		
Weighted average shares outstanding of Class B common stock	443,864		_		
Basic and diluted net loss per share, Class B common stock	\$ 0	\$			

The accompanying notes are an integral part of these condensed financial statements.

Mount Sinai Genomics, Inc. Condensed Statement of Redeemable Convertible Preferred Stock and Stockholders' Deficit (in thousands, except share amounts) (unaudited)

	Redeemable Con-	vertib ock	le Preferred	Class A Common Stock			Class B Common Stock							
	Shares		Amount	Shares Per value Shares Per value		Shares		Shares Per value		A	Accumulated deficit	SI	Total tockholders' deficit	
Balance at December 31, 2019	1,187,383	\$	217,115		1	\$	_	_	\$	_	\$	(88,711)	\$	(88,711)
Net loss												(26,990)		(26,990)
Balance at March 31, 2020	1,187,383	\$	217,115		1	\$	_	_	\$	_	\$	(115,701)	\$	(115,701)
								-						
Balance at December 31, 2020	1,385,204	\$	334,439		1	\$	_	105,429	\$	_	\$	(330,051)	\$	(330,051)
Net loss												(190,993)		(190,993)
Common stock class B issued pursuant to stock options								499,220						
Balance at March 31, 2021	1,385,204	\$	334,439		1	\$		604,649	\$		\$	(521,044)	\$	(521,044)

The accompanying notes are an integral part of these condensed financial statements.

Condensed Statements of Cash Flows (in thousands, except share amounts) (unaudited)

		Three months ended March		
		2021		2020
Operating activities				
Net loss	\$	(190,993)	\$	(26,990)
Adjustments to reconcile net loss to net cash used in operating activities:				
Depreciation and amortization expense		4,902		2,398
Stock-based compensation expense		164,962		815
Provision for excess and obsolete inventory		1,821		
Non-cash lease expense		191		1,052
Change in operating assets and liabilities:		(4.446)		(0.004)
Accounts receivable		(1,446)		(2,094)
Inventory		(9,828)		2,675
Prepaid expenses and other current assets		(6,466)		(860)
Due to/from related parties		(688)		(438
Other assets		2.450		1,174
Accounts payable and accrued expenses		3,458		1,725
Contract liabilities		1,027		(487
Other current liabilities		(9,148)		(1,583)
Net cash used in operating activities		(42,208)		(22,613)
Investing activities				
Purchases of property and equipment		(2,075)		(3,907
Development of internal-use software assets		(2,919)		(1,414)
Net cash used in investing activities		(4,994)		(5,321)
Financing activities				
Proceeds from long-term debt		_		6,000
Exercise of stock options		422		_
Long-term debt principal payments		(394)		
Capital lease principal payments		(1,052)		(1,343
Payment of deferred transaction costs		(1,254)		
Net cash (used in) provided by financing activities	<u> </u>	(2,278)		4,657
Net decrease in cash, cash equivalents and restricted cash		(49,480)		(23,277)
Cash, cash equivalents and restricted cash, at beginning of period		118,960		115,006
Cash, cash equivalents and restricted cash, at end of period	\$	69,480	\$	91,729
Supplemental disclosures of cash flow information	-			_
Interest expense paid	\$	723		629
Purchases of property and equipment in accounts payable and accrued expenses	\$	1,164		2,580
Software development costs in accounts payable and accrued expenses	\$	1,570		1,023
Assets acquired under capital leases obligations	\$	615	\$	4,340
Unpaid deferred transaction costs included in accounts payable and accrued expenses	\$	4,228	\$	_

Notes to Unaudited Condensed Financial Statements

1. Organization and Description of Business

Mount Sinai Genomics, Inc., d/b/a Sema4 (the "Company") provides genomics-related diagnostic and information services and pursues genomics medical research. The Company utilizes an integrated portfolio of laboratory processes, software tools and informatics capabilities to process DNA-containing samples, analyze information about patient-specific genetic variation and generate test reports for clinicians and their patients. The Company provides a variety of genetic diagnostic tests and information with focus on reproductive health, pediatric, oncology and other conditions. In 2020, the Company began to provide diagnostic testing services in response to the recent novel coronavirus ("COVID-19") outbreak. The Company serves patients and bills third party payors across the United States, with a substantial portion of its diagnostic testing volume occurring in the states of New York, California, Florida, Connecticut, and New Jersey.

The Company was incorporated in the State of Delaware as a for-profit corporation on October 16, 2015, with limited operations focused on establishing the Company as a capitalized, standalone entity. On June 1, 2017, the Company signed a contribution and funding agreement and other agreements with Icahn School of Medicine at Mount Sinai ("ISMMS"), whereby ISMMS contributed certain assets and liabilities related to the Company's operations, provided certain services to the Company, and also committed to fund the Company up to \$55.0 million in future capital contributions in exchange for equity in the Company (the "Spin-out"). Following the Spin-out, the Company commenced operations and began providing the services and performing research. The Company continues to be party to a Transition Services Agreement ("TSA") as well as service agreements ("Service Agreements") with ISMMS (see Note 6).

On February 9, 2021, the Company, CM Life Sciences, Inc. ("CMLS"), and S-IV Sub, Inc., a direct and wholly-owned subsidiary of CMLS, entered into an Agreement and Plan of Merger (the "Merger Agreement"), pursuant to which CMLS will acquire the Company through a merger of S-IV Sub, Inc. with and into the Company (the "Merger"), with the Company being the surviving corporation and a wholly-owned subsidiary of CMLS following the Merger. Once effective, all equity securities of the Company will be converted into the right to receive the applicable portion of merger consideration.

2. Summary of Significant Accounting Policies

Basis of Presentation

The accompanying unaudited condensed financial statements have been prepared in conformity with accounting principles generally accepted in the United States of America ("U.S. GAAP") for interim financial information. Accordingly, they do not include all of the information and footnotes required by U.S. GAAP for complete financial statements. As such, the accompanying unaudited condensed financial statements should be read in conjunction with the Company's audited financial statements and notes thereto as of and for the years ended December 31, 2020, 2019 and 2018 that are included elsewhere in this proxy statement.

The accompanying condensed financial statements reflect all normal recurring adjustments that are necessary to state fairly the results for the interim periods presented. Interim results are not necessarily indicative of the results of operations or cash flows for a full year or any subsequent interim period.

The Company's historical financial information includes costs of certain services historically provided by ISMMS pursuant to the TSA and Service Agreements. The Company's historical results are not necessarily indicative of what its results of operations, financial position, cash flows, or costs and expenses would have been had the Company been an independent entity during the historical periods presented or what its results of operations, financial position, cash flows, or costs and expenses will be in the future when it is a publicly traded, stand-alone company.

Liquidity and Going Concern

The Company has evaluated whether there are certain conditions and events, considered in the aggregate, that raise substantial doubt about the Company's ability to continue as a going concern within one year after the date that the condensed financial statements are issued.

Notes to Unaudited Condensed Financial Statements

Through March 31, 2021, the Company has funded its operations primarily with proceeds from the issuance of its redeemable convertible preferred stock and the issuance of long-term debt. The Company has incurred recurring losses since its inception, including net losses of \$191.0 million and \$27.0 million for the three months ended March 31, 2021 and 2020, respectively. As of March 31, 2021, the Company had an accumulated deficit of \$521.0 million. The Company expects to continue to generate significant operating losses for the foreseeable future. As of June 10, 2021, the issuance date of the condensed financial statements for the three months ended March 31, 2021, the Company expects that its existing cash and cash equivalents of \$58.7 million (excluding restricted cash) will be sufficient to fund its operating expenses and capital expenditure requirements into the third quarter of 2021. The future viability of the Company beyond that point is dependent on its ability to raise additional capital to finance its operations.

The Company is seeking to merge with CM Life Sciences, Inc. (see Note 1). In the event the Company does not complete this transaction, the Company expects to seek additional funding through an initial public offering of its common shares, private equity financings, debt financings or other capital sources, including collaborations with other companies or other strategic transactions. The Company may not be able to obtain financing on acceptable terms, or at all. The terms of any financing may adversely affect the holdings or the rights of the Company's stockholders.

If the Company is unable to obtain funding, the Company will be forced to delay, reduce or eliminate some or all of its research and development programs, product portfolio expansion or commercialization efforts, which could adversely affect its business prospects, or the Company may be unable to continue operations. Although management continues to pursue these plans, there is no assurance that the Company will be successful in obtaining sufficient funding on terms acceptable to the Company to fund continuing operations, if at all.

Based on its recurring losses from operations incurred since inception, expectation of continuing operating losses for the foreseeable future, and the need to raise additional capital to finance its future operations, as of June 10 2021, the issuance date of the accompanying condensed financial statements, the Company has concluded that there is substantial doubt about its ability to continue as a going concern for a period of one year from the date that these condensed financial statements were issued.

The accompanying condensed financial statements do not include any adjustments that might result from the outcome of this uncertainty. Accordingly, the condensed financial statements have been prepared on a basis that assumes the Company will continue as a going concern and which contemplates the realization of assets and satisfaction of liabilities and commitments in the ordinary course of business.

Use of Estimates

The preparation of condensed financial statements in conformity with U.S. GAAP requires management to make certain estimates, judgments and assumptions that affect the reported amounts of assets and liabilities and the related disclosures at the date of the condensed financial statements as well as the reported amounts of revenues and expenses during the periods presented. The Company bases these estimates on current facts, historical and anticipated results, trends and various other assumptions that it believes are reasonable in the circumstances, including assumptions as to future events. These estimates include, but are not limited to, the transaction price for certain contracts with customers, the capitalization of software costs and the valuation of stock-based awards and inventory. Actual results could differ materially from those estimates, judgments and assumptions.

Concentration of Credit Risk and Other Risks and Uncertainties

Financial instruments that potentially subject the Company to concentrations of credit risk consist primarily of cash and cash equivalents and accounts receivable.

The Company's cash and cash equivalents are deposited with high-quality financial institutions. The Company has balances in financial institutions that exceed federal depository insurance limits. Management believes these financial institutions are financially sound and, accordingly, that minimal credit risk exists. The Company has not experienced any losses on its deposits of cash and cash equivalents.

Notes to Unaudited Condensed Financial Statements

The Company assesses both the customer and, if applicable, the third-party payor that reimburses the Company on the customer's behalf when evaluating concentration of credit risk. Significant customers and payors are those that represent more than 10% of the Company's total annual revenues or accounts receivable balance at each respective balance sheet date. The significant concentrations of accounts receivable at March 31, 2021 and December 31, 2020 were primarily from large managed care insurance companies and a reference laboratory. There was no individual customer that accounted for 10% or more of revenue or accounts receivable for any of the years presented. The Company does not require collateral as a means to mitigate customer credit risk.

For each significant payor, revenue as a percentage of total revenues and accounts receivable as a percentage of total accounts receivable are as follows:

	Reven	iue	Accounts R	Receivable
	Three months en	ded March 31,	As of March 31,	As of December 31,
	2021	2020	2021	2020
Payor A	14 %	43 %	13 %	10 %
Payor B	*	15 %	*	*
Payor C	12 %	13 %	*	*
Payor D	12 %	11 %	17 %	*
Payor E	*	*	*	20 %

^{*}less than 10%

The Company is subject to a concentration of risk from a limited number of suppliers for certain reagents and laboratory supplies. One supplier accounted for approximately 11% and 12% of purchases of lab supplies, reagents and kits for the three months ended March 31, 2021 and 2020, respectively. This risk is managed by maintaining a target quantity of surplus stock.

Impact of COVID-19

In March 2020, the World Health Organization declared the COVID-19 outbreak a pandemic. COVID-19 has had, and continues to have, an extensive impact on the global health and economic environments. Many jurisdictions, including those in which the Company has locations, have implemented measures to combat the outbreak, such as travel restrictions and shelter in place orders. In addition, the healthcare sector generally experienced a decline in discretionary care services at the onset of the pandemic.

Beginning in April 2020, the Company's diagnostic test volumes decreased significantly as compared to the prior year as a result of COVID-19 and the related limitations and priorities across the healthcare system. In response, beginning in May 2020, the Company entered into several service agreements with state governments and healthcare institutions to provide testing for the presence of COVID-19 infection. While test volumes have since improved, the Company continues to experience changes in the mix of tests due to the impact of COVID-19. COVID-19 could continue to have a material impact on the Company's results of operations, cash flows and financial condition for the foreseeable future.

In March 2020, the Coronavirus Aid, Relief and Economic Security Act ("CARES Act") was signed into law, which was a stimulus bill that, among other things, provided assistance to qualifying businesses and individuals and included funding for the healthcare system. During 2020, as part of the stimulus, the Company received \$5.4 million, comprised of \$2.6 million received under the Provider Relief Fund ("PRF") distribution, which was recognized in other income, net in the statements of operations and comprehensive loss, and \$2.8 million received under the Employee Retention Credit ("ERC") distribution, which was recorded in the other liabilities and reflected in this balance as of March 31, 2021 and December 31, 2020.

During 2021, the Company received an additional \$5.6 million under the PRF distribution, which was recognized in other income, net in the statements of operations and comprehensive loss. At this time, the Company is not certain of the availability, extent or impact of any future relief provided under the CARES Act or other stimulus initiatives.

Notes to Unaudited Condensed Financial Statements

Cash, Cash Equivalents and Restricted Cash

Cash equivalents consist of amounts invested in money market funds. Carrying values of cash equivalents approximate fair value due to the short-term nature of these instruments.

The following table provides a reconciliation of cash, cash equivalents and restricted cash reported on the condensed balance sheets that sum to the total of the same amounts shown on the condensed statements of cash flows (in thousands):

(in thousands)	As of I	March 31, 2021	As of December 31, 2020		
Cash and cash equivalents	\$	58,652	\$	108,132	
Restricted cash		10,828		10,828	
Total	\$	69,480	\$	118,960	

Restricted cash as of March 31, 2021 consists of money market deposit accounts that secure irrevocable standby letters of credit that serve as collateral for security deposits for financing obligations and operating leases (see Note 7 and Note 8, respectively).

Deferred transaction costs

The Company capitalizes deferred transaction costs, which primarily consist of direct, incremental legal, professional, accounting and other third-party fees relating to the anticipated Merger. As of March 31, 2021, the Company has deferred \$5.5 million of transaction costs in prepaid expenses and other current assets on the condensed balance sheets that will be reclassified and offset against equity upon consummation of the Merger. Should the planned Merger be abandoned, the deferred offering costs will be expensed immediately as a charge to operating expenses in the condensed statements of operations and comprehensive loss.

Emerging Growth Company

The Company is an "emerging growth company" as defined in the Jumpstart Our Business Startups Act of 2012. As such, the Company is eligible for exemptions from various reporting requirements applicable to other public companies that are not emerging growth companies, including reduced reporting and extended transition periods to comply with new or revised accounting standards for public business entities. The Company has elected to avail itself of this exemption and, therefore, will not be subject to the same new or revised accounting standards as other public companies that are not emerging growth companies.

Recently Adopted Accounting Pronouncements

Effective January 1, 2021, the Company adopted Accounting Standards Update ("ASU") 2018-18, *Collaborative Arrangements: Clarifying the Interaction between Topic 808 and Topic 606* ("ASU 2018-18"), which clarifies that certain transactions between participants in a collaborative arrangement should be accounted for under ASC Topic 606 ("ASC 606"), *Revenue from Contracts with Customers*, when the counterparty is a customer. In addition, ASC Topic 808 ("ASC 808"), *Collaborative Arrangements* precludes an entity from presenting consideration from a transaction in a collaborative arrangement as revenue from contracts with customers if the counterparty is not a customer for that transaction. Adoption of ASU 2018-18 did not have an impact on the Company's condensed financial statements as the Company is not currently a participant in any such collaborative arrangements.

Recently Issued Accounting Pronouncements Not Yet Adopted

In February 2016, the FASB issued ASU 2016-02, *Leases* ("ASU 2016-02"), which requires lessees to recognize right-of-use assets and lease liabilities for most leases on their balance sheets. Expense recognition for lessees under ASU 2016-02 is similar to current lease accounting. ASU 2016-02 will require enhanced disclosures to help the financial statement users better understand the amount, timing, and uncertainty of cash flows arising from leases. The recognition, measurement and presentation of expenses and cash flows arising from a lease will

Notes to Unaudited Condensed Financial Statements

primarily depend on its classification as a finance or operating lease. As an emerging growth company, the provisions of ASU 2016-02 are effective for the Company for annual and interim periods beginning after December 15, 2021. Early adoption is permitted. The Company is evaluating the transition options permissible under ASU 2016-02 and plans to adopt through a cumulative adjustment to retained earnings on the date of adoption. Significant implementation matters being addressed by the Company include documenting the new lease accounting process. The Company is evaluating the effect this ASU will have on its financial statements, related disclosures and ongoing financial reporting. The Company expects implementation of this ASU to result in the recognition of right-of-use assets and corresponding lease liabilities in its balance sheets, principally related to office and facility leases.

In June 2016, the FASB issued ASU 2016-13, *Financial Instruments – Credit Losses (Topic 326): Measurement of Credit Losses on Financial Instruments* ("ASU 2016-13"). The new credit losses standard changes the impairment model for most financial assets and certain other instruments. For trade and other receivables, contract assets recognized as a result of applying ASC 606, loans and certain other instruments, entities will be required to use a new forward looking "expected loss" model that generally will result in earlier recognition of credit losses than under today's incurred loss model. As an emerging growth company, ASU 2016-13 is effective for annual periods beginning after December 31, 2022, with early adoption permitted. Application of the amendments is through a cumulative-effect adjustment to the opening retained earnings as of the beginning of the first reporting period in which the guidance is effective. The Company is currently evaluating the impact of the new guidance on its financial statements and related disclosures.

In August 2018, the FASB issued ASU 2018-15, Intangibles - Goodwill and Other - Internal-Use Software (Subtopic 350-40): Customer's Accounting for Implementation Costs Incurred in a Cloud Computing Arrangement That Is a Service Contract ("ASU 2018-15"), which aligns the requirements for capitalizing implementation costs incurred in a hosting arrangement that is a service contract with the requirements for capitalizing implementation costs incurred to develop or obtain internal-use software (and hosting arrangements that include an internal use software license). The accounting for the service element of a hosting arrangement that is a service contract is not affected by the standard. ASU 2018-15 will require an entity (customer) in a hosting arrangement that is a service contract to follow the guidance in Subtopic 350-40 to determine which implementation costs to capitalize as an asset related to the service contract and which costs to expense. ASU 2018-15 also requires the entity (customer) to expense the capitalized implementation costs of a hosting arrangement that is a service contract over the term of the hosting arrangement. ASU 2018-15 also requires the entity to present the expense related to the capitalized implementation costs in the same line item in the statement of income as the fees associated with the hosting element (service) of the arrangement and classify payments for capitalized implementation costs in the statement of cash flows in the same manner as payments made for fees associated with the hosting element. The entity is also required to present the capitalized implementation costs on the balance sheets in the same line item that a prepayment for the fees of the associated hosting arrangement would be presented. The amendments in ASU 2018-15 are effective for the Company in annual reporting periods beginning after December 15, 2020 and interim periods beginning after December 15, 2021. Early adoption is permitted. The Company is evaluating the transition options permissible under ASU 2018-15 of either 1) retrospectively adjusting prior periods presented or 2) prospectively applying amendments to all implementation costs incurred after the date of adoption. The Company is currently evaluating the impact of ASU 2018-15 will have on its financial statements and related disclosures.

In December 2019, the FASB issued ASU 2019-12, *Income Taxes (Topic 740): Simplifying the Accounting for Income Taxes* ("ASU 2019-12"). ASU 2019-12 simplifies the accounting for income taxes by removing certain exceptions to the general principles in ASC 740 and clarifying and amending existing guidance to improve consistent application. ASU 2019-12 is effective for fiscal years beginning after December 15, 2021. Early adoption is permitted. The Company is currently assessing the impact of adopting this new accounting guidance will have on its financial statements and related disclosures.

Notes to Unaudited Condensed Financial Statements

3. Revenue Recognition

Diagnostic Revenue

The majority of revenue is generated from diagnostic services provided to three groups of customers: patients with third-party insurance coverage; patients without third-party insurance coverage or those who elect to self-pay; and institutional clients, such as hospitals, clinics and reference laboratories. Revenue from diagnostic testing services is recorded at the estimated transaction price, subject to the constraint for variable consideration, upon transfer of control of the service.

Other Revenue

The Company enters into both short-term and long-term project-based collaboration service agreements with third parties, whereby the Company provides diagnostic testing, research and related data aggregation reporting services. The consideration to which the Company is entitled pursuant to its collaboration service agreements generally includes non-refundable upfront payments and variable payments based upon the achievement of certain milestones during the contract term. Non-refundable upfront payments are generally received in advance of performing the services and, therefore, are recorded as a contract liability upon receipt. Milestone payments are included in the transaction price only when it is probable that doing so will not result in a significant reversal of cumulative revenue recognized when the uncertainty associated with the milestone is subsequently resolved. Revenue for such collaboration service agreements is recognized over time using an input measure based on costs incurred to satisfy the performance obligation.

Disaggregated revenue

The following table summarizes the Company's revenue disaggregated by type of customer (in thousands):

	Three months ended March 31,					
(in thousands)		2021		2020		
Diagnostic test revenue						
Patients with third-party insurance	\$	46,197	\$	44,396		
Institutional customers		15,664		1,144		
Self-pay patients		899		530		
Total diagnostic test revenue		62,760		46,070		
Other revenue		1,591		585		
Total	\$	64,351	\$	46,655		

Reassessment of variable consideration

Subsequent changes to the estimate of the transaction price, determined on a portfolio basis when applicable, are generally recorded as adjustments to revenue in the period of the change. The Company updates estimated variable consideration quarterly.

For the three months ended March 31, 2021, the quarterly change in estimate resulted in a \$3.5 million adjustment for tests in which the performance obligation of delivering the test results was met in prior periods. The change in estimate is a result of changes in the estimated transaction price due to contractual adjustments, obtaining updated information from payors and patients that was unknown at the time the performance obligation was met and settlements with third party payors. For the three months ended March 31, 2020, the quarterly change in estimate did not result in material adjustments to the Company's previously reported revenue or accounts receivable amounts.

Remaining performance obligations

Due to the long-term nature of some collaboration service agreements, the Company's obligations pursuant to such agreements represent partially unsatisfied performance obligations as of March 31, 2021. The revenues under

Notes to Unaudited Condensed Financial Statements

existing collaboration service agreements with original expected durations of more than one year are estimated to be approximately \$11.8 million. The Company expects to recognize the majority of this revenue over the next 4 years.

Contract assets and liabilities

Contract assets consist of the Company's right to consideration that is conditional upon its future performance. Contract assets arise in collaboration service agreements for which revenue is recognized over time but the Company's right to bill the customer is contingent upon the achievement of contractually-defined milestones.

Contract liabilities consist of customer payments in excess of revenues recognized. For collaboration service agreements, the Company assesses the performance obligations and recognizes contract liabilities as current or non-current based upon forecasted performance.

A reconciliation of the beginning and ending balances of contract assets and contract liabilities is shown in the table below (in thousands):

(in thousands)	Contract Assets	Contract Liabilities
December 31, 2020	\$ 2,028	\$ 3,811
Contract asset additions	256	_
Customer prepayments	_	1,723
Revenue recognized	(100)	(540)
March 31, 2021	\$ 2,184	\$ 4,994

The increase in contract liabilities as of March 31, 2021 is primarily due to the execution of a collaboration service agreement with a customer. The Company presents contracts assets and contract liabilities arising from another customer contract on a net basis on its condensed balance sheets. As of March 31, 2021 and December 31, 2020, \$2.8 million and \$1.8 million is recorded as current contract liabilities, respectively.

Revenues recognized for the three months ended March 31, 2021 and March 31, 2020 that were included in the contract liability balance at the beginning of each period were \$0.5 million and \$0.1 million, respectively.

Costs to fulfill contracts

Costs associated with fulfilling the Company's performance obligations pursuant to its collaboration service agreements include costs for services that are subcontracted to ISMMS. Amounts are generally prepaid and then expensed in line with the pattern of revenue recognition. Prepayment of amounts prior to the costs being incurred are recognized on the condensed balance sheets as current or non-current based upon forecasted performance.

As of March 31, 2021 and December 31, 2020, the Company had outstanding deferred costs to fulfill contracts of \$2.8 million and \$3.0 million, respectively. As of March 31, 2021 and December 31, 2020, all outstanding deferred costs were recorded as prepaid expenses and other current assets.

Amortization of deferred costs was \$0.3 million and \$0.3 million for the three months ended March 31, 2021 and 2020, respectively. The amortization of these costs is recorded in cost of services on the condensed statements of operations and comprehensive loss.

4. Fair Value Measurements

The Company's financial assets and liabilities consist of cash and cash equivalents, restricted cash, accounts receivable, accounts payable, accrued liabilities, capital leases and long-term debt. The Company's cash and cash equivalents, restricted cash, accounts receivable, accounts payable and accrued liabilities approximate their fair value due to the relatively short-term nature of these accounts.

Notes to Unaudited Condensed Financial Statements

The Company's capital leases and long-term debt are classified within level 1 of the fair value hierarchy because such long-term debt and capital lease agreements bear interest at rates for instruments with similar characteristics; accordingly, the carrying value of these liabilities approximate their fair values.

The following tables set forth the fair value of financial instruments that were measured at fair value on a recurring basis (in thousands):

	As of March 31, 2021							
(in thousands)		Total		Level 1		Level 2		Level 3
Financial Assets:								
Money market funds	\$	50,919	\$	50,919	\$	_	\$	_
Total financial assets	\$	50,919	\$	50,919	\$	_	\$	_

	As of December 31, 2020							
(in thousands)		Total		Level 1		Level 2		Level 3
Financial Assets:								
Money market funds	\$	92,940	\$	92,940	\$		\$	_
Total financial assets	\$	92,940	\$	92,940	\$	_	\$	

Money market funds are classified within Level 1 of the fair value hierarchy as the fair value is based on quoted prices in active markets.

There were no transfers between Level 1, Level 2 and Level 3 during the periods presented.

5. Property and Equipment

Property and equipment consisted of the following (in thousands):

(in thousands)	As of March 31, 2021	As of December 31, 2020
Laboratory equipment	\$ 23,931	\$ 22,818
Equipment under capital leases	21,358	20,743
Building under capital lease	6,276	6,276
Construction in-progress	5,842	4,673
Capitalized software	17,647	14,631
Computer equipment	4,563	4,118
Furnitures, fixtures and other equipment	3,214	3,214
Leasehold improvements	16,802	16,736
Total property and equipment	99,633	93,209
Less: accumulated depreciation and amortization	(35,001)	(30,099)
Property and equipment, net	\$ 64,632	\$ 63,110

For the three months ended March 31, 2021 and 2020, depreciation and amortization expense was \$4.9 million and \$2.4 million, respectively, which included software amortization expense of \$1.2 million and \$0.5 million for

Notes to Unaudited Condensed Financial Statements

the three months ended March 31, 2021 and 2020, respectively. Depreciation and amortization expense is included within the condensed statements of operations and comprehensive loss as follows (in thousands):

	Three months ended March 31,			
(in thousands)		2021		2020
Cost of services	\$	3,058	\$	1,792
Research and development		1,251		249
Selling and marketing		_		_
General and administrative		593		357
Total depreciation and amortization expenses	\$	4,902	\$	2,398

During the three months ended March 31, 2021 and 2020, there were no sales of property and equipment made by the Company.

6. Related Party Transactions

Related party revenues

Related party revenue with Mount Sinai Health Network for diagnostic testing revenues were nominal for the three months ended March 31, 2021 and totaled \$0.1 million for the three months ended March 31, 2020. Related party revenues from collaborative service agreements were nominal for the three months ended March 31, 2021, while there were none for the three months ended March 31, 2020.

The Company had amounts due from ISMMS and other entities within the Mount Sinai Health Network for revenues earned of \$0.3 million and \$0.3 million as of March 31, 2021 and December 31, 2020, respectively. These amounts are presented as due from related parties on the Company's condensed balance sheets.

Related party costs

Expenses recognized under the TSA totaled \$1.4 million and \$1.9 million for the three months ended March 31, 2021 and 2020, respectively, and are presented within related party expenses in the condensed statements of operations and comprehensive loss. The Company had TSA payables due to ISMMS of \$0.7 million and \$0.6 million at March 31, 2021 and December 31, 2020, respectively. These amounts are included within due to related parties on the Company's condensed balance sheets.

Expenses recognized pursuant to the Service Agreements and other service arrangements with ISMMS totaled \$0.7 million and \$0.9 million for the three months ended March 31, 2021 and 2020, respectively. These amounts are included in either cost of services or related party expenses on the condensed statements of operations and comprehensive loss depending on the particular activity to which the costs relate. Payables due to ISMMS for the Service Agreements and other service arrangements were nominal at March 31, 2021 and totaled \$0.8 million at December 31, 2020. These amounts are included within due to related parties on the Company's condensed balance sheets.

Total related party costs are included within cost of services and related party expenses in the condensed statements of operations and comprehensive loss as follows (in thousands):

	Three months ended March 31,			
(in thousands)	2021		2020	
Cost of services	\$ 2	78 \$	574	
Related party expenses	1,7	97	2,195	
Total related party costs	\$ 2,0	75 \$	2,769	

Notes to Unaudited Condensed Financial Statements

7. Long-Term Debt

2016 Funding Commitment

In June 2017, ISMMS assigned a loan funding commitment from the Connecticut Department of Economic and Community Development ("DECD") to the Company. The DECD loan agreement, as amended, provides for a total loan commitment of \$15.5 million at a fixed annual interest rate of 2.0% for a term of 10 years. The Company is required to make interest-only payments through July 2023 and principal and interest payments commencing in August 2023. The final payment of principal and interest is due in July 2028. This commitment is collateralized by providing a security interest in certain machinery and equipment the Company acquired from ISMMS, as defined in a separate security agreement. ISMMS also guarantees the Company's obligation to repay the DECD.

The outstanding loan balance from the DECD was \$11.0 million and \$11.0 million at March 31, 2021 and December 31, 2020, respectively.

2020 Master Loan Agreement

In August 2020, the Company entered into a loan and security agreement with a bank, in which the Company received a loan of \$6.3 million and deposited the proceeds into a deposit account held by the bank. The Company is required to make sixty consecutive monthly payments of principal and interest at a fixed monthly amount of \$0.1 million beginning in November 2020. Interest payments are fixed at an annual interest rate of 4.75%.

The Company recorded the \$6.3 million proceeds as restricted cash on the condensed balance sheets at March 31, 2021 and December 31, 2020. The outstanding loan balance was \$5.8 million and \$6.1 million at March 31, 2021 and December 31, 2020, respectively.

2020 Master Lease Agreement

In December 2020, the Company entered into a lease agreement with a lender whereby the Company agreed to sell certain equipment and immediately leaseback the equipment, resulting in proceeds of \$3.6 million. Per the terms of the agreement, a financial institution issued an irrevocable standby letter of credit to the lender for \$3.6 million. The Company is required to make sixty consecutive monthly payments of principal and interest at a fixed monthly amount of \$0.1 million beginning in February 2021. Interest payments are fixed at an annual interest rate of 3.54%.

The Company must maintain an aggregate amount on deposit equal to at least 105% of the value of any outstanding letters of credit issued by the financial institution on the Company's behalf. The letter of credit must be in place until all obligations have been paid in full. Further, the Company must furnish annual audited financial statements and other financial information to the lender on a regular basis. The Company was in compliance with the covenants as of March 31, 2021

The Company recorded the \$3.6 million proceeds as restricted cash on the condensed balance sheets at March 31, 2021 and December 31, 2020. The outstanding loan balance was \$3.5 million and \$3.6 million at March 31, 2021 and December 31, 2020, respectively.

Notes to Unaudited Condensed Financial Statements

Maturities of Long-Term Debt

As of March 31, 2021, long-term debt matures as follows (in thousands):

(in thousands)	
2021 (remainder of year)	\$ 1,377
2022	1,906
2023	2,865
2024	4,208
2025	4,106
Thereafter	5,886
Total maturities of long-term debt	20,348
Less: current portion of long-term debt	(1,846)
Total long-term debt, net of current maturities	\$ 18,502

8. Commitments and Contingencies

Operating Leases

The Company's operating leases consist of office and lab space leases and a ground lease associated with a building under capital lease. The Company has entered into leases of office and lab space with ISMSS, including month-to-month leases in place during the three months ended March 31, 2021 and 2020. Pursuant to the terms of a lease agreement, the Company was required to have issued an irrevocable standby letter of credit to the lessor for \$0.9 million, which was included in restricted cash on the condensed balance sheets as of March 31, 2021 and December 31, 2020.

Future minimum payments under non-cancelable operating leases as of March 31, 2021 are as follows (in thousands):

(in thousands)	
2021 (remainder of year)	\$ 3,315
2022	4,386
2023	4,474
2024	4,568
2025	4,687
Thereafter	50,111
Total operating lease obligations	\$ 71,541

Rent expense related to non-cancelable operating leases was \$1.4 million and \$1.3 million for the three months ended March 31, 2021 and 2020, respectively. Rent expense related to month-to-month operating leases was \$0.3 million and \$0.8 million for the three months ended March 31, 2021 and 2020, respectively.

Capital Leases

The Company entered into various capital lease agreements to obtain laboratory equipment which contain bargain purchase commitments at the end of the lease term. The terms of the capital leases range from 3 to 5 years with interest rates ranging from 1.9% to 12.0%. The leases are secured by the underlying equipment. The Company also leases a building used for office and laboratory space in which the building is accounted for as a capital lease and the land is as an operating lease.

Property and equipment under capital leases was \$27.6 million and \$27.0 million as of March 31, 2021 and December 31, 2020, respectively. Accumulated amortization on capital lease assets was \$10.7 million and \$9.7 million at March 31, 2021 and December 31, 2020 and 2019, respectively.

Notes to Unaudited Condensed Financial Statements

For all capital leases, the portion of the future payments designated as principal repayment is recorded as a capital lease obligation on the Company's condensed balance sheets in accordance with repayment terms. Future payments under capital leases at March 31, 2021, are as follows (in thousands):

(in thousands)	
2021 (remainder of year)	\$ 3,761
2022	4,794
2023	3,570
2024	2,749
2025	2,437
Thereafter	51,882
Total capital lease obligations	 69,193
Less: amounts representing interest	(45,407)
Present value of net minimum capital lease payments	 23,786
Less: current portion	(3,504)
Capital lease obligations, net of current portion	\$ 20,282

Interest expense related to capital leases was \$0.6 million and \$0.5 million for the three months ended March 31, 2021 and 2020, respectively.

Contingencies

The Company may, from time to time, become involved in legal proceedings arising out of the normal course of its operations. For instance, the Company may be subject to lawsuits alleging negligence or other similar legal claims related to its provision of genetic testing and/or information services. The Company establishes reserves for specific legal matters when it determines that the likelihood of an unfavorable outcome is probable and the loss is reasonably estimable. The Company has also identified certain other legal matters where it believes an unfavorable outcome is not probable and, therefore, no reserve is established. Although management currently believes that resolving claims against the Company, including claims where an unfavorable outcome is reasonably possible, will not have a material impact on the liquidity, results of operations, or financial condition of the Company, these matters are subject to inherent uncertainties and management's view of these matters may change in the future. It is possible that an unfavorable outcome of one or more of these lawsuits or other contingencies could have a material impact on the liquidity, results of operations, or financial condition of the Company.

Significant judgment is required in both the determination of probability of loss and the determination as to whether the amount can be reasonably estimated. Accruals are based only on information available at the time of the assessment, due to the uncertain nature of such matters. As additional information becomes available, management reassesses potential liabilities related to pending claims and litigation and may revise its previous estimates, which could materially affect the Company's results of operations in a given period.

The Company maintains various liability insurance coverages for, among other things, claims that could result from providing, or failing to provide diagnostic testing services, including inaccurate testing results, and other exposures. The Company's insurance coverage limits its maximum exposure on claims; however, the Company is responsible for any uninsured portion of losses. Management believes that present insurance coverage is sufficient to cover potential exposures.

The Company was not a party to any material legal proceedings at March 31, 2021, nor is it a party to any legal proceedings as of the date of issuance of these condensed financial statements.

9. Stock-Based Compensation

The Company adopted the 2017 Stock Incentive Plan (the 2017 Plan) in April of 2017. The 2017 Plan was amended in February 2018, offering total aggregate shares of up to 279,192 shares of Class A common stock and

Notes to Unaudited Condensed Financial Statements

Class B common stock, collectively, on an as-converted to Class A common stock basis. Following the amendment to the 2017 Plan, the Company intends to use available shares to grant Class B common stock awards.

Under the 2017 Plan, the Company has a call option to repurchase awards for cash from the plan participants upon termination of the participant's employment or consulting agreement. The Company concludes that it is probable it will exercise its call option prior to the award holder being subject to the risks and rewards of equity ownership. As a result, the Company's stock-based compensation awards are classified as a liability. Shares of common stock issued upon settlement of an award continue to be classified as a liability and remeasured to fair value each reporting period until the stockholder bears the risks and rewards of equity ownership for a reasonable period of time, which the Company concludes is a period of at least six months.

The Company historically granted stock appreciation rights ("SAR") to one employee and one consultant. The SAR can only be exercised upon a liquidation event, which the Company concludes is not probable of occurring as of March 31, 2021. As a result, no expense related to the SAR was recognized by the Company during the three months ended March 31, 2021 and 2020. The Company did not grant SARs to any employees or consultants during the three months ended March 31, 2021.

At March 31, 2021 and December 31, 2020, stock-based compensation liabilities were \$297.0 million and \$132.0 million, respectively. Stock-based compensation expense is included within the condensed statements of operations and comprehensive loss as follows (in thousands):

	Three months ended March 31,			
(in thousands)	2021 202			
Cost of services	\$ 19,782	\$	120	
Research and development	38,187		234	
Selling and marketing	17,381		126	
General and administrative	89,612		335	
Total Stock-based compensation expense	\$ 164,962	\$	815	

The following summarizes the activity under the 2017 Plan for Class A and Class B common stock options (in thousands, except share and per share amounts):

*** * 1 * 1 *

(in thousands)

Class A Common Stock	Shares Available for Grant	Stock Options Outstanding	Weighted Average Exercise Price	Weighted Average Remaining Contractual Life (years)	Aggregate I Valu	
Balances at December 31, 2020	_	122,000	\$ 18.94	6.57	\$ 8	30,565
Options forfeited and cancelled	_	_				_
Balances at March 31, 2021	_	122,000	\$ 18.94	6.32	\$ 17	74,739
Options exercisable at March 31, 2021		117,816	\$ 18.94	6.31	\$ 16	68,747

Notes to Unaudited Condensed Financial Statements

All outstanding stock options for Class A common stock have an exercise price of \$18.94.

(in thousands)

Class B Common Stock	Shares Available for Grant	Stock Options Outstanding	١	Weighted Average Exercise Price	Weighted Average Remaining Contractual Life (years)	A	ggregate Intrinsic Value
Balances at December 31, 2020	1,308,167	13,915,604	\$	1.09	8.91	\$	79,334
Option granted	(194,706)	194,706	\$	2.36			
Options forfeited and cancelled	1,901,065	(1,901,065)	\$	1.45			_
Options exercised	_	(499,220)	\$	0.95			
Balances at March 31, 2021	3,014,526	11,710,025	\$	1.06	8.60	\$	157,455
Options exercisable at March 31, 2021		5,552,271	\$	0.80	8.18	\$	76,135

The aggregate intrinsic value in the tables above calculates the difference between the exercise price of the underlying stock options and the fair value of the Company's common stock for stock options that were in-the-money and represents the value that would have been received by the option holders had all option holders exercised their options on March 31, 2021.

The estimated fair value of the stock option awards as of March 31, 2021 and March 31, 2020, was estimated using the Black-Scholes option pricing model with the following assumptions:

	Three Months er	nded March 31,
(in thousands)	2021	2020
Expected volatility	68.50%- 75.60%	68.30%-73.30%
Expected term (in years)	0.50- 1.75	3.00-5.00
Risk-free interest rate	0.05%- 0.16%	0.29%-0.37%
Dividend yield	0.00 %	0.00 %
Fair value of Class A common stock	\$565.85-\$1,549.43	\$85.42-\$97.58
Fair value of Class B common stock	\$5.66-\$15.49	\$0.85-\$0.98

As of March 31, 2021, the fair value associated with the Company's stock options totaled \$340.5 million. The vested portion of this fair value at March 31, 2021 was \$174.2 million and \$122.8 million for Class A and Class B stock options, respectively, and is included in stock-based compensation liabilities on the Company's condensed balance sheets. As of March 31, 2021, unrecognized stock-based compensation cost related to the unvested portion of the Company's stock options were \$0.6 million and \$42.9 million for Class A and Class B stock options, respectively. The Company expects to recognize the unrecognized compensation cost on a graded-vesting basis over a weighted-average period of 0.3 and 0.9 years for Class A and Class B stock options, respectively. Cash received from stock option exercise for the three months ended March 31, 2021 was \$0.4 million. No cash was received from stock option exercise for the three months ended March 31, 2020.

Notes to Unaudited Condensed Financial Statements

10. Redeemable Convertible Preferred Stock

Redeemable Convertible Preferred Stock at March 31, 2021 and December 31, 2020 consists of the following (in thousands, except share data):

(in thousands)

Redeemable Convertible Preferred Stock	Shares Authorized	Shares Issued and Outstanding	Amount	Agg	regate Liquidation Preference
Series A-1	447,373	447,373	\$ 51,811	\$	55,000
Series A-2	522,627	401,347	46,480		49,342
Series B	338,663	338,663	118,824		204,302
Series C	197,824	197,821	117,324		121,397
Total Redeemable Convertible Preferred Stock	1,506,487	1,385,204	\$ 334,439	\$	430,041

Voting Rights

Holders of the Redeemable Convertible Preferred Stock are entitled to a number of votes equal to the number of whole shares of Class A common stock into which it is convertible.

Dividends

Holders of the Redeemable Convertible Preferred Stock are entitled to receive or participate in dividends to the extent that dividends are declared for holders of Class A common stock and Class B common stock, at which point the holders of the Redeemable Convertible Preferred Stock are entitled to participate on an as-converted to Class A common stock basis.

The Company has not declared any cash or other dividends through March 31, 2021.

Conversion Rights

The Redeemable Convertible Preferred Stock is convertible into Class A common stock at the option of the holder at any time and without the payment of additional consideration and is mandatorily convertible upon the occurrence of certain events. The conversion ratio could be adjusted upon the Company's issuance of shares of common stock below the original issue prices of the Redeemable Convertible Preferred Stock; the issuance of certain options or securities convertible into common stock of the Company; the issuance of certain dividends; and events such as stock splits, merger and reorganization.

There were no conversions of Redeemable Convertible Preferred Stock into Class A common stock during the three months ended March 31, 2021. As of March 31, 2021 and December 31, 2020, all shares of Redeemable Convertible Preferred Stock were convertible into shares of Class A common stock at a 1:1 ratio.

Classification of Redeemable Convertible Preferred Stock

The Redeemable Convertible Preferred Stock has deemed liquidation provisions which provide the holders the option to redeem the shares upon a change in control or other deemed liquidation event. The deemed liquidation preference provisions of the Redeemable Convertible Preferred Stock are considered contingent redemption provisions that are not solely within the Company's control. Accordingly, the Redeemable Convertible Preferred Stock is presented outside of permanent equity in the mezzanine portion of the Company's condensed balance sheets. No accretion was recorded during the three months ended March 31, 2021 and 2020, as a deemed liquidation event was not considered probable.

11. Common Stock

There was one share of Class A common stock issued and outstanding at March 31, 2021 and December 31, 2020. There were 604,649 and 105,429 shares of Class B common stock issued and outstanding at March 31, 2021 and December 31, 2020, respectively. The shares of Class B common stock issued and outstanding at March 31,

Notes to Unaudited Condensed Financial Statements

2021 remained liability-classified since the Company concluded that the stockholder did not yet bear the risks and rewards of equity ownership for a reasonable period of time.

12. Income Taxes

Income taxes for the three months ended March 31, 2021 and March 31, 2020 are recorded at the Company's estimated annual effective income tax rate, subject to adjustments for discrete events, should they occur. The Company's estimated annual effective tax rate was 0.0% for the three months ended March 31, 2021 and March 31, 2020. The primary reconciling items between the federal statutory rate of 21.0% for these periods and the Company's overall effective tax rate of 0.0% were related to the effects of deferred state income taxes, stock-based compensation, research and development credits, nondeductible transaction costs and the valuation allowance recorded against the full amount of its net deferred tax assets.

A valuation allowance is required when it is more likely than not that some portion or all of the Company's deferred tax assets will not be realized. The realization of deferred tax assets depends on the generation of sufficient future taxable income during the period in which the Company's related temporary differences become deductible. The Company has recorded a full valuation allowance against its net deferred tax assets as of March 31, 2021 and March 31, 2020 since management believes that based on the earnings history of the Company, it is more likely than not that the benefits of these assets will not be realized.

13. Net Loss per Share

For the three months ended March 31, 2021 and 2020, basic and diluted net loss per share attributable to common stockholders is presented in conformity with the two-class method. Net loss attributable to common stockholders was not allocated to the redeemable convertible preferred stock, as holders of the redeemable convertible preferred stock did not have a contractual obligation to share in losses.

Basic net loss per share is computed by dividing the net loss attributable to common stockholders by the weighted-average number of shares of common stock outstanding for the period. During the three months ended March 31, 2021 and 2020, the net loss attributable to common stockholders was equivalent to the Company's net

Notes to Unaudited Condensed Financial Statements

loss and comprehensive loss. The following table sets forth the computation of basic net loss per share attributable to common stockholders (in thousands, except for share amounts):

	Three months ended March 31,			31,
(in thousands)		2021	2	2020
Numerator:				
Net loss attributable to common stockholders	\$	(190,993)	\$	(26,990)
Weighted average Class A shares outstanding used in computing allocation of net loss attributable to common stockholders		1		1
Weighted average Class B shares on an as converted to Class A basis used in computing allocation of net loss attributable to common stockholders		4,439		_
Allocation of net loss attributable to common stockholders for basic:				
Class A common stock		(43)		(26,990)
Class B common stock		(190,950)		_
Denominator:				
Weighted average shares used in computing net loss per share attributable to Class A common stockholders		1		1
Weighted average shares used in computing net loss per share attributable to Class B common stockholders		443,864		_
Basic net loss per share attributable to Class A		(43)		(26,990)
Basic net loss per share attributable to Class B		`—		

Diluted net loss per share is computed based on the weighted-average number of shares of common stock, including the dilutive effect of common stock equivalents, outstanding. Basic net loss per share is the same as diluted net loss per share for the three months ended March 31, 2020 as the inclusion of potentially dilutive shares would have been anti-dilutive.

For the three months ended March 31, 2021, the Company's diluted net loss per share of Class A common stock assumed the conversion of all Class B common stock into Class A common stock in accordance with the if-converted method. For the three months ended March 31, 2021 the calculation of diluted net loss per share of Class B common stock did not differ from the calculation of basic net loss per share as the inclusion of potentially dilutive shares would have been anti-dilutive. The following table sets forth the computation of diluted net loss per share of Class A common stock for the three months ended March 31, 2021 (in thousands, except for share amounts):

(in thousands)	Three months ended March 31, 2021				
	Net loss attributable to Class A common stock Weighted average shares outstanding			Loss per share	
Basic net loss per share	\$	(43)	1	\$	(43)
Add: The effect of dilutive potential Class A common stock					
Class B common stock		(190,950)	4,439		
Diluted net loss per share attributable to Class A common stock	\$	(190,993)	4,440	\$	(43)

Notes to Unaudited Condensed Financial Statements

The following table summarizes the outstanding shares of potentially dilutive securities that were excluded from the computation of diluted net loss per share attributable to common stockholders for the period presented because including them would have been anti-dilutive:

	Three months	ended March 31,
(in thousands)	2021	2020
Outstanding options to purchase Class A common stock	122,000	122,000
Outstanding options to purchase Class B common stock	11,710,025	12,073,090
Redeemable convertible preferred stock (on an if-converted basis)	1,385,204	1,187,383
Total	13,217,229	13,382,473

14. Subsequent Events

The Company has evaluated subsequent events through June 10, 2021, the date the condensed financial statements were available to be issued.

CM LIFE SCIENCES, INC.

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CM LIFE SCIENCES, INC. CONDENSED BALANCE SHEETS

		March 31, 2021	December 31, 2020
		(Unaudited)	
ASSETS			
Current Assets			
Cash	\$	627,415	\$ 1,094,681
Prepaid expenses	_	293,754	277,031
Total Current Assets		921,169	1,371,712
Cash and marketable securities held in trust account		442,774,870	442,763,951
Total Assets	\$	443,696,039	\$ 444,135,663
LIABILITIES AND STOCKHOLDERS' EQUITY			
Current liabilities			
Accounts payable and accrued expenses	\$	1,491,735	\$ 97,120
Total Current Liabilities		1,491,735	97,120
Warrant liability		126,960,100	70,322,418
Deferred underwriting fee payable		15,496,250	15,496,250
Total Liabilities		143,948,085	85,915,788
Commitments and Contingencies			
Class A common stock subject to possible redemption, 29,474,795 and 35,321,987 shares at \$10.00 per share as of March 31, 2021 and December 31, 2020, respectively		294,747,950	353,219,870
Stockholders' Equity			
Preferred stock, \$0.0001 par value; 1,000,000 shares authorized; none issued or outstanding		_	_
Class A common stock, \$0.0001 par value; 380,000,000 shares authorized; 14,800,205 and 8,953,013 shares issued and outstanding (excluding 29,474,795 and 35,321,987 shares subject to possible redemption) as of March 31, 2021 and December 31, 2020, respectively		1,480	895
Class B common stock, \$0.0001 par value; 20,000,000 shares authorized; 11,068,750 shares issued and		1,400	033
outstanding as of March 31, 2021 and December 31, 2020		1,107	1,107
Additional paid-in capital		103,376,938	44,905,602
Accumulated deficit		(98,379,521)	(39,907,599)
Total Stockholders' Equity		5,000,004	5,000,005
TOTAL LIABILITIES AND STOCKHOLDERS' EQUITY	\$	443,696,039	\$ 444,135,663

CM LIFE SCIENCES, INC. CONDENSED STATEMENT OF OPERATIONS THREE MONTHS ENDED MARCH 31, 2021 (Unaudited)

	ee Months Ended Aarch 31, 2021
General and administrative expenses	\$ 1,845,158
Loss from operations	(1,845,158)
Other income:	
Interest earned on marketable securities held in Trust Account	10,919
Change in fair value of warrants	(56,637,684)
Loss before provision for income taxes	(58,471,923)
Benefit from (Provision for) income taxes	 _
Net Loss	\$ (58,471,923)
Weighted average shares outstanding of Class A common stock	 44,275,000
Basic and diluted net income per share, Class A common stock	\$ _
Weighted average shares outstanding of Class B common stock	 11,068,750
Basic and diluted net loss per share, Class B common stock	\$ (5.28)

CM LIFE SCIENCES, INC. CONDENSED STATEMENT OF CHANGES IN STOCKHOLDERS' EQUITY THREE MONTHS ENDED MARCH 31, 2021 (Unaudited)

	Clas Commo		Clas Commo	ss B n Stock	Additional Paid-in	Accumulated	Total Stockholders'
	Shares	Amount	Shares	Amount	Capital	Deficit	Equity
Balance – January 1, 2021	8,953,013	\$ 895	11,068,750	\$ 1,107	\$ 44,905,602	\$ (39,907,599)	\$ 5,000,005
Change in value of Common stock subject to possible							
redemption	5,847,192	585	_	_	58,471,335	_	58,471,920
Net Loss	_	_	_	_	_	(58,471,923)	(58,471,923)
Balance – March 31, 2021	14,800,205	\$ 1,480	11,068,750	\$ 1,107	\$ 103,376,937	\$ (98,379,522)	\$ 5,000,002

CM LIFE SCIENCES, INC. CONDENSED STATEMENT OF CASH FLOWS THREE MONTHS ENDED MARCH 31, 2021 (Unaudited)

Cash Flows from Operating Activities:		
Net Loss		(58,471,923)
Adjustments to reconcile net loss to net cash used in operating activities:		
Change in fair value of warrant liability		56,637,684
Interest earned on marketable securities held in trust account		(10,919)
Changes in operating assets and liabilities:		
Prepaid expenses		(16,723)
Accrued expenses		1,394,615
Net cash used in operating activities		(467,266)
Net Change in Cash		(467,266)
Cash – Beginning of period		1,094,681
Cash – End of period	\$	627,415
Non-Cash financing activities:		
Change in value of common stock subject to possible redemption	\$	(58,471,923)

NOTE 1. DESCRIPTION OF ORGANIZATION AND BUSINESS OPERATIONS

CM Life Sciences, Inc. (the "Company") was incorporated in Delaware on July 10, 2020. The Company was formed for the purpose of effecting a merger, capital stock exchange, asset acquisition, stock purchase, reorganization or similar business combination with one or more businesses (the "Business Combination"). The Company is not limited to a particular industry or sector for purposes of consummating a Business Combination. The Company is an early stage and emerging growth company and, as such, the Company is subject to all of the risks associated with early stage and emerging growth companies.

As of March 31, 2021, the Company had not commenced any operations. All activity for the period from July 10, 2020 (inception) through March 31, 2021 relates to the Company's formation, the initial public offering ("Initial Public Offering"), which is described below, and, subsequent to the Initial Public Offering, identifying a target company for a Business Combination. The Company will not generate any operating revenues until after the completion of its initial Business Combination, at the earliest. The Company will generate non-operating income in the form of interest income from the proceeds derived from the Initial Public Offering.

The registration statement for the Company's Initial Public Offering was declared effective on September 1, 2020. On September 4, 2020 the Company consummated the Initial Public Offering of 44,275,000 units (the "Units" and, with respect to the Class A common stock included in the Units sold, the "Public Shares"), which includes the full exercise by the underwriter of its over-allotment option in the amount of 5,775,000 Units, at \$10.00 per Unit, generating gross proceeds of \$442,750,000 which is described in Note 3.

Simultaneously with the closing of the Initial Public Offering, the Company consummated the sale of 7,236,667 warrants (the "Private Placement Warrants") at a price of \$1.50 per Private Placement Warrant in a private placement to CMLS Holdings LLC (the "Sponsor") and certain of the Company's independent directors, generating gross proceeds of \$10,855,000, which is described in Note 4.

Transaction costs amounted to \$24,895,463, consisting of \$8,855,000 in cash underwriting fees, \$15,496,250 of deferred underwriting fees and \$544,213 of other offering costs.

Following the closing of the Initial Public Offering on September 4, 2020, an amount of \$442,750,000 (\$10.00 per Unit) from the net proceeds of the sale of the Units in the Initial Public Offering and the sale of the Private Placement Warrants was placed in a trust account (the "Trust Account") located in the United States and will be invested only in U.S. government securities, within the meaning set forth in Section 2(a)(16) of the Investment Company Act of 1940, as amended (the "Investment Company Act"), with a maturity of 185 days or less or in any open-ended investment company that holds itself out as a money market fund selected by the Company meeting certain conditions of Rule 2a-7 of the Investment Company Act, as determined by the Company, until the earlier of: (i) the completion of a Business Combination and (ii) the distribution of the funds held in the Trust Account, as described below.

The Company's management has broad discretion with respect to the specific application of the net proceeds of the Initial Public Offering and the sale of Private Placement Warrants, although substantially all of the net proceeds are intended to be applied generally toward consummating a Business Combination. There is no assurance that the Company will be able to complete a Business Combination successfully. The Company must complete one or more initial Business Combinations with one or more operating businesses or assets with a fair market value equal to at least 80% of the net assets held in the Trust Account (excluding the deferred underwriting commissions and taxes payable on the interest earned on the Trust Account). The Company will only complete a Business Combination if the post-transaction company owns or acquires 50% or more of the outstanding voting securities of the target or otherwise acquires a controlling interest in the target business sufficient for it not to be required to register as an investment company under the Investment Company Act.

The Company will provide the holders of the outstanding Public Shares (the "Public Stockholders") with the opportunity to redeem all or a portion of their Public Shares upon the completion of a Business Combination either (i) in connection with a stockholder meeting called to approve the Business Combination or (ii) by means of a tender

offer. The decision as to whether the Company will seek stockholder approval of a Business Combination or conduct a tender offer will be made by the Company. The Public Stockholders will be entitled to redeem their Public Shares for a pro rata portion of the amount then in the Trust Account (initially \$10.00 per Public Share, plus any pro rata interest then in the Trust Account, net of taxes payable). There will be no redemption rights upon the completion of a Business Combination with respect to the Company's warrants.

The Company will only proceed with a Business Combination if the Company has net tangible assets of at least \$5,000,001 following any related redemptions and, if the Company seeks stockholder approval, a majority of the shares voted are voted in favor of the Business Combination. If a stockholder vote is not required by applicable law or stock exchange listing requirements and the Company does not decide to hold a stockholder vote for business or other reasons, the Company will, pursuant to its Second Amended and Restated Certificate of Incorporation (the "Certificate of Incorporation"), conduct the redemptions pursuant to the tender offer rules of the U.S. Securities and Exchange Commission ("SEC") and file tender offer documents with the SEC prior to completing a Business Combination. If, however, stockholder approval of the transaction is required by applicable law or stock exchange listing requirements, or the Company decides to obtain stockholder approval for business or other reasons, the Company will offer to redeem shares in conjunction with a proxy solicitation pursuant to the proxy rules and not pursuant to the tender offer rules. If the Company seeks stockholder approval in connection with a Business Combination, the Company's Sponsor and any other holders of the Company's common stock prior to the Initial Public Offering (the "initial stockholders") have agreed to vote their Founder Shares (as defined in Note 5) and any Public Shares purchased during or after the Initial Public Offering in favor of approving a Business Combination. Additionally, each Public Stockholder may elect to redeem their Public Shares without voting, and if they do vote, irrespective of whether they vote for or against the proposed transaction.

Notwithstanding the foregoing, if the Company seeks stockholder approval of a Business Combination and it does not conduct redemptions pursuant to the tender offer rules, the Certificate of Incorporation provides that a Public Stockholder, together with any affiliate of such stockholder or any other person with whom such stockholder is acting in concert or as a "group" (as defined under Section 13 of the Securities Exchange Act of 1934, as amended (the "Exchange Act")), will be restricted from redeeming its shares with respect to more than an aggregate of 20% of the Public Shares, without the prior consent of the Company.

The Sponsor has agreed (a) to waive its redemption rights with respect to the Founder Shares and Public Shares held by it in connection with the completion of a Business Combination and (b) not to propose an amendment to the Certificate of Incorporation (i) to modify the substance or timing of the Company's obligation to redeem 100% of its Public Shares if the Company does not complete a Business Combination within the Combination Period (as defined below) or (ii) with respect to any other material provision relating to stockholders' rights or pre-business combination activity, unless the Company provides the Public Stockholders with the opportunity to redeem their Public Shares in conjunction with any such amendment.

If the Company has not completed a Business Combination by September 4, 2022 (the "Combination Period"), the Company will (i) cease all operations except for the purpose of winding up, (ii) as promptly as reasonably possible but not more than ten business days thereafter, redeem the Public Shares, at a per-share price, payable in cash, equal to the aggregate amount then on deposit in the Trust Account, including interest earned on the funds held in the Trust Account and not previously released to pay taxes (less up to \$100,000 of interest to pay dissolution expenses), divided by the number of then outstanding Public Shares, which redemption will completely extinguish Public Stockholders' rights as stockholders (including the right to receive further liquidating distributions, if any), and (iii) as promptly as reasonably possible following such redemption, subject to the approval of the Company's remaining stockholders and the Company's board of directors, dissolve and liquidate, subject in each case to the Company's obligations under Delaware law to provide for claims of creditors and the requirements of other applicable law. There will be no redemption rights or liquidating distributions with respect to the Company's warrants, which will expire worthless if the Company fails to complete a Business Combination within the Combination Period.

The Sponsor has agreed to waive its liquidation rights with respect to the Founder Shares if the Company fails to complete a Business Combination within the Combination Period. However, if the Sponsor acquires Public Shares in or after the Initial Public Offering, such Public Shares will be entitled to liquidating distributions from the

Trust Account if the Company fails to complete a Business Combination within the Combination Period. The underwriter has agreed to waive its rights to its deferred underwriting commission (see Note 6) held in the Trust Account in the event the Company does not complete a Business Combination within the Combination Period and, in such event, such amounts will be included with the other funds held in the Trust Account that will be available to fund the redemption of the Public Shares. In the event of such distribution, it is possible that the per share value of the assets remaining available for distribution will be less than the Initial Public Offering price per Unit (\$10.00).

In order to protect the amounts held in the Trust Account, the Sponsor has agreed to be liable to the Company if and to the extent any claims by a third party for services rendered or products sold to the Company, or a prospective target business with which the Company has discussed entering into a transaction agreement, reduce the amount of funds in the Trust Account to below the lesser of (i) \$10.00 per Public Share and (ii) the actual amount per Public Share held in the Trust Account as of the date of the liquidation of the Trust Account, if less than \$10.00 per public Share due to reductions in the value of the trust assets, less taxes payable, provided that such liability will not apply to any claims by a third party or prospective target business who executed a waiver of any and all rights to monies held in the Trust Account nor will it apply to any claims under the Company's indemnity of the underwriter of the Initial Public Offering against certain liabilities, including liabilities under the Securities Act of 1933, as amended (the "Securities Act"). Moreover, in the event that an executed waiver is deemed to be unenforceable against a third party, the Sponsor will not be responsible to the extent of any liability for such third-party claims. The Company will seek to reduce the possibility that the Sponsor will have to indemnify the Trust Account due to claims of creditors by endeavoring to have all vendors, service providers (except for the Company's independent registered public accounting firm), prospective target businesses and other entities with which the Company does business, execute agreements with the Company waiving any right, title, interest or claim of any kind in or to monies held in the Trust Account.

NOTE 2. SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES

Basis of Presentation

The accompanying unaudited condensed financial statements have been prepared in accordance with accounting principles generally accepted in the United States of America ("GAAP") for interim financial information and in accordance with the instructions to Form 10-Q and Article 8 of Regulation S-X of the SEC. Certain information or footnote disclosures normally included in financial statements prepared in accordance with GAAP have been condensed or omitted, pursuant to the rules and regulations of the SEC for interim financial reporting. Accordingly, they do not include all the information and footnotes necessary for a complete presentation of financial position, results of operations, or cash flows. In the opinion of management, the accompanying unaudited condensed financial statements include all adjustments, consisting of a normal recurring nature, which are necessary for a fair presentation of the financial position, operating results and cash flows for the periods presented.

The accompanying unaudited condensed financial statements should be read in conjunction with the Company's Annual Report on 10-K/A as filed with the SEC on May 5, 2021. The interim results for the three months ended March 31, 2021 are not necessarily indicative of the results to be expected for the year ending December 31, 2021 or for any future interim periods.

Emerging Growth Company

The Company is an "emerging growth company," as defined in Section 2(a) of the Securities Act, as modified by the Jumpstart Our Business Startups Act of 2012 (the "JOBS Act"), and it may take advantage of certain exemptions from various reporting requirements that are applicable to other public companies that are not emerging growth companies including, but not limited to, not being required to comply with the independent registered public accounting firm attestation requirements of Section 404 of the Sarbanes-Oxley Act, of 2002, reduced disclosure obligations regarding executive compensation in its periodic reports and proxy statements, and exemptions from the requirements of holding a nonbinding advisory vote on executive compensation and stockholder approval of any golden parachute payments not previously approved.

Further, Section 102(b)(1) of the JOBS Act exempts emerging growth companies from being required to comply with new or revised financial accounting standards until private companies (that is, those that have not had a

Securities Act registration statement declared effective or do not have a class of securities registered under the Exchange Act) are required to comply with the new or revised financial accounting standards. The JOBS Act provides that a company can elect to opt out of the extended transition period and comply with the requirements that apply to non-emerging growth companies but any such election to opt out is irrevocable. The Company has elected not to opt out of such extended transition period which means that when a standard is issued or revised and it has different application dates for public or private companies, the Company, as an emerging growth company, can adopt the new or revised standard at the time private companies adopt the new or revised standard. This may make comparison of the Company's financial statements with another public company which is neither an emerging growth company nor an emerging growth company which has opted out of using the extended transition period difficult or impossible because of the potential differences in accounting standards used.

Use of Estimates

The preparation of condensed financial statements in conformity with GAAP requires management to make estimates and assumptions that affect the reported amounts of assets and liabilities and disclosure of contingent assets and liabilities at the date of the financial statements and the reported amounts of revenues and expenses during the reporting period.

Making estimates requires management to exercise significant judgment. It is at least reasonably possible that the estimate of the effect of a condition, situation or set of circumstances that existed at the date of the financial statements, which management considered in formulating its estimate, could change in the near term due to one or more future events. Accordingly, the actual results could differ significantly from those estimates.

Cash and Cash Equivalents

The Company considers all short-term investments with an original maturity of three months or less when purchased to be cash equivalents. The Company did not have any cash equivalents as of March 31, 2021 and December 31, 2020.

Class A common stock subject to possible redemption

The Company accounts for its Class A common stock subject to possible redemption in accordance with the guidance in Accounting Standards Codification ("ASC") Topic 480 "Distinguishing Liabilities from Equity." Class A Common stock subject to mandatory redemption is classified as a liability instrument and is measured at fair value. Conditionally redeemable common stock (including common stock that features redemption rights that is either within the control of the holder or subject to redemption upon the occurrence of uncertain events not solely within the Company's control) is classified as temporary equity. At all other times, common stock is classified as stockholders' equity. The Company's common stock features certain redemption rights that are considered to be outside of the Company's control and subject to occurrence of uncertain future events. Accordingly, at March 31, 2021 and December 31, 2020, Class A common stock subject to possible redemption is presented as temporary equity, outside of the stockholders' equity section of the Company's condensed balance sheets.

Offering Costs

Offering costs consist of underwriting, legal, accounting and other expenses incurred through the Initial Public Offering that are directly related to the Initial Public Offering. Offering costs amounting to \$23,690,692 were charged to stockholders' equity upon the completion of the Initial Public Offering, and \$1,204,771 of offering costs were related to the warrant liability and charged to the statement of operations.

Warrant Liability

The Company accounts for warrants as either equity-classified or liability-classified instruments based on an assessment of the warrant's specific terms and applicable authoritative guidance in Financial Accounting Standards Board ("FASB") Accounting Standards Codification ("ASC") 480, Distinguishing Liabilities from Equity ("ASC 480") and ASC 815, Derivatives and Hedging ("ASC 815"). The assessment considers whether the warrants are freestanding financial instruments pursuant to ASC 480, meet the definition of a liability pursuant to ASC 480, and

whether the warrants meet all of the requirements for equity classification under ASC 815, including whether the warrants are indexed to the Company's own ordinary shares, among other conditions for equity classification. This assessment, which requires the use of professional judgment, is conducted at the time of warrant issuance and as of each subsequent quarterly period end date while the warrants are outstanding.

For issued or modified warrants that meet all of the criteria for equity classification, the warrants are required to be recorded as a component of additional paid-in capital at the time of issuance. For issued or modified warrants that do not meet all the criteria for equity classification, the warrants are required to be recorded at their initial fair value on the date of issuance, and each balance sheet date thereafter. Changes in the estimated fair value of the warrants are recognized as a non-cash gain or loss on the statements of operations. The fair value of the warrants was estimated using a Monte Carlo simulation approach (see Note 9).

Income Taxes

The Company follows the asset and liability method of accounting for income taxes under ASC 740, "Income Taxes." Deferred tax assets and liabilities are recognized for the estimated future tax consequences attributable to differences between the financial statement carrying amounts of existing assets and liabilities and their respective tax bases. Deferred tax assets and liabilities are measured using enacted tax rates expected to apply to taxable income in the years in which those temporary differences are expected to be recovered or settled. The effect on deferred tax assets and liabilities of a change in tax rates is recognized in income in the period that included the enactment date. Valuation allowances are established, when necessary, to reduce deferred tax assets to the amount expected to be realized. As of March 31, 2021 and December 31, 2020, the Company had a deferred tax asset of approximately \$426,000 and \$40,400, which had a full valuation allowance recorded against it of approximately \$426,000 and \$40,400, respectively.

The Company's currently taxable income primarily consists of interest income on the Trust Account. The Company's general and administrative costs are generally considered start-up costs and are not currently deductible. During the three months ended March 31, 2021, the Company recorded no income tax expense. The Company's effective tax rate for the three months ended March 31, 2021 was approximately 0%, which differs from the expected income tax rate due to the start-up costs (discussed above) which are not currently deductible.

ASC 740 prescribes a recognition threshold and a measurement attribute for the financial statement recognition and measurement of tax positions taken or expected to be taken in a tax return. For those benefits to be recognized, a tax position must be more likely than not to be sustained upon examination by taxing authorities. The Company recognizes accrued interest and penalties related to unrecognized tax benefits as income tax expense. There were no unrecognized tax benefits and no amounts accrued for interest and penalties as of March 31, 2021 and December 31, 2020. The Company is currently not aware of any issues under review that could result in significant payments, accruals or material deviation from its position. The Company is subject to income tax examinations by major taxing authorities since inception.

Net Income (Loss) per Common Share

Net income (loss) per common share is computed by dividing net income by the weighted average number of common shares outstanding for the period. The Company has not considered the effect of warrants sold in the Initial Public Offering and private placement to purchase 21,995,000 shares of Class A common stock in the calculation of diluted income per share, since the exercise of the warrants are contingent upon the occurrence of future events and the inclusion of such warrants would be anti-dilutive.

The Company's statement of operations includes a presentation of income (loss) per share for common shares similar to the two-class method of income (loss) per share. Net income per common share, basic and diluted, for Class A common stock is calculated by dividing the interest income earned on the Trust Account less income and franchise taxes, by the weighted average number of Class A common stock outstanding since original issuance. Net loss per share, basic and diluted, for Class B common stock is calculated by dividing the net loss, adjusted for income attributable to Class A common stock, net of applicable franchise and income taxes, by the weighted average number of Class B common stock outstanding for the period. Class B common stock includes the Founder Shares as these shares do not have any redemption features and do not participate in the income earned on the Trust Account.

The following table reflects the calculation of basic and diluted net income (loss) per common share (in dollars, except per share amounts):

		Three Months Ended March 31, 2021	
Class A Common Stock			
Numerator: Earnings allocable to Class A Common Stock			
Interest Income	\$	10,919	
Income and Franchise Tax		(10,919)	
Net Earnings	\$	_	
Denominator: Weighted Average Class A Common Stock			
Class A Common Stock, Basic and Diluted		44,275,000	
Earnings/Basic and Diluted Class A Common Stock	\$	0.00	
Class A and B Common Stock			
Numerator: Net Loss minus Net Earnings			
Net Loss	\$	(58,471,923)	
Net Earnings		_	
Net Loss		(58,471,923)	
Denominator: Weighted Average Class A and B Common Stock			
Class A and B Common Stock, Basic and Diluted		11,068,750	
Loss/Basic and Diluted Class A and B Common Stock	\$	(5.28)	

Concentration of Credit Risk

Financial instruments that potentially subject the Company to concentrations of credit risk consist of a cash account in a financial institution, which, at times, may exceed the Federal Depository Insurance Coverage of \$250,000. The Company has not experienced losses on this account and management believes the Company is not exposed to significant risks on such account.

Fair Value of Financial Instruments

The fair value of the Company's assets and liabilities, which qualify as financial instruments under ASC Topic 820, "Fair Value Measurement," approximates the carrying amounts represented in the accompanying condensed balance sheets, primarily due to their short-term nature.

Liquidity and Capital Resources

As of March 31, 2021, the Company had \$627,415 in its operating bank accounts and a working capital deficit of \$570,566.

Prior to the completion of the Initial Public Offering, the Company's liquidity needs had been satisfied through a contribution of \$25,000 from Sponsor to cover for certain offering costs in exchange for the issuance of the Founder Shares, the loan of up to \$300,000 from the Sponsor pursuant to the Note (see Note 5), and the proceeds from the consummation of the Private Placement not held in the Trust Account. The Note was repaid on September 4, 2020. In addition, in order to finance transaction costs in connection with a Business Combination, the Sponsor or an affiliate of the Sponsor, or certain of the Company's officers and directors may, but are not obligated to, provide the Company Working Capital Loans up to \$1,500,000 (see Note 6). As of March 31, 2021, there were no amounts outstanding under any Working Capital Loan.

Based on the foregoing, management believes that the Company will have sufficient working capital and borrowing capacity to meet its needs through the earlier of the consummation of a Business Combination or one year

from this filing. Over this time period, the Company will be using these funds for paying existing accounts payable, identifying and evaluating prospective initial Business Combination candidates, performing due diligence on prospective target businesses, paying for travel expenditures, selecting the target business to merge with or acquire, and structuring, negotiating and consummating the Business Combination.

Recently Issued Accounting Standards

Management does not believe that any recently issued, but not yet effective, accounting standards, if currently adopted, would have a material effect on the Company's condensed financial statements.

NOTE 3. INITIAL PUBLIC OFFERING

Pursuant to the Initial Public Offering, the Company sold 44,275,000 Units, which includes the full exercise by the underwriter of its over-allotment option in the amount of 5,775,000 Units, at a purchase price of \$10.00 per Unit. Each Unit consists of one share of Class A common stock and one-third of one redeemable warrant ("Public Warrant"). Each whole Public Warrant entitles the holder to purchase one share of Class A common stock at a price of \$11.50 per share, subject to adjustment (see Note 7).

NOTE 4. PRIVATE PLACEMENT

Simultaneously with the closing of the Initial Public Offering, the Sponsor and certain of the Company's independent directors purchased an aggregate of 7,236,667 Private Placement Warrants, at a price of \$1.50 per Private Placement Warrant, for an aggregate purchase price of \$10,855,000. The Sponsor purchased 6,903,335 Private Placement Warrants, and each of Mr. Islam and Dr. Leproust (and/or one or more entities controlled by them) purchased 166,666 Private Placement Warrants. Each Private Placement Warrant is exercisable to purchase one share of Class A common stock at a price of \$11.50 per share, subject to adjustment (see Note 7). Proceeds from the sale of the Private Placement Warrants were added to the net proceeds from the Initial Public Offering held in the Trust Account. If the Company does not complete a Business Combination within the Combination Period, the proceeds from the sale of the Private Placement Warrants held in the Trust Account will be used to fund the redemption of the Public Shares (subject to the requirements of applicable law) and the Private Placement Warrants will expire worthless.

NOTE 5. RELATED PARTY TRANSACTIONS

Founder Shares

In July 2020, the Sponsor paid \$25,000 to cover certain offering costs of the Company in consideration for 10,062,500 shares of the Company's Class B common stock (the "Founder Shares"). In August 2020, the Sponsor transferred 25,000 Founder Shares to each of Munib Islam, Emily Leproust and Nat Turner, certain of the Company's independent directors, at their original per-share purchase price, for an aggregate of 75,000 Founder Shares transferred. On September 1, 2020, the Company effected a 1:1.1 stock split of its Class B common stock, resulting in the Sponsor holding an aggregate of 10,993,750 Founder Shares and there being an aggregate of 11,068,750 Founder Shares outstanding. All share and per-share amounts have been retroactively restated to reflect the stock split, The Founder Shares included an aggregate of up to 1,443,750 shares subject to forfeiture by the Sponsor to the extent that the underwriter's over-allotment was not exercised in full or in part, so that the number of Founder Shares would equal, on an as-converted basis, approximately 20% of the Company's issued and outstanding shares of common stock after the Initial Public Offering. As a result of the underwriter's election to fully exercise its over-allotment option, 1,443,750 Founder Shares are no longer subject to forfeiture.

The Sponsor has agreed, subject to limited exceptions, not to transfer, assign or sell any of the Founder Shares until the earlier to occur of: (A) one year after the completion of a Business Combination and (B) subsequent to a Business Combination, (x) if the last reported sale price of the Class A common stock equals or exceeds \$12.00 per share (as adjusted for stock splits, stock capitalizations, reorganizations, recapitalizations and the like) for any 20 trading days within any 30-trading day period commencing at least 150 days after a Business Combination, or (y) the date on which the Company completes a liquidation, merger, capital stock exchange or other similar transaction

that results in all of the Public Stockholders having the right to exchange their shares of common stock for cash, securities or other property.

Promissory Note - Related Party

On July 16, 2020, the Sponsor issued an unsecured promissory note to the Company (the "Promissory Note"), pursuant to which the Company could borrow up to an aggregate principal amount of \$300,000. The Promissory Note was non-interest bearing and payable on the earlier of (i) December 31, 2020 or (ii) the consummation of the Initial Public Offering. The outstanding balance under the Promissory Note of \$165,081 was repaid at the closing of the Initial Public Offering on September 4, 2020.

Related Party Loans

In order to finance transaction costs in connection with a Business Combination, the Sponsor or an affiliate of the Sponsor, or certain of the Company's officers and directors may, but are not obligated to, loan the Company funds as may be required ("Working Capital Loans"). Such Working Capital Loans would be evidenced by promissory notes. The notes may be repaid upon completion of a Business Combination, without interest, or, at the lender's discretion, up to \$1,500,000 of the notes may be converted upon completion of a Business Combination into warrants at a price of \$1.50 per warrant. Such warrants would be identical to the Private Placement Warrants. In the event that a Business Combination does not close, the Company may use a portion of proceeds held outside the Trust Account to repay the Working Capital Loans but no proceeds held in the Trust Account would be used to repay the Working Capital Loans. As of March 31, 2021, there were no amounts outstanding under the Working Capital Loans.

NOTE 6. COMMITMENTS AND CONTINGENCIES

Risks and Uncertainties

Management continues to evaluate the impact of the COVID-19 pandemic on the industry and has concluded that while it is reasonably possible that the virus could have a negative effect on the Company's financial position, results of its operations and/or search for a target company, the specific impact is not readily determinable as of the date of these financial statements. The financial statements do not include any adjustments that might result from the outcome of this uncertainty.

Registration Rights

Pursuant to a registration rights agreement entered into on September 1, 2020, the holders of the Founder Shares, Private Placement Warrants and securities that may be issued upon conversion of Working Capital Loans and forward purchase shares are entitled to registration rights. The holders of these securities will be entitled to make up to three demands, excluding short form demands, that the Company register such securities. In addition, the holders have certain "piggy-back" registration rights with respect to registration statements filed subsequent to the completion of a Business Combination. The Company will bear the expenses incurred in connection with the filing of any such registration statements.

Underwriting Agreement

The underwriter is entitled to a deferred fee of \$0.35 per Unit, or \$15,496,250 in the aggregate. The deferred fee will become payable to the underwriter from the amounts held in the Trust Account solely in the event that the Company completes a Business Combination, subject to the terms of the underwriting agreement.

Forward Purchase Agreement

The Company entered into separate forward purchase agreements with affiliates of the Sponsor, Casdin Capital, LLC ("Casdin") and Corvex Management LP ("Corvex"), in their capacities as investment advisors on behalf of one or more investment funds, clients or accounts managed by each of Casdin and Corvex, respectively (collectively, their "Clients"), pursuant to which, subject to the conditions described below, they will cause the Clients to purchase from the Company up to an aggregate amount of 15,000,000 shares of Class A common stock, or the forward

purchase shares, for \$10.00 per forward purchase share, or an aggregate amount of up to \$150,000,000, in a private placement that will close concurrently with the closing of a Business Combination. The amount of forward purchase shares sold pursuant to the forward purchase agreements will be determined in the Company's discretion based on the Company's need for additional capital to consummate a Business Combination. Under each forward purchase agreement, the Company is required to approach Casdin and Corvex if it proposes to raise additional capital by issuing any equity, or securities convertible into, exchangeable or exercisable for equity securities in connection with a Business Combination. The respective obligations of Casdin and Corvex to purchase forward purchase shares will, among other things, be conditioned on the Company completing a Business Combination with a company engaged in a business that is within the investment objectives of the Clients purchasing forward purchase shares and on the Business Combination (including the target assets or business, and the terms of the Business Combination) being reasonably acceptable to such Clients as determined by Casdin or Corvex, as relevant, as investment advisors on behalf of such Clients. Each of Casdin and Corvex will have the right to transfer a portion of its purchase obligation under the forward purchase agreement to third parties, subject to compliance with applicable securities laws. To the extent that the Company obtains alternative financing to fund the initial Business Combination and the Clients participate in such financing, the aggregate commitment under the forward purchase agreement will be reduced by the amount of such alternative financing.

Business Combination Agreement

On February 10, 2021, the Company announced that it executed an Agreement and Plan of Merger (the "Merger Agreement") with Mount Sinai Genomics, Inc., a Delaware corporation, d/b/a Sema4 ("Sema4") and the other parties thereto (the transactions contemplated by the Merger Agreement, including the Merger (as defined below), the "Business Combination"). Specifically, the Company entered into the Merger Agreement with Sema4 and S-IV Sub, Inc., a Delaware corporation incorporated on February 1, 2021 and a direct, wholly-owned subsidiary of the Company ("Merger Sub"). Pursuant to the terms of the Merger Agreement, the Company will acquire Sema4through the merger of Merger Sub with and into Sema4, with Sema4 surviving as a wholly-owned subsidiary of the Company (the "Merger")

The Business Combination is expected to close in the second quarter of 2021, following the receipt of the required approval by the Company's stockholders and the satisfaction of certain other customary closing conditions.

At the effective time of the Merger (the "Effective Time"), each share of Sema4 class B common stock, par value \$0.00001 per share ("Sema4 Class B Common Stock") issued and outstanding as of immediately prior to the Effective Time will be converted into 1/100th of a share of Sema4 class A common stock, par value \$0.00001 per share ("Sema4 Class A Common Stock", together with Sema4 Class B Common Stock, "Sema4 Common Stock") in accordance with Sema4's organizational documents.

Immediately thereafter, each share of Sema4 Common Stock and Sema4's series A-1 preferred stock, series A-2 preferred stock, series B preferred stock and series C preferred stock (collectively, "Sema4 Capital Stock") issued and outstanding immediately prior to the Effective Time (other than Excluded Shares and Dissenting Shares (each as defined in the Merger Agreement)) will be converted into the right to receive a portion of the total closing merger consideration, with each Sema4 stockholder being entitled to receive the following:

- (a) if such stockholder has made a cash election as set forth and in accordance with the terms of the Merger Agreement, a portion of the specified aggregate amount of cash consideration payable under the terms of the Merger Agreement (such aggregate amount not to exceed \$343,000,000) and pursuant to the terms of such stockholder's cash election; and
- (b) a number of shares of common stock, par value \$0.0001 per share, of the Company (the "Common Stock") equal to the quotient of: (i) (A) the product of (x) such stockholder's total shares of Sema4 Capital Stock multiplied by (y) the per share amount calculated in accordance with the Merger Agreement *minus* (B) the amount of cash payable to such stockholder pursuant to its cash election, if any, divided by (ii) \$10.

In addition, at the Effective Time, each outstanding option to purchase Sema4 Capital Stock, each outstanding and unsettled restricted stock unit in respect of shares of Sema4 Capital Stock and each outstanding stock appreciation right will be rolled over into options to purchase Common Stock, restricted stock units in respect of

Common Stock and stock appreciation rights in respect of Common Stock, all as further set forth in and in accordance with the terms of the Merger Agreement.

In addition to the payment of cash, issuance of Common Stock and rollover of other Sema4 equity awards described above as of the Effective Time, in the event that the closing sale price of Common Stock exceeds certain price thresholds for 20 out of any 30 consecutive trading days during the period of time commencing upon the expiration of the lock-up period applicable to the Sponsor under the Letter Agreement, dated as of August 27, 2021, by and among the Company, Sponsor and each of the executive officers and directors of the Company and ending on the second anniversary of the closing of the Merger, an additional number of shares equal to an amount up to an aggregate of 11% of the shares of Common Stock that would have been issuable upon closing of the Merger to the stockholders of the Company if no cash elections were made and the closing cash payment amount under the Merger Agreement was \$0.00 (the "Earn-Out Shares") shall become issuable, in accordance with the terms of the Merger Agreement following the achievement of those certain price thresholds, to the stockholders of Sema4 as of immediately prior to the closing of the Merger; provided that the board of directors of Sema4 (or a duly authorized committee thereof) may, prior to the closing of the Merger, allocate a portion of such Earn-Out Shares to be issued to service providers of Sema4 in the form of restricted stock units of the Company.

Sponsor Support Agreement

On February 10, 2021, the Company entered into a Sponsor Support Agreement with the Sponsor and Sema4, whereby Sponsor has agreed to, among other things, (a) vote at any meeting of the stockholders of the Company all of their shares of capital stock of the Company held of record or thereafter acquired in favor of the Stockholder Approvals (as defined in the Merger Agreement), (b) be bound by certain other covenants and agreements related to the Business Combination and (c) be bound by certain transfer restrictions with respect to such securities, prior to the closing of the Business Combination, in each case, on the terms and subject to the conditions set forth in the Sponsor Support Agreement. On February 10, 2021, concurrently with the execution of the Merger Agreement, the Company entered into subscription agreements (collectively, the "Subscription Agreements") with certain investors (collectively, the "PIPE Investors" which include certain existing equity holders of Sema4), pursuant to, and on the terms and subject to the conditions of which, the PIPE Investors have collectively subscribed for 35,000,000 shares of our common stock for an aggregate purchase price equal to \$350,000,000 (the "PIPE Investment"). The PIPE Investment will be consummated immediately prior to the closing of the Sema4Business Combination. The Subscription Agreements provide for certain customary registration rights for the PIPE Investors. The Subscription Agreements will terminate with no further force and effect upon the earliest to occur of: (a) such date and time as the Merger Agreement is terminated in accordance with its terms; (b) the mutual written agreement of the parties to such Subscription Agreement; and (c) November 9, 2021.

NOTE 7. STOCKHOLDERS' EQUITY

Preferred Stock — The Company is authorized to issue 1,000,000 shares of preferred stock with a par value of \$0.0001 per share with such designations, voting and other rights and preferences as may be determined from time to time by the Company's board of directors. At March 31, 2021 and December 31, 2020, there were no shares of preferred stock issued or outstanding.

Class A Common Stock — The Company is authorized to issue 380,000,000 shares of Class A common stock with a par value of \$0.0001 per share. Holders of Class A common stock are entitled to one vote for each share. At March 31, 2021 and December 31, 2020, there were 14,800,205 and 8,953,013 shares of Class A common stock issued or outstanding, excluding 29,474,795 and 35,321,987 shares of Class A common stock subject to possible redemption, respectively.

Class B Common Stock — The Company is authorized to issue 20,000,000 shares of Class B common stock with a par value of \$0.0001 per share. Holders of Class B common stock are entitled to one vote for each share. At March 31, 2021 and December 31, 2020, there were 11,068,750 shares of Class B common stock issued and outstanding.

The shares of Class B common stock will automatically convert into Class A common stock concurrently with or immediately following the consummation of the Business Combination, on a one-for-one basis, subject to

adjustment. In the case that additional shares of Class A common stock, or equity-linked securities, are issued or deemed issued in connection with a Business Combination, the number of shares of Class A common stock issuable upon conversion of all Founder Shares will equal, in the aggregate, on an as-converted basis, 20% of the total number of shares of Class A common stock outstanding after such conversion (after giving effect to any redemptions of shares of Class A common stock by public stockholders), including the total number of shares of Class A common stock issued, or deemed issued or issuable upon conversion or exercise of any equity-linked securities or rights issued or deemed issued, by the Company in connection with or in relation to the consummation of a Business Combination (including the forward purchase shares), excluding any shares of Class A common stock or equity-linked securities or rights exercisable for or convertible into shares of Class A common stock issued, or to be issued, to any seller in a Business Combination and any Private Placement Warrants issued to the Sponsor, officers or directors upon conversion of Working Capital Loans, provided that such conversion of Founder Shares will never occur on a less than one-for-one basis.

Warrants — Public Warrants may only be exercised for a whole number of shares. No fractional warrants will be issued upon separation of the Units and only whole warrants will trade. The Public Warrants will become exercisable on the later of (a) 30 days after the completion of a Business Combination and (b)

12 months from the closing of the Initial Public Offering. The Public Warrants will expire five years after the completion of a Business Combination or earlier upon redemption or liquidation.

The Company will not be obligated to deliver any shares of Class A common stock pursuant to the exercise of a warrant and will have no obligation to settle such warrant exercise unless a registration statement under the Securities Act with respect to the Class A common stock underlying the warrants is then effective and a prospectus relating thereto is current, subject to the Company satisfying its obligations with respect to registration. No warrant will be exercisable and the Company will not be obligated to issue shares of Class A common stock upon exercise of a warrant unless the share of Class A common stock issuable upon such warrant exercise has been registered, qualified or deemed to be exempt under the securities laws of the state of residence of the registered holder of the warrants.

The Company has agreed that as soon as practicable, but in no event later than 15 business days, after the closing of a Business Combination, it will use its best efforts to file with the SEC a registration statement for the registration, under the Securities Act, of the Class A common stock issuable upon exercise of the Public Warrants. The Company will use its best efforts to cause the same to become effective and to maintain the effectiveness of such registration statement, and a current prospectus relating thereto, until the expiration of the Public Warrants in accordance with the provisions of the warrant agreement. If a registration statement covering the shares of Class A common stock issuable upon exercise of the warrants is not effective by the sixtieth (60th) business day after the closing of a Business Combination, warrant holders may, until such time as there is an effective registration statement and during any period when the Company will have failed to maintain an effective registration statement, exercise warrants on a "cashless basis" in accordance with Section 3(a)(9) of the Securities Act or another exemption. Notwithstanding the above, if the Class A common stock are, at the time of any exercise of a Public Warrant, not listed on a national securities exchange such that they satisfy the definition of a "covered security" under Section 18(b)(1) of the Securities Act, the Company may, at its option, require holders of Public Warrants who exercise their Public Warrants to do so on a "cashless basis" in accordance with Section 3(a)(9) of the Securities Act and, in the event the Company so elects, the Company will not be required to file or maintain in effect a registration statement, and in the event the Company does not so elect, it will use its best efforts to register or qualify the shares under applicable blue sky laws to the extent an exemption is not available.

Redemption of Warrants When the Price per Share of Class A Common Stock Equals or Exceeds \$18.00 — Once the warrants become exercisable, the Company may redeem the outstanding Public Warrants:

- in whole and not in part;
- at a price of \$0.01 per Public Warrant;
- upon not less than 30 days' prior written notice of redemption to each warrant holder; and

• if, and only if, the reported last sale price of the Company's Class A common stock equals or exceeds \$18.00 per share (as adjusted for stock splits, stock dividends, reorganizations, recapitalizations and the like) for any 20 trading days within a 30-trading day period ending on the third trading day prior to the date on which the Company sends the notice of redemption to the warrant holders.

If and when the warrants become redeemable by the Company, the Company may exercise its redemption right even if it is unable to register or qualify the underlying securities for sale under all applicable state securities laws.

Redemption of Warrants When the Price per Share of Class A Common Stock Equals or Exceeds \$10.00 — Once the warrants become exercisable, the Company may redeem the outstanding warrants:

- in whole and not in part;
- at a price of \$0.10 per warrant provided that holders will be able to exercise their warrants prior to redemption and receive that number of shares of Class A common stock determined based on the redemption date and the "fair market value" of the Company's Class A common stock;
- upon a minimum of 30 days' prior written notice of redemption;
- if, and only if, the last reported sale price of the Company's Class A common stock equals or exceeds \$10.00 per share (as adjusted for stock splits, stock dividends, reorganizations, recapitalizations and the like) on the trading day prior to the date on which the Company sends the notice of redemption to the warrant holders;
- if, and only if, there is an effective registration statement covering the issuance of the shares of Class A common stock issuable upon exercise of the warrants and a current prospectus relating thereto is available throughout the 30-day period after the written notice of redemption is given.

In addition, if (x) the Company issues additional shares of Class A common stock or equity-linked securities for capital raising purposes in connection with the closing of a Business Combination at an issue price or effective issue price of less than \$9.20 per share of Class A common stock (with such issue price or effective issue price to be determined in good faith by the Company's board of directors, and, in the case of any such issuance to the Sponsor or its affiliates, without taking into account any Founder Shares held by the Sponsor or its affiliates, as applicable, prior to such issuance) (the "Newly Issued Price"), (y) the aggregate gross proceeds from such issuances represent more than 60% of the total equity proceeds, and interest thereon, available for the funding of a Business Combination on the date of the completion of a Business Combination (net of redemptions), and (z) the volume weighted average trading price of the Company's Class A common stock during the 20 trading day period starting on the trading day after the day on which the Company completes a Business Combination (such price, the "Market Value") is below \$9.20 per share, the exercise price of the warrants will be adjusted (to the nearest cent) to be equal to 115% of the higher of the Market Value and the Newly Issued Price, and the \$10.00 per share redemption trigger price will be adjusted (to the nearest cent) to be equal to the higher of the Market Value and the Newly Issued Price.

The Private Placement Warrants are identical to the Public Warrants underlying the Units sold in the Initial Public Offering, except that (1) the Private Placement Warrants and the Class A common stock issuable upon the exercise of the Private Placement Warrants will not be transferable, assignable or saleable until 30 days after the completion of a Business Combination, subject to certain limited exceptions, (2) the Private Placement Warrants will be exercisable on a cashless basis, (3) the Private Placement Warrants will be non-redeemable (except as described above in "Redemption of Warrants When the Price per Share of Class A Common Stock Equals or Exceeds \$10.00") so long as they are held by the initial purchasers or their permitted transferees, and (4) the holders of the Private Placement Warrants and the Class A common stock issuable upon the exercise of the Private Placement Warrants will have certain registration rights. If the Private Placement Warrants are held by someone other than the initial purchasers or their permitted transferees, the Private Placement Warrants will be redeemable by the Company and exercisable by such holders on the same basis as the Public Warrants.

CM LIFE SCIENCES, INC. NOTES TO CONDENSED FINANCIAL STATEMENTS MARCH 31, 2021 (Unaudited)

NOTE 9. FAIR VALUE MEASUREMENTS

The fair value of the Company's financial assets and liabilities reflects management's estimate of amounts that the Company would have received in connection with the sale of the assets or paid in connection with the transfer of the liabilities in an orderly transaction between market participants at the measurement date. In connection with measuring the fair value of its assets and liabilities, the Company seeks to maximize the use of observable inputs (market data obtained from independent sources) and to minimize the use of unobservable inputs (internal assumptions about how market participants would price assets and liabilities). The following fair value hierarchy is used to classify assets and liabilities based on the observable inputs and unobservable inputs used in order to value the assets and liabilities:

- Level 1: Quoted prices in active markets for identical assets or liabilities. An active market for an asset or liability is a market in which transactions for the asset or liability occur with sufficient frequency and volume to provide pricing information on an ongoing basis.
- Level 2: Observable inputs other than Level 1 inputs. Examples of Level 2 inputs include quoted prices in active markets for similar assets or liabilities and quoted prices for identical assets or liabilities in markets that are not active.
- Level 3: Unobservable inputs based on our assessment of the assumptions that market participants would use in pricing the asset or liability.

At March 31, 2021 and December 31, 2020, assets held in the Trust Account were comprised of \$442,774,870 and \$442,763,951 in money market funds which are invested primarily in U.S. Treasury Securities, respectively. During the three months ended March 31, 2021 and the year ended December 31, 2020, the Company did not withdraw any interest income from the Trust Account.

The following table presents information about the Company's assets that are measured at fair value on a recurring basis at March 31, 2021 and December 31, 2020 and indicates the fair value hierarchy of the valuation inputs the Company utilized to determine such fair value:

Description	Level	March 31, 2021	December 31, 2020
Assets:			
Investments held in Trust Account – U.S. Treasury Securities Money Market Fund	1	\$ 442,774,870	\$ 442,763,951

The following table presents information about the Company's liabilities that are measured at fair value on a recurring basis at March 31, 2021 and December 31, 2020 and indicates the fair value hierarchy of the valuation inputs the Company utilized to determine such fair value:

Description	Level	March 31, 2021	December 31, 2020
Liabilities:			
Warrant Liability – Public Warrants	1	\$ 76,448,164	\$ 40,290,250
Warrant Liability – Private Placement Warrants	3	\$ 50,511,936	\$ 30,032,168

The Warrants were accounted for as liabilities in accordance with ASC 815-40 and are presented within warrant liabilities on the accompanying balance sheets. The warrant liabilities are measured at fair value at inception and on a recurring basis, with changes in fair value presented within the change in fair value of warrant liabilities in the statement of operations. There were no transfers between levels for the three months ended March 31, 2021.

Level 3 financial liabilities consist of the Private Placement Warrant liability for which there is no current market for these securities such that the determination of fair value requires significant judgment or estimation.

CM LIFE SCIENCES, INC. NOTES TO CONDENSED FINANCIAL STATEMENTS MARCH 31, 2021 (Unaudited)

Changes in fair value measurements categorized within Level 3 of the fair value hierarchy are analyzed each period based on changes in estimates or assumptions and recorded as appropriate.

The fair value of the Private Placement Warrants was estimated at March 31, 2021 and December 31, 2020 to be \$2.29 and \$4.24, respectively, using the modified Black-Scholes option pricing model and the following assumptions:

	March 31, 2021	December 31, 2020
Stock Price	\$ 14.89	\$ 11.04
Expected volatility	42.5 %	42.8 %
Risk-free interest rate	0.96 %	0.42 %
Remaining term	5.17	5.42
Exercise Price	\$ 11.50	\$ 11.50

The following table presents the changes in the fair value of warrant liabilities:

	Priva	ite Placement	Public	Warrant Liabilities
Fair value as of January 1, 2021	\$	30,032,168	\$ 40,290,250	\$ 70,322,418
Change in valuation inputs or other assumptions		20,479,768	36,157,914	56,637,682
Fair value as of March 31, 2021	\$	50,511,936	\$ 76,448,164	\$ 126,960,100

There were no transfers in or out of Level 3 from other levels in the fair value hierarchy during the three months ended March 31, 2021.

NOTE 10. SUBSEQUENT EVENTS

The Company evaluated subsequent events and transactions that occurred after the balance sheet date up to the date that the financial statements were issued. Based upon this review, other than as described below, the Company did not identify any subsequent events that would have required adjustment or disclosure in the financial statements.

Report of Independent Registered Public Accounting Firm

To the Stockholders and the Board of Directors of CM Life Sciences, Inc.

Opinion on the Financial Statements

We have audited the accompanying balance sheet of CM Life Sciences, Inc. (the "Company") as of December 31, 2020, the related statements of operations, changes in stockholders' equity and cash flows for the period from July 10, 2020 (inception) through December 31, 2020, and the related notes (collectively referred to as the "financial statements"). In our opinion, the financial statements present fairly, in all material respects, the financial position of the Company as of December 31, 2020, and the results of its operations and its cash flows for the period from July 10, 2020 (inception) through December 31, 2020, in conformity with accounting principles generally accepted in the United States of America.

Restatement of Financial Statements

As discussed in Note 2 to the financial statements, the Securities and Exchange Commission issued a public statement entitled Staff Statement on Accounting and Reporting Considerations for Warrants Issued by Special Purpose Acquisition Companies ("SPACs") (the "Public Statement") on April 12, 2021, which discusses the accounting for certain warrants as liabilities. The Company previously accounted for its warrants as equity instruments. Management evaluated its warrants against the Public Statement, and determined that the warrants should be accounted for as liabilities. Accordingly, the 2020 financial statements have been restated to correct the accounting and related disclosure for the warrants.

Basis for Opinion

These financial statements are the responsibility of the Company's management. Our responsibility is to express an opinion on the Company's financial statements based on our audit. We are a public accounting firm registered with the Public Company Accounting Oversight Board (United States) ("PCAOB") and are required to be independent with respect to the Company in accordance with the U.S. federal securities laws and the applicable rules and regulations of the Securities and Exchange Commission and the PCAOB.

We conducted our audit in accordance with the standards of the PCAOB. Those standards require that we plan and perform the audit to obtain reasonable assurance about whether the financial statements are free of material misstatement, whether due to error or fraud. The Company is not required to have, nor were we engaged to perform, an audit of its internal control over financial reporting. As part of our audit we are required to obtain an understanding of internal control over financial reporting but not for the purpose of expressing an opinion on the effectiveness of the Company's internal control over financial reporting. Accordingly, we express no such opinion.

Our audit included performing procedures to assess the risks of material misstatement of the financial statements, whether due to error or fraud, and performing procedures that respond to those risks. Such procedures included examining, on a test basis, evidence regarding the amounts and disclosures in the financial statements. Our audit also included evaluating the accounting principles used and significant estimates made by management, as well as evaluating the overall presentation of the financial statements. We believe that our audit provides a reasonable basis for our opinion.

/s/ WithumSmith+Brown, PC

We have served as the Company's auditor since 2020.

New York, New York May 4, 2021

CM LIFE SCIENCES, INC. BALANCE SHEET DECEMBER 31, 2020 (As Restated)

ASSETS

ABBLIO		
Current assets		
Cash	\$	1,094,681
Prepaid expenses		277,031
Total Current Assets		1,371,712
Cash and marketable securities held in trust account		442,763,951
Total Assets	\$	444,135,663
LIABILITIES AND STOCKHOLDERS' EQUITY		
Current liabilities		
Accounts payable and accrued expenses	\$	97,120
Total Current Liabilities		97,120
Warrant liability		70,322,418
Deferred underwriting fee payable		15,496,250
Total Liabilities		85,915,788
Commitments and contingencies		
Class A common stock subject to possible redemption, 35,321,987 shares at \$10.00 per share		353,219,870
Stockholders' Equity		
Preferred stock, \$0.0001 par value; 1,000,000 shares authorized; none issued or outstanding		_
Class A common stock, \$0.0001 par value; 380,000,000 shares authorized; 8,953,013 shares issued and outstanding (excluding 35,321,987 shares subject to possible redemption)		895
Class B common stock, \$0.0001 par value; 20,000,000 shares authorized; 11,068,750 shares issued and outstanding		1,107
Additional paid-in capital		44,905,602
Accumulated deficit		(39,907,599)
Total Stockholders' Equity	-	5,000,005
Total Liabilities and Stockholders' Equity	\$	444,135,663

 $\label{the accompanying notes are an integral part of the financial statements.$

CM LIFE SCIENCES, INC. STATEMENT OF OPERATIONS FOR THE PERIOD FROM JULY 10, 2020 (INCEPTION) THROUGH DECEMBER 31, 2020 (As Restated)

General and administrative expenses	\$	206,195
Loss from operations		(206,195)
Other income (expense):		
Interest earned on investments held in Trust Account		13,951
Change in fair value of warrant liability		(38,510,584)
Transaction Costs		(1,204,771)
Loss before provision for income taxes	<u> </u>	(39,907,599)
Provision for income taxes		
Net loss	\$	(39,907,599)
Weighted average shares outstanding of Class A redeemable common stock		44,275,000
Basic and diluted income per share, Class A redeemable common stock	\$	0.00
Weighted average shares outstanding of Class B non-redeemable common stock		10,633,062
Basic and diluted net loss per share, Class B non-redeemable common stock	\$	(3.75)

The accompanying notes are an integral part of the financial statements.

CM LIFE SCIENCES, INC. STATEMENT OF CHANGES IN STOCKHOLDERS' EQUITY FOR THE PERIOD FROM JULY 10, 2020 (INCEPTION) THROUGH DECEMBER 31, 2020 (As Restated)

_	Class Common		Class Common		Additional Paid-in	Accumulated	Total Stockholders'
_	Shares	Amount	Shares	Amount	Capital	Deficit	Equity
Balance - July 10, 2020 (Inception)	_	\$ —		\$ —	\$ —	\$ —	\$ —
Issuance of Class B common stock to initial stockholders	_	_	11,068,750	1,107	23,893	_	25,000
Sale of 44,275,000 Units, net of underwriting discounts	44,275,000	4,427	_	_	398,098,047	_	398,102,474
Common stock subject to possible redemption	(35,321,987)	(3,532)	_	_	(353,216,338)	_	(353,219,870)
Net loss	_	_	_	_	_	(39,907,599)	(39,907,599)
Balance - December 31, 2020 =	8,953,013	\$ 895	11,068,750	\$ 1,107	\$ 44,905,602	\$ (39,907,599)	\$ 5,000,005

The accompanying notes are an integral part of the financial statements

CM LIFE SCIENCES, INC. STATEMENT OF CASH FLOWS FOR THE PERIOD JULY 10, 2020 (INCEPTION) THROUGH DECEMBER 31, 2020 (As Restated)

Cash Flows from Operating Activities:	
Net loss	\$ (39,907,599)
Adjustments to reconcile net loss to net cash used in operating activities:	
Interest earned on investments held in Trust Account	(13,951)
Change in fair value of warrant liability	38,510,584
Transaction costs	1,204,771
Changes in operating assets and liabilities:	
Prepaid expenses	(277,031)
Accrued expenses	97,120
Net cash used in operating activities	 (386,106)
Cash Flows from Investing Activities:	
Investment of cash into Trust Account	(442,750,000)
Net cash used in investing activities	 (442,750,000)
Cash Flows from Financing Activities:	
Proceeds from sale of Units, net of underwriting discounts paid	433,895,000
Proceeds from sale of Private Placement Warrants	10,855,000
Proceeds from promissory note – related party	112,837
Repayment of promissory note – related party	(165,081)
Payment of offering costs	(466,969)
Net cash provided by financing activities	 444,230,787
Net Change in Cash	1,094,681
Cash – Beginning of period	_
Cash – End of period	\$ 1,094,681

The accompanying notes are an integral part of the financial statements.

380,268,982

(27,049,112)

31,811,834

15,496,250

25,000 52,244

\$

\$

Non-Cash financing activities:

Initial classification of warrant liabilities

Deferred underwriting fee payable

Initial classification of common stock subject to possible redemption

Offering costs paid directly by Sponsor in consideration for the issuance of Class B common stock

Change in value of common stock subject to possible redemption

Payment of offering costs through promissory note — related party

NOTE 1. DESCRIPTION OF ORGANIZATION AND BUSINESS OPERATIONS

CM Life Sciences, Inc. (the "Company") was incorporated in Delaware on July 10, 2020. The Company was formed for the purpose of effecting a merger, capital stock exchange, asset acquisition, stock purchase, reorganization or similar business combination with one or more businesses (the "Business Combination"). The Company is not limited to a particular industry or sector for purposes of consummating a Business Combination. The Company is an early stage and emerging growth company and, as such, the Company is subject to all of the risks associated with early stage and emerging growth companies.

As of December 31, 2020, the Company had not commenced any operations. All activity for the period from July 10, 2020 (inception) through December 31, 2020 relates to the Company's formation, the initial public offering ("Initial Public Offering"), which is described below, and, subsequent to the Initial Public Offering, identifying a target company for a Business Combination. The Company will not generate any operating revenues until after the completion of its initial Business Combination, at the earliest. The Company will generate non-operating income in the form of interest income from the proceeds derived from the Initial Public Offering.

The registration statement for the Company's Initial Public Offering was declared effective on September 1, 2020. On September 4, 2020 the Company consummated the Initial Public Offering of 44,275,000 units (the "Units" and, with respect to the Class A common stock included in the Units sold, the "Public Shares"), which includes the full exercise by the underwriter of its over-allotment option in the amount of 5,775,000 Units, at \$10.00 per Unit, generating gross proceeds of \$442,750,000 which is described in Note 4.

Simultaneously with the closing of the Initial Public Offering, the Company consummated the sale of 7,236,667 warrants (the "Private Placement Warrants") at a price of \$1.50 per Private Placement Warrant in a private placement to CMLS Holdings LLC (the "Sponsor") and certain of the Company's independent directors, generating gross proceeds of \$10,855,000, which is described in Note 5.

Transaction costs charged to equity amounted to \$24,895,463, consisting of \$8,855,000 in cash underwriting fees, \$15,496,250 of deferred underwriting fees and \$544,213 of other offering costs. Of the total transaction costs of the Initial Public Offering, \$1,204,771 is included in transactions costs in the statement of operations and \$23,690,693 is included in shareholders' equity. In addition, as of December 31, 2020, cash of \$1,094,681 was held outside of the Trust Account (as defined below) and is available for the payment of offering costs and for working capital purposes.

Following the closing of the Initial Public Offering on September 4, 2020, an amount of \$442,750,000 (\$10.00 per Unit) from the net proceeds of the sale of the Units in the Initial Public Offering and the sale of the Private Placement Warrants was placed in a trust account (the "Trust Account") located in the United States and will be invested only in U.S. government securities, within the meaning set forth in Section 2(a)(16) of the Investment Company Act of 1940, as amended (the "Investment Company Act"), with a maturity of 185 days or less or in any open-ended investment company that holds itself out as a money market fund selected by the Company meeting certain conditions of Rule 2a-7 of the Investment Company Act, as determined by the Company, until the earlier of: (i) the completion of a Business Combination and (ii) the distribution of the funds held in the Trust Account, as described below.

The Company's management has broad discretion with respect to the specific application of the net proceeds of the Initial Public Offering and the sale of Private Placement Warrants, although substantially all of the net proceeds are intended to be applied generally toward consummating a Business Combination. There is no assurance that the Company will be able to complete a Business Combination successfully. The Company must complete one or more initial Business Combinations with one or more operating businesses or assets with a fair market value equal to at least 80% of the net assets held in the Trust Account (excluding the deferred underwriting commissions and taxes payable on the interest earned on the Trust Account). The Company will only complete a Business Combination if the post-transaction company owns or acquires 50% or more of the outstanding voting securities of the target or otherwise acquires a controlling interest in the target business sufficient for it not to be required to register as an investment company under the Investment Company Act.

The Company will provide the holders of the outstanding Public Shares (the "Public Stockholders") with the opportunity to redeem all or a portion of their Public Shares upon the completion of a Business Combination either (i) in connection with a stockholder meeting called to approve the Business Combination or (ii) by means of a tender offer. The decision as to whether the Company will seek stockholder approval of a Business Combination or conduct a tender offer will be made by the Company. The Public Stockholders will be entitled to redeem their Public Shares for a pro rata portion of the amount then in the Trust Account (initially \$10.00 per Public Share, plus any pro rata interest then in the Trust Account, net of taxes payable). There will be no redemption rights upon the completion of a Business Combination with respect to the Company's warrants.

The Company will only proceed with a Business Combination if the Company has net tangible assets of at least \$5,000,001 following any related redemptions and, if the Company seeks stockholder approval, a majority of the shares voted are voted in favor of the Business Combination. If a stockholder vote is not required by applicable law or stock exchange listing requirements and the Company does not decide to hold a stockholder vote for business or other reasons, the Company will, pursuant to its Second Amended and Restated Certificate of Incorporation (the "Certificate of Incorporation"), conduct the redemptions pursuant to the tender offer rules of the U.S. Securities and Exchange Commission ("SEC") and file tender offer documents with the SEC prior to completing a Business Combination. If, however, stockholder approval of the transaction is required by applicable law or stock exchange listing requirements, or the Company decides to obtain stockholder approval for business or other reasons, the Company will offer to redeem shares in conjunction with a proxy solicitation pursuant to the proxy rules and not pursuant to the tender offer rules. If the Company seeks stockholder approval in connection with a Business Combination, the Company's Sponsor and any other holders of the Company's common stock prior to the Initial Public Offering (the "initial stockholders") have agreed to vote their Founder Shares (as defined in Note 6) and any Public Shares purchased during or after the Initial Public Offering in favor of approving a Business Combination. Additionally, each Public Stockholder may elect to redeem their Public Shares without voting, and if they do vote, irrespective of whether they vote for or against the proposed transaction.

Notwithstanding the foregoing, if the Company seeks stockholder approval of a Business Combination and it does not conduct redemptions pursuant to the tender offer rules, the Certificate of Incorporation provides that a Public Stockholder, together with any affiliate of such stockholder or any other person with whom such stockholder is acting in concert or as a "group" (as defined under Section 13 of the Securities Exchange Act of 1934, as amended (the "Exchange Act")), will be restricted from redeeming its shares with respect to more than an aggregate of 20% of the Public Shares, without the prior consent of the Company.

The Sponsor has agreed (a) to waive its redemption rights with respect to the Founder Shares and Public Shares held by it in connection with the completion of a Business Combination and (b) not to propose an amendment to the Certificate of Incorporation (i) to modify the substance or timing of the Company's obligation to redeem 100% of its Public Shares if the Company does not complete a Business Combination within the Combination Period (as defined below) or (ii) with respect to any other material provision relating to stockholders' rights or pre-business combination activity, unless the Company provides the Public Stockholders with the opportunity to redeem their Public Shares in conjunction with any such amendment.

If the Company has not completed a Business Combination by September 4, 2022 (the "Combination Period"), the Company will (i) cease all operations except for the purpose of winding up, (ii) as promptly as reasonably possible but not more than ten business days thereafter, redeem the Public Shares, at a per-share price, payable in cash, equal to the aggregate amount then on deposit in the Trust Account, including interest earned on the funds held in the Trust Account and not previously released to pay taxes (less up to \$100,000 of interest to pay dissolution expenses), divided by the number of then outstanding Public Shares, which redemption will completely extinguish Public Stockholders' rights as stockholders (including the right to receive further liquidating distributions, if any), and (iii) as promptly as reasonably possible following such redemption, subject to the approval of the Company's remaining stockholders and the Company's board of directors, dissolve and liquidate, subject in each case to the Company's obligations under Delaware law to provide for claims of creditors and the requirements of other applicable law. There will be no redemption rights or liquidating distributions with respect to the Company's warrants, which will expire worthless if the Company fails to complete a Business Combination within the Combination Period.

The Sponsor has agreed to waive its liquidation rights with respect to the Founder Shares if the Company fails to complete a Business Combination within the Combination Period. However, if the Sponsor acquires Public Shares in or after the Initial Public Offering, such Public Shares will be entitled to liquidating distributions from the Trust Account if the Company fails to complete a Business Combination within the Combination Period. The underwriter has agreed to waive its rights to its deferred underwriting commission (see Note 7) held in the Trust Account in the event the Company does not complete a Business Combination within the Combination Period and, in such event, such amounts will be included with the other funds held in the Trust Account that will be available to fund the redemption of the Public Shares. In the event of such distribution, it is possible that the per share value of the assets remaining available for distribution will be less than the Initial Public Offering price per Unit \$(10.00).

In order to protect the amounts held in the Trust Account, the Sponsor has agreed to be liable to the Company if and to the extent any claims by a third party for services rendered or products sold to the Company, or a prospective target business with which the Company has discussed entering into a transaction agreement, reduce the amount of funds in the Trust Account to below the lesser of (i) \$10.00 per Public Share and (ii) the actual amount per Public Share held in the Trust Account as of the date of the liquidation of the Trust Account, if less than \$10.00 per public Share due to reductions in the value of the trust assets, less taxes payable, provided that such liability will not apply to any claims by a third party or prospective target business who executed a waiver of any and all rights to monies held in the Trust Account nor will it apply to any claims under the Company's indemnity of the underwriter of the Initial Public Offering against certain liabilities, including liabilities under the Securities Act of 1933, as amended (the "Securities Act"). Moreover, in the event that an executed waiver is deemed to be unenforceable against a third party, the Sponsor will not be responsible to the extent of any liability for such third-party claims. The Company will seek to reduce the possibility that the Sponsor will have to indemnify the Trust Account due to claims of creditors by endeavoring to have all vendors, service providers (except for the Company's independent registered public accounting firm), prospective target businesses and other entities with which the Company does business, execute agreements with the Company waiving any right, title, interest or claim of any kind in or to monies held in the Trust Account.

NOTE 2. RESTATEMENT OF PREVIOUSLY ISSUED FINANCIAL STATEMENTS

The Company previously accounted for its outstanding Public Warrants (as defined in Note 4) and Private Placement Warrants issued in connection with its Initial Public Offering as components of equity instead of as derivative liabilities. The warrant agreement governing the warrants includes a provision that provides for potential changes to the settlement amounts dependent upon the characteristics of the holder of the warrant. In addition, the warrant agreement includes a provision that in the event of a tender or exchange offer made to and accepted by holders of more than 50% of the outstanding shares of a single class of common shares, all holders of the warrants would be entitled to receive cash for their warrants (the "tender offer provision").

In connection with the audit of the Company's financial statements for the period ended December 31, 2020, the Company's management further evaluated the warrants under Accounting Standards Codification ("ASC") Subtopic 815-40, Contracts in Entity's Own Equity. ASC Section 815-40-15 addresses equity versus liability treatment and classification of equity-linked financial instruments, including warrants, and states that a warrant may be classified as a component of equity only if, among other things, the warrant is indexed to the issuer's common stock. Under ASC Section 815-40-15, a warrant is not indexed to the issuer's common stock if the terms of the warrant require an adjustment to the exercise price upon a specified event and that event is not an input to the fair value of the warrant. Based on management's evaluation, the Company's audit committee, in consultation with management and after discussion with the Company's independent registered public accounting firm, concluded that the Company's Private Placement Warrants are not indexed to the Company's common shares in the manner contemplated by ASC Section 815-40-15 because the holder of the instrument is not an input into the pricing of a fixed-for-fixed option on equity shares. In addition, based on management's evaluation, the Company's audit committee, in consultation with management and after discussion with the Company's independent registered public accounting firm, concluded the tender offer provision included in the warrant agreement fails the "classified in shareholders' equity" criteria as contemplated by ASC Section 815-40-25.

As a result of the above, the Company should have classified the warrants as derivative liabilities in its previously issued financial statements. Under this accounting treatment, the Company is required to measure the fair

value of the warrants at the end of each reporting period and recognize changes in the fair value from the prior period in the Company's operating results for the current period. In addition, at the IPO, the Company re-allocated a portion of the IPO transaction costs related to the warrant liabilities, which resulted in additional operating costs that were expensed through the statement of operations.

The Company's accounting for the warrants as components of equity instead of as derivative liabilities did not have any effect on the Company's previously reported operating expenses, cash flows or cash.

	As Previously Reported	1	Adjustments	ì	As Restated
Balance sheet as of September 4, 2020 (audited)					
Warrant Liabilities	\$ _	\$	43,462,868	\$	43,462,86
Class A Common Stock Subject to Possible Redemption	423,731,850		(43,462,868)		380,268,98
Class A Common Stock	190		434		62
Additional Paid-in Capital	5,001,390		12,855,371		17,856,7
Accumulated Deficit	(2,681)		(12,855,805)		(12,858,48
Total Stockholders' Equity	5,000,006		_		5,000,0
Balance sheet as of September 30, 2020 (unaudited)					
Warrant Liabilities	\$ _	\$	48,148,484	\$	48,148.4
Class A Common Stock Subject to Possible Redemption	423,677,610		(48,148,484)		375,529,1
Class A Common Stock	191		481		6
Additional Paid-in Capital	5,055,629		17,540,941		22,596,5
Accumulated Deficit	(56,923)		(17,541,422)		(17,598,3
Total Stockholders' Equity	5,000,004		_		5,000,0
Balance sheet as of December 31, 2020 (audited)					
Warrant Liabilities	\$ _	\$	70,322,418	\$	70,322,4
Class A Common Stock Subject to Possible Redemption	423,542,290		(70,322,420)		353,219,8
Class A Common Stock	192		703		8
Additional Paid-in Capital	5,190,948		39,714,654		44,905,6
Accumulated Deficit	(192,244)		(39,715,355)		(39,907,5
Total Stockholders' Equity	5,000,003		2		5,000,0
Period from July 10, 2020 (inception) to September 30, 2020 (unaudited					
Change in value of warrant liability	\$ _	\$	16,336,651	\$	16,336,6
Transaction costs	_		1,204,771		1,204,7
Net loss	(56,923)		(17,541,422)		(17,598,3
Veighted average shares outstanding of Class A redeemable common stock	44,275,000		_		44,275,0
Basic and diluted earnings per share, Class A redeemable common stock	_		_		
Weighted average shares outstanding of Class B non-redeemable common stock	11,068,750		_		11,068,7
Basic and diluted net loss per share, Class B non-redeemable common stock	(0.01)		(1.58)		(1.5

Period from July 10, 2020 (inception) to September 30, 2020 (Unaudited)			
Change in value of warrant liability	\$ _	\$ 38,510,584	\$ 38,510,5
Transaction costs	_	1,204,771	1,204,7
Net loss	(192,244)	(39,715,354)	(39,907,59
Weighted average shares outstanding of Class A redeemable common stock	44,275,000	_	44,275,00
Basic and diluted earnings per share, Class A redeemable common stock	_	_	-
Weighted average shares outstanding of Class B non-redeemable common stock	10,633,062	_	10,633,06
Basic and diluted net loss per share, Class B non-redeemable common stock	(0.02)	(3.73)	(3.7
Cash Flow Statement for the Period from July 10, 2020 (inception) to September 30, 2020 (unaudited)			
Net loss	\$ (56,923)	\$ (17,541,422)	\$ (17,598,34
Allocation of initial public offering costs to warrant liability	_	1,204,771	1,204,77
Change in fair value of warrant liability	_	16,336,651	16,336,65
Initial classification of warrant liability	_	31,811,834	31,811,83
Initial classification of common stock subject to possible redemption	423,731,850	(43,462,868)	380,268,98
Change in value of common stock subject to possible redemption	(54,240)	(4,685,617)	(4,739,85
Cash Flow Statement for the Period from December 31, 2020 (inception) to December 31, 2020 (audited)			
Net loss	\$ (192,244)	\$ (39,715,355)	\$ (39,907,59
Change in fair value of warrant liability	_	38,510,584	38,510,58
Allocation of initial public offering costs to warrant liability	_	1,204,771	1,204,77
Initial classification of warrant liability	_	31,811,834	31,811,83
Initial classification of common stock subject to possible redemption	423,731,850	(43,462,868)	380,268,98
Change in value of common stock subject to possible redemption	(1,539,252)	(25,509,860)	(27,049,11

NOTE 3. SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES

Basis of Presentation

The accompanying financial statements have been prepared in accordance with accounting principles generally accepted in the United States of America ("U.S. GAAP") and pursuant to the rules and regulations of the SEC.

Emerging Growth Company

The Company is an "emerging growth company," as defined in Section 2(a) of the Securities Act, as modified by the Jumpstart Our Business Startups Act of 2012 (the "JOBS Act"), and it may take advantage of certain

exemptions from various reporting requirements that are applicable to other public companies that are not emerging growth companies including, but not limited to, not being required to comply with the independent registered public accounting firm attestation requirements of Section 404 of the Sarbanes-Oxley Act, of 2002, reduced disclosure obligations regarding executive compensation in its periodic reports and proxy statements, and exemptions from the requirements of holding a nonbinding advisory vote on executive compensation and stockholder approval of any golden parachute payments not previously approved.

Further, Section 102(b)(1) of the JOBS Act exempts emerging growth companies from being required to comply with new or revised financial accounting standards until private companies (that is, those that have not had a Securities Act registration statement declared effective or do not have a class of securities registered under the Exchange Act) are required to comply with the new or revised financial accounting standards. The JOBS Act provides that a company can elect to opt out of the extended transition period and comply with the requirements that apply to non-emerging growth companies but any such election to opt out is irrevocable. The Company has elected not to opt out of such extended transition period which means that when a standard is issued or revised and it has different application dates for public or private companies, the Company, as an emerging growth company, can adopt the new or revised standard at the time private companies adopt the new or revised standard. This may make comparison of the Company's financial statements with another public company which is neither an emerging growth company nor an emerging growth company which has opted out of using the extended transition period difficult or impossible because of the potential differences in accounting standards used.

Use of Estimates

The preparation of financial statements in conformity with GAAP requires management to make estimates and assumptions that affect the reported amounts of assets and liabilities and disclosure of contingent assets and liabilities at the date of the financial statements and the reported amounts of revenues and expenses during the reporting period.

Making estimates requires management to exercise significant judgment. It is at least reasonably possible that the estimate of the effect of a condition, situation or set of circumstances that existed at the date of the financial statements, which management considered in formulating its estimate, could change in the near term due to one or more future events. Accordingly, the actual results could differ significantly from those estimates.

Class A common stock subject to possible redemption

The Company accounts for its Class A common stock subject to possible redemption in accordance with the guidance in Accounting Standards Codification ("ASC") Topic 480 "Distinguishing Liabilities from Equity." Class A Common stock subject to mandatory redemption is classified as a liability instrument and is measured at fair value. Conditionally redeemable common stock (including common stock that features redemption rights that is either within the control of the holder or subject to redemption upon the occurrence of uncertain events not solely within the Company's control) is classified as temporary equity. At all other times, common stock is classified as stockholders' equity. The Company's common stock features certain redemption rights that are considered to be outside of the Company's control and subject to occurrence of uncertain future events. Accordingly, at December 31, 2020, Class A common stock subject to possible redemption is presented as temporary equity, outside of the stockholders' equity section of the Company's balance sheet.

Offering Costs

Offering costs consist of underwriting, legal, accounting and other expenses incurred through the Initial Public Offering that are directly related to the Initial Public Offering. Offering costs amounting to \$23,690,693 were charged to stockholders' equity upon the completion of the Initial Public Offering. At the IPO date, \$1,204,771 of offering costs were expensed through the statement of operations.

Warrant Liability

The Company accounts for warrants as either equity-classified or liability-classified instruments based on an assessment of the warrant's specific terms and applicable authoritative guidance in Financial Accounting Standards

Board ("FASB") Accounting Standards Codification ("ASC") 480, Distinguishing Liabilities from Equity ("ASC 480") and ASC 815, Derivatives and Hedging ("ASC 815"). The assessment considers whether the warrants are freestanding financial instruments pursuant to ASC 480, meet the definition of a liability pursuant to ASC 480, and whether the warrants meet all of the requirements for equity classification under ASC 815, including whether the warrants are indexed to the Company's own common shares and whether the warrant holders could potentially require "net cash settlement" in a circumstance outside of the Company's control, among other conditions for equity classification. This assessment, which requires the use of professional judgment, is conducted at the time of warrant issuance and as of each subsequent quarterly period end date while the warrants are outstanding.

For issued or modified warrants that meet all of the criteria for equity classification, the warrants are required to be recorded as a component of additional paid-in capital at the time of issuance. For issued or modified warrants that do not meet all the criteria for equity classification, the warrants are required to be recorded at their initial fair value on the date of issuance, and each balance sheet date thereafter. Changes in the estimated fair value of the warrants are recognized as a non-cash gain or loss on the statements of operations.

Income Taxes

The Company follows the asset and liability method of accounting for income taxes under ASC 740, "Income Taxes." Deferred tax assets and liabilities are recognized for the estimated future tax consequences attributable to differences between the financial statement carrying amounts of existing assets and liabilities and their respective tax bases. Deferred tax assets and liabilities are measured using enacted tax rates expected to apply to taxable income in the years in which those temporary differences are expected to be recovered or settled. The effect on deferred tax assets and liabilities of a change in tax rates is recognized in income in the period that included the enactment date. Valuation allowances are established, when necessary, to reduce deferred tax assets to the amount expected to be realized.

ASC 740 prescribes a recognition threshold and a measurement attribute for the financial statement recognition and measurement of tax positions taken or expected to be taken in a tax return. For those benefits to be recognized, a tax position must be more likely than not to be sustained upon examination by taxing authorities. The Company recognizes accrued interest and penalties related to unrecognized tax benefits as income tax expense. There were no unrecognized tax benefits and no amounts accrued for interest and penalties as of December 31, 2020. The Company is currently not aware of any issues under review that could result in significant payments, accruals or material deviation from its position. The Company is subject to income tax examinations by major taxing authorities since inception.

Net Income (Loss) per Common Share

Net income (loss) per common share is computed by dividing net income by the weighted average number of common shares outstanding for the period. The Company has not considered the effect of warrants sold in the Initial Public Offering and private placement to purchase 21,995,000 shares of Class A common stock in the calculation of diluted income per share, since the exercise of the warrants are contingent upon the occurrence of future events and the inclusion of such warrants would be anti-dilutive.

The Company's statement of operations includes a presentation of income (loss) per share for common shares subject to possible redemption in a manner similar to the two-class method of income (loss) per share. Net income per common share, basic and diluted, for Class A redeemable common stock is calculated by dividing the interest income earned on the Trust Account less income and franchise taxes, by the weighted average number of Class A redeemable common stock outstanding since original issuance. Net loss per share, basic and diluted, for Class B non-redeemable common stock is calculated by dividing the net loss, adjusted for income attributable to Class A redeemable common stock, net of applicable franchise and income taxes, by the weighted average number of Class B non-redeemable common stock outstanding for the period. Class B non-redeemable common stock includes the Founder Shares as these shares do not have any redemption features and do not participate in the income earned on the Trust Account.

The following table reflects the calculation of basic and diluted net income (loss) per common share (in dollars, except per share amounts):

	For the Period From July 10, 2020 (inception) Through December 31, 2020
Redeemable Class A Common Stock	
Numerator: Earnings allocable to Redeemable Class A Common Stock	
Interest Income	\$ 13,951
Income and Franchise Tax	(13,951)
Net Earnings	_
Denominator: Weighted Average Redeemable Class A Common Stock	
Redeemable Class A Common Stock, Basic and Diluted	44,275,000
Earnings/Basic and Diluted Redeemable Class A Common Stock	\$ 0.00
Non-Redeemable Class A and B Common Stock	
Numerator: Net Income (Loss) minus Redeemable Net Earnings	
Net Income (Loss)	\$ (39,907,599)
Redeemable Net Earnings	_
Non-Redeemable Net Loss	\$ (39,907,599)
Denominator: Weighted Average Non-Redeemable Class A and B Common Stock	
Non-Redeemable Class A and B Common Stock, Basic and Diluted	10,633,062
Loss/Basic and Diluted Non-Redeemable Class A and B Common Stock	\$ (3.75)

Note: As of December 31, 2020, basic and diluted shares are the same as there are no non-redeemable securities that are dilutive to the Company's stockholders.

Concentration of Credit Risk

Financial instruments that potentially subject the Company to concentrations of credit risk consist of a cash account in a financial institution, which, at times, may exceed the Federal Depository Insurance Coverage of \$250,000. The Company has not experienced losses on this account and management believes the Company is not exposed to significant risks on such account.

Fair Value of Financial Instruments

The fair value of the Company's assets and liabilities, which qualify as financial instruments under ASC Topic 820, "Fair Value Measurement," approximates the carrying amounts represented in the accompanying balance sheet, primarily due to their short-term nature.

Fair Value Measurements

Fair value is defined as the price that would be received for sale of an asset or paid for transfer of a liability, in an orderly transaction between market participants at the measurement date. GAAP establishes a three-tier fair value hierarchy, which prioritizes the inputs used in measuring fair value. The hierarchy gives the highest priority to

unadjusted quoted prices in active markets for identical assets or liabilities (Level 1 measurements) and the lowest priority to unobservable inputs (Level 3 measurements). These tiers include:

- Level 1, defined as observable inputs such as quoted prices (unadjusted) for identical instruments in active markets;
- Level 2, defined as inputs other than quoted prices in active markets that are either directly or indirectly observable such as quoted prices for similar instruments in active markets or quoted prices for identical or similar instruments in markets that are not active; and
- Level 3, defined as unobservable inputs in which little or no market data exists, therefore requiring an entity to develop its own assumptions, such as valuations derived from valuation techniques in which one or more significant inputs or significant value drivers are unobservable.

In some circumstances, the inputs used to measure fair value might be categorized within different levels of the fair value hierarchy. In those instances, the fair value measurement is categorized in its entirety in the fair value hierarchy based on the lowest level input that is significant to the fair value measurement.

Derivative Financial Instruments

The Company evaluates its financial instruments to determine if such instruments are derivatives or contain features that qualify as embedded derivatives in accordance with ASC Topic 815, "Derivatives and Hedging". For derivative financial instruments that are accounted for as liabilities, the derivative instrument is initially recorded at its fair value on the grant date and is then re-valued at each reporting date, with changes in the fair value reported in the statements of operations. The classification of derivative instruments, including whether such instruments should be recorded as liabilities or as equity, is evaluated at the end of each reporting period. Derivative liabilities are classified in the balance sheet as current or non-current based on whether or not net-cash settlement or conversion of the instrument could be required within 12 months of the balance sheet date.

Recently Issued Accounting Standards

Management does not believe that any recently issued, but not yet effective, accounting standards, if currently adopted, would have a material effect on the Company's financial statements.

NOTE 4. INITIAL PUBLIC OFFERING

Pursuant to the Initial Public Offering, the Company sold 44,275,000 Units, which includes the full exercise by the underwriter of its over-allotment option in the amount of 5,775,000 Units, at a purchase price of \$10.00 per Unit. Each Unit consists of one share of Class A common stock and one-third of one redeemable warrant ("Public Warrant"). Each whole Public Warrant entitles the holder to purchase one share of Class A common stock at a price of \$11.50 per share, subject to adjustment (see Note 8).

NOTE 5. PRIVATE PLACEMENT

Simultaneously with the closing of the Initial Public Offering, the Sponsor and certain of the Company's independent directors purchased an aggregate of 7,236,667 Private Placement Warrants, at a price of \$1.50 per Private Placement Warrant, for an aggregate purchase price of \$10,855,000. The Sponsor purchased 6,903,335 Private Placement Warrants, and each of Mr. Islam and Dr. Leproust (and/or one or more entities controlled by them) purchased 166,666 Private Placement Warrants. Each Private Placement Warrant is exercisable to purchase one share of Class A common stock at a price of \$11.50 per share, subject to adjustment (see Note 8). Proceeds from the sale of the Private Placement Warrants were added to the net proceeds from the Initial Public Offering held in the Trust Account. If the Company does not complete a Business Combination within the Combination Period, the proceeds from the sale of the Private Placement Warrants held in the Trust Account will be used to fund the redemption of the Public Shares (subject to the requirements of applicable law) and the Private Placement Warrants will expire worthless.

NOTE 6. RELATED PARTY TRANSACTIONS

Founder Shares

In July 2020, the Sponsor paid 25,000 to cover certain offering costs of the Company in consideration for 10,062,500 shares of the Company's Class B common stock (the "Founder Shares"). In August 2020, the Sponsor transferred 25,000 Founder Shares to each of Munib Islam, Emily Leproust and Nat Turner, certain of the Company's independent directors, at their original per-share purchase price, for an aggregate of 75,000 Founder Shares transferred. On September 1, 2020, the Company effected a 1:1.1 stock split of its Class B common stock, resulting in the Sponsor holding an aggregate of 10,993,750 Founder Shares and there being an aggregate of 11,068,750 Founder Shares outstanding. All share and per-share amounts have been retroactively restated to reflect the stock split, The Founder Shares included an aggregate of up to 1,443,750 shares subject to forfeiture by the Sponsor to the extent that the underwriter's over-allotment was not exercised in full or in part, so that the number of Founder Shares would equal, on an as-converted basis, approximately 20% of the Company's issued and outstanding shares of common stock after the Initial Public Offering. As a result of the underwriter's election to fully exercise its over-allotment option, 1,443,750 Founder Shares are no longer subject to forfeiture.

The Sponsor has agreed, subject to limited exceptions, not to transfer, assign or sell any of the Founder Shares until the earlier to occur of: (A) one year after the completion of a Business Combination and (B) subsequent to a Business Combination, (x) if the last reported sale price of the Class A common stock equals or exceeds \$12.00 per share (as adjusted for stock splits, stock capitalizations, reorganizations, recapitalizations and the like) for any 20 trading days within any 30-trading day period commencing at least 150 days after a Business Combination, or (y) the date on which the Company completes a liquidation, merger, capital stock exchange or other similar transaction that results in all of the Public Stockholders having the right to exchange their shares of common stock for cash, securities or other property.

Promissory Note - Related Party

On July 16, 2020, the Sponsor issued an unsecured promissory note to the Company (the "Promissory Note"), pursuant to which the Company could borrow up to an aggregate principal amount of \$300,000. The Promissory Note was non-interest bearing and payable on the earlier of (i) December 31, 2020 or (ii) the consummation of the Initial Public Offering. The outstanding balance under the Promissory Note of \$165,081 was repaid at the closing of the Initial Public Offering on September 4, 2020.

Related Party Loans

In order to finance transaction costs in connection with a Business Combination, the Sponsor or an affiliate of the Sponsor, or certain of the Company's officers and directors may, but are not obligated to, loan the Company funds as may be required ("Working Capital Loans"). Such Working Capital Loans would be evidenced by promissory notes. The notes may be repaid upon completion of a Business Combination, without interest, or, at the lender's discretion, up to \$1,500,000 of the notes may be converted upon completion of a Business Combination into warrants at a price of \$1.50 per warrant. Such warrants would be identical to the Private Placement Warrants. In the event that a Business Combination does not close, the Company may use a portion of proceeds held outside the Trust Account to repay the Working Capital Loans but no proceeds held in the Trust Account would be used to repay the Working Capital Loans. As of December 31, 2020, there were no amounts outstanding under the Working Capital Loans.

NOTE 7. COMMITMENTS AND CONTINGENCIES

Risks and Uncertainties

Management continues to evaluate the impact of the COVID-19 pandemic on the industry and has concluded that while it is reasonably possible that the virus could have a negative effect on the Company's financial position, results of its operations and/or search for a target company, the specific impact is not readily determinable as of the date of these financial statements. The financial statements do not include any adjustments that might result from the outcome of this uncertainty.

Registration Rights

Pursuant to a registration rights agreement entered into on September 1, 2020, the holders of the Founder Shares, Private Placement Warrants and securities that may be issued upon conversion of Working Capital Loans and forward purchase shares are entitled to registration rights. The holders of these securities will be entitled to make up to three demands, excluding short form demands, that the Company register such securities. In addition, the holders have certain "piggy-back" registration rights with respect to registration statements filed subsequent to the completion of a Business Combination. The Company will bear the expenses incurred in connection with the filing of any such registration statements.

Underwriting Agreement

The underwriter is entitled to a deferred fee of \$0.35 per Unit, or 15,496,250 in the aggregate. The deferred fee will become payable to the underwriter from the amounts held in the Trust Account solely in the event that the Company completes a Business Combination, subject to the terms of the underwriting agreement.

Forward Purchase Agreement

The Company entered into separate forward purchase agreements with affiliates of the Sponsor, Casdin Capital, LLC ("Casdin") and Corvex Management LP ("Corvex"), in their capacities as investment advisors on behalf of one or more investment funds, clients or accounts managed by each of Casdin and Corvex, respectively (collectively, their "Clients"), pursuant to which, subject to the conditions described below, they will cause the Clients to purchase from the Company up to an aggregate amount of 15,000,000 shares of Class A common stock, or the forward purchase shares, for \$10.00 per forward purchase share, or an aggregate amount of up to \$150,000,000, in a private placement that will close concurrently with the closing of a Business Combination. The amount of forward purchase shares sold pursuant to the forward purchase agreements will be determined in the Company's discretion based on the Company's need for additional capital to consummate a Business Combination. Under each forward purchase agreement, the Company is required to approach Casdin and Corvex if it proposes to raise additional capital by issuing any equity, or securities convertible into, exchangeable or exercisable for equity securities in connection with a Business Combination. The respective obligations of Casdin and Corvex to purchase forward purchase shares will, among other things, be conditioned on the Company completing a Business Combination with a company engaged in a business that is within the investment objectives of the Clients purchasing forward purchase shares and on the Business Combination (including the target assets or business, and the terms of the Business Combination) being reasonably acceptable to such Clients as determined by Casdin or Corvex, as relevant, as investment advisors on behalf of such Clients. Each of Casdin and Corvex will have the right to transfer a portion of its purchase obligation under the forward purchase agreement to third parties, subject to compliance with applicable securities laws. To the extent tha

NOTE 8. STOCKHOLDERS' EQUITY

Preferred Stock — The Company is authorized to issue 1,000,000 shares of preferred stock with a par value of \$0.0001 per share with such designations, voting and other rights and preferences as may be determined from time to time by the Company's board of directors. At December 31, 2020, there were no shares of preferred stock issued or outstanding.

Class A Common Stock — The Company is authorized to issue 380,000,000 shares of Class A common stock with a par value of \$0.0001 per share. Holders of Class A common stock are entitled to one vote for each share. At December 31, 2020, there were 8,953,013 shares of Class A common stock issued and outstanding, excluding \$35,321,987 shares of Class A common stock subject to possible redemption.

Class B Common Stock — The Company is authorized to issue 20,000,000 shares of Class B common stock with a par value of 0.0001 per share. Holders of Class B common stock are entitled to one vote for each share. At December 31, 2020, there were 11,068,750 shares of Class B common stock issued and outstanding.

The shares of Class B common stock will automatically convert into Class A common stock concurrently with or immediately following the consummation of the Business Combination, on a one-for-one basis, subject to adjustment. In the case that additional shares of Class A common stock, or equity-linked securities, are issued or deemed issued in connection with a Business Combination, the number of shares of Class A common stock issuable upon conversion of all Founder Shares will equal, in the aggregate, on an as-converted basis, 20% of the total number of shares of Class A common stock outstanding after such conversion (after giving effect to any redemptions of shares of Class A common stock by public stockholders), including the total number of shares of Class A common stock issued, or deemed issued or issuable upon conversion or exercise of any equity-linked securities or rights issued or deemed issued, by the Company in connection with or in relation to the consummation of a Business Combination (including the forward purchase shares), excluding any shares of Class A common stock or equity-linked securities or rights exercisable for or convertible into shares of Class A common stock issued, or to be issued, to any seller in a Business Combination and any Private Placement Warrants issued to the Sponsor, officers or directors upon conversion of Working Capital Loans, provided that such conversion of Founder Shares will never occur on a less than one-for-one basis.

NOTE 9. WARRANT LIABILITY

Warrants — Public Warrants may only be exercised for a whole number of shares. No fractional warrants will be issued upon separation of the Units and only whole warrants will trade. The Public Warrants will become exercisable on the later of (a) 30 days after the completion of a Business Combination and (b) 12 months from the closing of the Initial Public Offering. The Public Warrants will expire five years after the completion of a Business Combination or earlier upon redemption or liquidation.

The Company will not be obligated to deliver any shares of Class A common stock pursuant to the exercise of a warrant and will have no obligation to settle such warrant exercise unless a registration statement under the Securities Act with respect to the Class A common stock underlying the warrants is then effective and a prospectus relating thereto is current, subject to the Company satisfying its obligations with respect to registration. No warrant will be exercisable and the Company will not be obligated to issue shares of Class A common stock upon exercise of a warrant unless the share of Class A common stock issuable upon such warrant exercise has been registered, qualified or deemed to be exempt under the securities laws of the state of residence of the registered holder of the warrants.

The Company has agreed that as soon as practicable, but in no event later than 15 business days, after the closing of a Business Combination, it will use its best efforts to file with the SEC a registration statement for the registration, under the Securities Act, of the Class A common stock issuable upon exercise of the Public Warrants. The Company will use its best efforts to cause the same to become effective and to maintain the effectiveness of such registration statement, and a current prospectus relating thereto, until the expiration of the Public Warrants in accordance with the provisions of the warrant agreement. If a registration statement covering the shares of Class A common stock issuable upon exercise of the warrants is not effective by the sixtieth (60th) business day after the closing of a Business Combination, warrant holders may, until such time as there is an effective registration statement and during any period when the Company will have failed to maintain an effective registration statement, exercise warrants on a "cashless basis" in accordance with Section 3(a)(9) of the Securities Act or another exemption. Notwithstanding the above, if the Class A common stock are, at the time of any exercise of a Public Warrant, not listed on a national securities exchange such that they satisfy the definition of a "covered security" under Section 18(b)(1) of the Securities Act, the Company may, at its option, require holders of Public Warrants who exercise their Public Warrants to do so on a "cashless basis" in accordance with Section 3(a)(9) of the Securities Act and, in the event the Company so elects, the Company will not be required to file or maintain in effect a registration statement, and in the event the Company does not so elect, it will use its best efforts to register or qualify the shares under applicable blue sky laws to the extent an exemption is not available.

Redemption of Warrants When the Price per Share of Class A Common Stock Equals or Exceeds \$18.00 — Once the warrants become exercisable, the Company may redeem the outstanding Public Warrants:

• in whole and not in part;

- at a price of \$0.01 per warrant;
- upon not less than 30 days' prior written notice of redemption, or the 30-day redemption period, to each warrant holder; and
- if, and only if, the reported last sale price of the Company's Class A common stock equals or exceeds \$18.00 per share (as adjusted for stock splits, stock dividends, reorganizations, recapitalizations and the like) for any 20 trading days within a 30-trading day period ending on the third trading day prior to the date on which the Company sends the notice of redemption to the warrant holders.

If and when the warrants become redeemable by the Company, the Company may exercise its redemption right even if it is unable to register or qualify the underlying securities for sale under all applicable state securities laws. Redemption of Warrants When the Price per Share of Class A Common Stock Equals or Exceeds \$10.00 — Once the warrants become exercisable, the Company may redeem the outstanding warrants:

- in whole and not in part;
- at a price of \$0.10 per warrant provided that holders will be able to exercise their warrants prior to redemption and receive that number of shares of Class A common stock determined based on the redemption date and the "fair market value" of the Company's Class A common stock;
- upon a minimum of 30 days' prior written notice of redemption;
- if, and only if, the last reported sale price of the Company's Class A common stock equals or exceeds \$10.00 per share (as adjusted for stock splits, stock dividends, reorganizations, recapitalizations and the like) on the trading day prior to the date on which the Company sends the notice of redemption to the warrant holders:
- if, and only if, there is an effective registration statement covering the issuance of the shares of Class A common stock issuable upon exercise of the warrants and a current prospectus relating thereto is available throughout the 30-day period after the written notice of redemption is given.

In addition, if (x) the Company issues additional shares of Class A common stock or equity-linked securities for capital raising purposes in connection with the closing of a Business Combination at an issue price or effective issue price of less than \$9.20 per share of Class A common stock (with such issue price or effective issue price to be determined in good faith by the Company's board of directors, and, in the case of any such issuance to the Sponsor or its affiliates, without taking into account any Founder Shares held by the Sponsor or its affiliates, as applicable, prior to such issuance) (the "Newly Issued Price"), (y) the aggregate gross proceeds from such issuances represent more than 60% of the total equity proceeds, and interest thereon, available for the funding of a Business Combination on the date of the completion of a Business Combination (net of redemptions), and (z) the volume weighted average trading price of the Company's Class A common stock during the 20 trading day period starting on the trading day after the day on which the Company completes a Business Combination (such price, the "Market Value") is below \$9.20 per share, the exercise price of the warrants will be adjusted (to the nearest cent) to be equal to 115% of the higher of the Market Value and the Newly Issued Price, and the \$10.00 per share redemption trigger price will be adjusted (to the nearest cent) to be equal to the higher of the Market Value and the Newly Issued Price, and the \$10.00 per share redemption trigger price will be adjusted (to the nearest cent) to be equal to the higher of the Market Value and the Newly Issued Price.

The Private Placement Warrants are identical to the Public Warrants underlying the Units sold in the Initial Public Offering, except that (1) the Private Placement Warrants and the Class A common stock issuable upon the exercise of the Private Placement Warrants will not be transferable, assignable or saleable until 30 days after the completion of a Business Combination, subject to certain limited exceptions, (2) the Private Placement Warrants will be exercisable on a cashless basis, (3) the Private Placement Warrants will be non-redeemable (except as described above in "Redemption of Warrants When the Price per Share of Class A Common Stock Equals or Exceeds \$10.00") so long as they are held by the initial purchasers or their permitted transferees, and (4) the holders

of the Private Placement Warrants and the Class A common stock issuable upon the exercise of the Private Placement Warrants will have certain registration rights.

NOTE 10. INCOME TAX

The Company's net deferred tax assets are as follows:

	December 31, 2020
Deferred tax asset	
Net operating loss carryforward	\$ 16,902
Organizational costs/Startup expenses	23,469
Total deferred tax asset	 40,371
Valuation allowance	(40,371)
Deferred tax asset, net of allowance	\$ _

The income tax provision consists of the following:

	December 31, 2020
Federal	
Current	\$ _
Deferred	(40,371)
State	
Current	\$ _
Deferred	_
Change in valuation allowance	40,371
Income tax provision	\$ _

As of December 31, 2020, the Company had a U.S. federal net operating loss carryover of approximately \$80,000 available to offset future taxable income.

In assessing the realization of the deferred tax assets, management considers whether it is more likely than not that some portion of all of the deferred tax assets will not be realized. The ultimate realization of deferred tax assets is dependent upon the generation of future taxable income during the periods in which temporary differences representing net future deductible amounts become deductible. Management considers the scheduled reversal of deferred tax liabilities, projected future taxable income and tax planning strategies in making this assessment. After consideration of all of the information available, management believes that significant uncertainty exists with respect to future realization of the deferred tax assets and has therefore established a full valuation allowance. For the period from July 10, 2020 (inception) through December 31, 2020, the change in the valuation allowance was \$40,371.

A reconciliation of the federal income tax rate to the Company's effective tax rate at December 31, 2020 is as follows:

	December 31, 2020
Statutory federal income tax rate	21.0 %
State taxes, net of federal tax benefit	0.0 %
Change in fair value of warrant liability	(20.0)%
Transaction costs	(1.0)%
Change in valuation allowance	0.0 %
Income tax provision	0.0 %

The Company files income tax returns in the U.S. federal jurisdiction in various state and local jurisdictions and is subject to examination by the various taxing authorities.

NOTE 11.FAIR VALUE MEASUREMENTS

The fair value of the Company's financial assets and liabilities reflects management's estimate of amounts that the Company would have received in connection with the sale of the assets or paid in connection with the transfer of the liabilities in an orderly transaction between market participants at the measurement date. In connection with measuring the fair value of its assets and liabilities, the Company seeks to maximize the use of observable inputs (market data obtained from independent sources) and to minimize the use of unobservable inputs (internal assumptions about how market participants would price assets and liabilities). The following fair value hierarchy is used to classify assets and liabilities based on the observable inputs and unobservable inputs used in order to value the assets and liabilities:

- Level 1: Quoted prices in active markets for identical assets or liabilities. An active market for an asset or liability is a market in which transactions for the asset or liability occur with sufficient frequency and volume to provide pricing information on an ongoing basis.
- Level 2: Observable inputs other than Level 1 inputs. Examples of Level 2 inputs include quoted prices in active markets for similar assets or liabilities and quoted prices for identical assets or liabilities in markets that are not active.
 - Level 3: Unobservable inputs based on our assessment of the assumptions that market participants would use in pricing the asset or liability.

At December 31, 2020, assets held in the Trust Account were comprised of \$442,763,951 in money market funds which are invested primarily in U.S. Treasury Securities. During the year ended December 31, 2020, the Company did not withdraw any interest income from the Trust Account.

The following table presents information about the Company's assets and liabilities that are measured at fair value on a recurring basis at December 31, 2020 and indicates the fair value hierarchy of the valuation inputs the Company utilized to determine such fair value:

Description	Level	December 31, 2020
Assets:		
Investments held in Trust Account – U.S. Treasury Securities Money Market Fund	1	\$ 442,763,951
Liabilities:		
Warrant Liability – Public Warrants	1	\$ 40,290,250
Warrant Liability – Private Placement Warrants	3	\$ 30,032,168

The Warrants were accounted for as liabilities in accordance with ASC 815-40 and are presented within warrant liabilities on our balance sheet. The warrant liabilities are measured at fair value at inception and on a recurring basis, with changes in fair value presented within change in fair value of warrant liabilities in the statement of operations.

The Private Warrants were initially valued using a Modified Black Scholes Option Pricing Model, which is considered to be a Level 3 fair value measurement. The Modified Black Scholes model's primary unobservable input utilized in determining the fair value of the Private Warrants is the expected volatility of the common stock. The expected volatility as of the IPO date was derived from observable public warrant pricing on comparable 'blank-check' companies without an identified target. The expected volatility as of subsequent valuation dates will be implied from the Company's own public warrant pricing. A Monte Carlo simulation methodology was used in estimating the fair value of the public warrants for periods where no observable traded price was available, using the same expected volatility as was used in measuring the fair value of the Private Warrants. For periods subsequent to the detachment of the warrants from the Units, the close price of the public warrant price will be used as the fair value as of each relevant date.

The following table presents the changes in the fair value of warrant liabilities:

	I	Private Placement	Public	Total	l Warrant Liabilities
Fair value as of July 10, 2020 (inception)	\$	_	\$ _	\$	_
Initial measurement on September 4, 2020		10,855,001	20,956,833		31,811,834
Change in valuation inputs or other assumptions		19,177,167	19,333,417		38,510,584
Fair value as of December 31, 2020	\$	30,032,168	\$ 40,290,250	\$	70,322,418

There were no transfers in or out of Level 3 from other levels in the fair value hierarchy.

NOTE 12.SUBSEQUENT EVENTS

The Company evaluated subsequent events and transactions that occurred after the balance sheet date up to the date that the financial statements were issued. Based upon this review, other than as described below and in Note 2, the Company did not identify any subsequent events that would have required adjustment or disclosure in the financial statements

On February 10, 2021, the Company announced that it executed an Agreement and Plan of Merger (the "Merger Agreement") with Mount Sinai Genomics, Inc., a Delaware corporation, d/b/a Sema4 ("Sema4") and the other parties thereto (the transactions contemplated by the Merger Agreement, including the Merger (as defined below), the "Business Combination"). Specifically, the Company entered into the Merger Agreement with Sema4 and S-IV Sub, Inc., a Delaware corporation incorporated on February 1, 2021 and a direct, wholly-owned subsidiary of the Company ("Merger Sub"). Pursuant to the terms of the Merger Agreement, the Company will acquire Sema4

through the merger of Merger Sub with and into Sema4, with Sema4 surviving as a wholly-owned subsidiary of the Company (the "Merger")

The Business Combination is expected to close in the second quarter of 2021, following the receipt of the required approval by the Company's stockholders and the satisfaction of certain other customary closing conditions.

At the effective time of the Merger (the "Effective Time"), each share of Sema4 class B common stock, par value \$0.00001 per share ("Sema4 Class B Common Stock") issued and outstanding as of immediately prior to the Effective Time will be converted into 1/100th of a share of Sema4 class A common stock, par value \$0.00001 per share ("Sema4 Class A Common Stock", together with Sema4 Class B Common Stock, "Sema4 Common Stock") in accordance with Sema4's organizational documents.

Immediately thereafter, each share of Sema4 Common Stock and Sema4's series A-1 preferred stock, series A-2 preferred stock, series B preferred stock and series C preferred stock (collectively, "Sema4 Capital Stock") issued and outstanding immediately prior to the Effective Time (other than Excluded Shares and Dissenting Shares (each as defined in the Merger Agreement)) will be converted into the right to receive a portion of the total closing merger consideration, with each Sema4 stockholder being entitled to receive the following:

- (c) if such stockholder has made a cash election as set forth and in accordance with the terms of the Merger Agreement, a portion of the specified aggregate amount of cash consideration payable under the terms of the Merger Agreement (such aggregate amount not to exceed \$343,000,000) and pursuant to the terms of such stockholder's cash election; and
- (d) a number of shares of common stock, par value \$0.0001 per share, of the Company (the "Common Stock") equal to the quotient of: (i) (A) the product of (x) such stockholder's total shares of Sema4 Capital Stock multiplied by (y) the per share amount calculated in accordance with the Merger Agreement *minus* (B) the amount of cash payable to such stockholder pursuant to its cash election, if any, divided by (ii) \$10.

In addition, at the Effective Time, each outstanding option to purchase Sema4 Capital Stock, each outstanding and unsettled restricted stock unit in respect of shares of Sema4 Capital Stock and each outstanding stock appreciation right will be rolled over into options to purchase Common Stock, restricted stock units in respect of Common Stock and stock appreciation rights in respect of Common Stock, all as further set forth in and in accordance with the terms of the Merger Agreement.

In addition to the payment of cash, issuance of Common Stock and rollover of other Sema4 equity awards described above as of the Effective Time, in the event that the closing sale price of Common Stock exceeds certain price thresholds for 20 out of any 30 consecutive trading days during the period of time commencing upon the expiration of the lock-up period applicable to the Sponsor under the Letter Agreement, dated as of August 27, 2021, by and among the Company, Sponsor and each of the executive officers and directors of the Company and ending on the second anniversary of the closing of the Merger, an additional number of shares equal to an amount up to an aggregate of 11% of the shares of Common Stock that would have been issuable upon closing of the Merger to the stockholders of the Company if no cash elections were made and the closing cash payment amount under the Merger Agreement was \$0.00 (the "Earn-Out Shares") shall become issuable, in accordance with the terms of the Merger Agreement following the achievement of those certain price thresholds, to the stockholders of Sema4 as of immediately prior to the closing of the Merger; provided that the board of directors of Sema4 (or a duly authorized committee thereof) may, prior to the closing of the Merger, allocate a portion of such Earn-Out Shares to be issued to service providers of Sema4 in the form of restricted stock units of the Company.

On February 10, 2021, the Company entered into a Sponsor Support Agreement with the Sponsor and Sema4, whereby Sponsor has agreed to, among other things, (a) vote at any meeting of the stockholders of the Company all of their shares of capital stock of the Company held of record or thereafter acquired in favor of the Stockholder Approvals (as defined in the Merger Agreement), (b) be bound by certain other covenants and agreements related to the Business Combination and (c) be bound by certain transfer restrictions with respect to such securities, prior to the closing of the Business Combination, in each case, on the terms and subject to the conditions set forth in the Sponsor Support Agreement. On February 10, 2021, concurrently with the execution of the Merger Agreement, the Company entered into subscription agreements (collectively, the "Subscription Agreements") with certain investors

(collectively, the "PIPE Investors" which include certain existing equityholders of Sema4), pursuant to, and on the terms and subject to the conditions of which, the PIPE Investors have collectively subscribed for 35,000,000 shares of our common stock for an aggregate purchase price equal to \$350,000,000 (the "PIPE Investment"). The PIPE Investment will be consummated immediately prior to the closing of the Sema4Business Combination. The Subscription Agreements provide for certain customary registration rights for the PIPE Investors. The Subscription Agreements will terminate with no further force and effect upon the earliest to occur of: (a) such date and time as the Merger Agreement is terminated in accordance with its terms; (b) the mutual written agreement of the parties to such Subscription Agreement; and (c) November 9, 2021.

Part II

INFORMATION NOT REQUIRED IN PROSPECTUS

Item 13. Other Expenses of Issuance and Distribution.

The following is an estimate of the expenses that Sema4 Holdings Corp. (the "Registrant") may incur in connection with the securities being registered hereby (all of which are to be paid by the Registrant).

SEC registration fee	\$ 299,749
Legal fees and expenses	*
Accounting fees and expenses	*
Financial printing and miscellaneous expenses	*
Total	*

^{*} Except for the SEC registration fee, estimated expenses are not presently known. The foregoing sets forth the general categories of expenses (other than underwriting discounts and commissions) that we anticipate we will incur in connection with the offering of securities under this Registration Statement on Form S-1. To the extent required, any applicable prospectus supplement will set forth the estimated aggregate amount of expenses payable in respect of any offering of securities under the registration statement.

Item 14. Indemnification of Directors and Officers.

Section 145 of the Delaware General Corporation Law authorizes a court to award, or a corporation's board of directors to grant, indemnity to directors and officers under certain circumstances and subject to certain limitations. The terms of Section 145 of the Delaware General Corporation Law are sufficiently broad to permit indemnification under certain circumstances for liabilities, including reimbursement of expenses incurred, arising under the Securities Act of 1933, as amended (the "Securities Act").

As permitted by the Delaware General Corporation Law, the Registrant's certificate of incorporation, as amended (the "Certificate of Incorporation") contains provisions that eliminate the personal liability of its directors for monetary damages for any breach of fiduciary duties as a director, except liability for the following:

- any breach of the director's duty of loyalty to the Registrant or its stockholders;
- · acts or omissions not in good faith or that involve intentional misconduct or a knowing violation of law;
- · under Section 174 of the Delaware General Corporation Law (regarding unlawful dividends and stock purchases); or
- any transaction from which the director derived an improper personal benefit.

As permitted by the Delaware General Corporation Law, the Registrant's restated bylaws (the "Bylaws") provide that:

- the Registrant is required to indemnify its directors and officers to the fullest extent permitted by the Delaware General Corporation Law, subject to very limited exceptions;
- the Registrant is required to advance expenses, as incurred, to its directors and officers in connection with a legal proceeding to the fullest extent permitted by the Delaware General Corporation Law, subject to limited exceptions; and
- the rights conferred in the bylaws are not exclusive.

The Registrant has entered into indemnification agreements with its directors and executive officers, which provide for indemnification and advancements by the Registrant of certain expenses and costs under certain circumstances. At present, there is no pending litigation or proceeding involving a director or executive officer of the Registrant for which indemnification is sought. The indemnification provisions in the Registrant's Certificate of

Incorporation, Bylaws and the indemnification agreements entered into between the Registrant and each of its directors and executive officers may be sufficiently broad to permit indemnification of the Registrant's directors and executive officers for liabilities arising under the Securities Act.

The Registrant has directors' and officers' liability insurance for securities matters.

Item 15. Recent Sales of Unregistered Securities.

Since January 1, 2020, the Registrant has issued and sold the following unregistered securities:

- a. On July 16, 2020, CMLS Holdings LLC, the Registrant's sponsor (the "Sponsor"), purchased an aggregate of 10,062,500 shares of Class B common stock of the Registrant (the "Founder Shares") for a total purchase price of \$25,000, or approximately \$0.002 per share. Such securities were issued in connection with the Registrant's organization pursuant to the exemption from registration contained in Section 4(a)(2) of the Securities Act.
- b. C-LSH LLC (an entity affiliated with Eli Casdin) and M-LSH LLC (an entity affiliated with Keith Meister) are the managing members of the Sponsor. The Sponsor is an accredited investor for purposes of Rule 501 of Regulation D.
- c. Each of the equity holders in the Sponsor is an accredited investor under Rule 501 of Regulation D. The sole business of the Sponsor was to act as the Registrant's sponsor in connection with the Registrant's initial public offering (the "IPO"). The limited liability company agreement of the Sponsor provides that its membership interests may only be transferred to the Registrant's officers or directors or other persons affiliated with the Sponsor, or in connection with estate planning transfers.
- d. On September 1, 2020, the Registrant effected a 1:1.1 stock split of its Class B common stock, resulting there being an aggregate of 11,068,750 Founder Shares outstanding.
- e. On September 4, 2020, pursuant to a written agreement, the Sponsor and Munib Islam and Emily Leproust purchased from the Registrant in a private sale an aggregate of 7,236,667 warrants (the "Private Placement Warrants") at a purchase price of \$1.50 per Private Placement Warrant generating gross proceeds to the Registrant of \$10,855,000. This issuance was made pursuant to the exemption from registration contained in Section 4(a)(2) of the Securities Act.
- f. On July 22, 2021 (the "Closing Date"), the Registrant consummated its initial business combination (the "Business Combination") with Mount Sinai Genomics, Inc. d/b/a Sema4 ("Sema4") pursuant to an Agreement and Plan of Merger, dated February 9, 2021, among the Registrant, S-IV Sub, Inc., a wholly-owned subsidiary of the Registrant ("Merger Sub"), and Sema4 (as amended, the "Merger Agreement"). In addition, on the Closing Date, pursuant to subscription agreements entered into on February 9, 2021 (collectively, the "Subscription Agreements"), certain investors agreed to subscribe for an aggregate of 35,000,000 newly-issued shares of Class A common stock at a purchase price of \$10.00 per share for an aggregate purchase price of \$350,000,000 (the "PIPE Investment"). Additionally, 11,068,750 Founder Shares automatically converted to shares of Class A common stock as of the closing of the Business Combination.
- g. The Registrant issued the shares of Class A common stock pursuant to the Business Combination and the PIPE Investment under Section 4(a)(2) of the Securities Act and/or Rule 506 of Regulation D promulgated under the Securities Act, as a transaction by an issuer not involving a public offering. The Registrant issued the shares of Class A common stock in connection with the conversion of the Founder Shares under Section 3(a)(9) of the Securities Act, as an exchange with its existing security holders exclusively where no commission or other remuneration was paid or given directly or indirectly for soliciting such exchange. The investors in the PIPE Investment represented their intentions to acquire the shares for investment only and not with a view to or for sale in connection with any distribution, and appropriate restrictive legends were affixed to the certificates representing all of the shares issued in the Business Combination and the PIPE Investment and in connection with the conversion of the Founder Shares (or reflected in restricted book entry with the Registrant's transfer agent). The parties also had adequate access, through business or other relationships, to information about the Registrant.

Item 16. Exhibits and Financial Statement Schedules.

(a) Exhibits.

(a) Exillo	115.	Inco	rporated by Refe	rence
Exhibit Number	Description	Form	Exhibit	Filing Date
2.1	Agreement and Plan of Merger, dated February 9, 2021, by and among CMLS, Merger Sub and Legacy Sema4, as amended by Amendment to Agreement and Plan of Merger dated May 3, 2021	DEFM14A	Annex A	07/02/2021
3.1	Third Amended and Restated Certificate of Incorporation of Sema4 Holdings Corp.	8-K	3.1	07/28/2021
3.2	Restated Bylaws of Sema4 Holdings Corp.	8-K	3.2	07/28/2021
4.1	Specimen Warrant Certificate	S-1/A	4.3	08/24/2020
4.2	Warrant Agreement, dated as of September 1, 2020, by and between CM Life Sciences, Inc. and Continental Stock Transfer & Trust Company, as warrant agent	8-K	10.1	09/04/2020
5.1	Legal Opinion of Fenwick & West LLP			
10.1	Form of Director and Officer Indemnification Agreement.	8-K	10.4	07/28/2021
10.2	<u>Subscription Agreement, dated as of February 9, 2021, by and among the Company and the subscriber parties</u> thereto	8-K	10.1	02/11/2021
10.3	Amended and Restated Registration Rights Agreement, dated as of July 22, 2021, by and among the Company, certain equity holders of the Company named therein and certain equity holders of Sema4 named therein	8-K	10.2	07/28/2021
10.4	Lockup Agreement, dated as of February 9, 2021, by and among the Company and the stockholder parties identified therein	8-K	10.2	02/11/2021
10.5	Form of Stock Option Agreement under the 2021 Incentive Award Plan	8-K	10.6	07/28/2021
10.6	Form of RSU Agreement under the 2021 Incentive Award Plan	8-K	10.7	07/28/2021
10.7	Form of Earn-Out RSU Agreement	8-K	10.8	07/28/2021
10.8	2021 Incentive Award Plan	8-K	10.5	07/28/2021
10.9	2021 Employee Stock Purchase Plan	8-K	10.9	07/28/2021
10.10	Amended and Restated Employment Agreement of Eric Schadt.	8-K	10.10	07/28/2021
10.11	Employment Agreement of Isaac Ro.	8-K	10.11	07/28/2021
10.12	Employment Agreement of Dan Clark.	8-K	10.12	07/28/2021
10.13	Employment Agreement of James Coffin.	8-K	10.13	07/28/2021
10.14	Employment Agreement of Anthony Prentice.	8-K	10.14	07/28/2021
10.15	Employment Agreement of Kareem Saad.	8-K	10.15	07/28/2021
10.16	Employment Agreement of Karen White.	8-K	10.16	07/28/2021
10.17	Sub-Sublease, dated as of June 6, 2017, by and between Icahn School of Medicine at Mount Sinai and the	8-K	10.17	07/28/2021
10.18	Company, as amended July 31, 2019. Sublease Agreement, dated as of November 8, 2019, by and between Marriott International, Inc. and the Company.	8-K	10.18	07/28/2021
	Sublease, dated as of June 1, 2017, by and between Icahn School of Medicine at Mount Sinai and the Company, as			
10.19	<u>Subjects</u> , dated as of June 1, 2017, by and between Icann School of Medicine at Mount Sinal and the Company, as amended December 22, 2017.	8-K	10.19	07/28/2021
10.20	Sublease, dated as of April 23, 2019, by and between Icahn School of Medicine at Mount Sinai and the Company.	8-K	10.20	07/28/2021
10.21	Lease Agreement, dated as of January 31, 2020, by and between 1 Commercial Street Associates, LLC and the Company.	8-K	10.21	07/28/2021
10.22	Master Services Agreement, dated as of April 2, 2018, by and among the Company, Icahn School of Medicine at Mount Sinai, The Mount Sinai Hospital, and the parties thereto, as amended July 31, 2019.	8-K	10.22	07/28/2021
10.23	<u>Master Services Agreement, dated as of May 10, 2018, by and between the Company and Icahn School of Medicine at Mount Sinai, as amended July 31, 2019.</u>	8-K	10.23	07/28/2021
10.24	<u>Data Structuring and Curation Agreement, dated as of August 1, 2019, by and between Icahn School of Medicine at Mount Sinai and the Company.</u>	8-K	10.24	07/28/2021
10.25	BioMe Biospecimen and Data Access Agreement, dated as of July 19, 2019, by and between Icahn School of Medicine at Mount Sinai and the Company.	8-K	10.25	07/28/2021
10.26	Non-Exclusive Patent License Agreement, dated as of June 1, 2017, by and between the Company and Icahn School of Medicine at Mount Sinai.	8-K	10.26	07/28/2021
10.27	<u>Supply Agreement, dated as of June 20, 2014, by and between the Company and Illumina, Inc., and amendments thereto.</u>	8-K	10.27	07/28/2021
21.1	List of Subsidiaries	8-K	21.1	07/28/2021
23.1	Consent of WithumSmith+Brown, PC, independent registered accounting firm for CMLS			

- 23.2 Consent of Ernst & Young LLP, independent registered accounting firm for Mount Sinai Genomics, Inc.
- 23.3 Consent of Fenwick & West LLP (included as part of Exhibit 5.1)

Item 17. Undertakings.

The undersigned registrant hereby undertakes:

- (1) to file, during any period in which offers or sales are being made, a post-effective amendment to this registration statement:
- i. to include any prospectus required by Section 10(a)(3) of the Securities Act of 1933, as amended (the "Securities Act");
- ii. to reflect in the prospectus any facts or events arising after the effective date of the registration statement (or the most recent post-effective amendment thereof) which, individually or in the aggregate, represent a fundamental change in the information set forth in the registration statement. Notwithstanding the foregoing, any increase or decrease in volume of securities offered (if the total dollar value of securities offered would not exceed that which was registered) and any deviation from the low or high end of the estimated maximum offering range may be reflected in the form of prospectus filed with the Commission pursuant to Rule 424(b) if, in the aggregate, the changes in volume and price represent no more than a 20% change in the maximum aggregate offering price set forth in the "Calculation of Registration Fee" table in the effective registration statement; and
- iii. to include any material information with respect to the plan of distribution not previously disclosed in the registration statement or any material change to such information in the registration statement;

provided, however, that paragraphs (i), (ii) and (iii) do not apply if the registration statement is on Form S-1 and the information required to be included in a post-effective amendment by those paragraphs is contained in reports filed with or furnished to the Commission by the registrant pursuant to Section 13 or Section 15(d) of the Securities Exchange Act of 1934 that are incorporated by reference in the registration statement, or is contained in a form of prospectus filed pursuant to Rule 424(b) that is part of the registration statement;

- (2) that, for the purpose of determining any liability under the Securities Act, each such post-effective amendment shall be deemed to be a new registration statement relating to the securities offered therein, and the offering of such securities at that time shall be deemed to be the initial bona fide offering thereof;
- (3) to remove from registration by means of a post-effective amendment any of the securities being registered which remain unsold at the termination of the offering:
- (4) that, for the purpose of determining liability under the Securities Act to any purchaser: each prospectus filed pursuant to Rule 424(b) as part of a registration statement relating to an offering, other than registration statements relying on Rule 430B or other than prospectuses filed in reliance on Rule 430A, shall be deemed to be part of and included in the registration statement as of the date it is first used after effectiveness. Provided, however, that no statement made in a registration statement or prospectus that is part of the registration statement or made in a document incorporated or deemed incorporated by reference into the registration statement or prospectus that is part of the registration statement will, as to a purchaser with a time of contract of sale prior to such first use, supersede or modify any statement that was made in the registration statement or prospectus that was part of the registration statement or made in any such document immediately prior to such date of first use; and
- (5) that, for the purpose of determining liability of the registrant under the Securities Act to any purchaser in the initial distribution of the securities, the undersigned registrant undertakes that in a primary offering of securities of the undersigned registrant pursuant to this registration statement, regardless of the underwriting method used to sell the securities to the purchaser, if the securities are offered or sold to such purchaser by means of any of the following communications, the undersigned registrant will be a seller to the purchaser and will be considered to offer or sell such securities to such purchaser:

- (a) any preliminary prospectus or prospectus of the undersigned registrant relating to the offering required to be filed pursuant to Rule 424;
- (b) any free writing prospectus relating to the offering prepared by or on behalf of the undersigned registrant or used or referred to by the undersigned registrant;
- (c) the portion of any other free writing prospectus relating to the offering containing material information about the undersigned registrant or its securities provided by or on behalf of an undersigned registrant; and
 - (d) any other communication that is an offer in the offering made by the undersigned registrant to the purchaser.

Insofar as indemnification for liabilities arising under the Securities Act of 1933 may be permitted to directors, officers, and controlling persons of the registrant pursuant to the foregoing provisions, or otherwise, the registrant has been advised that in the opinion of the Securities and Exchange Commission, such indemnification is against public policy as expressed in the Securities Act of 1933 and is, therefore, unenforceable. In the event that a claim for indemnification against such liabilities (other than the payment by the registrant of expenses incurred or paid by a director, officer, or controlling person of the registrant in the successful defense of any action, suit, or proceeding) is asserted by such director, officer, or controlling person in connection with the securities being registered, the registrant will, unless in the opinion of its counsel the matter has been settled by controlling precedent, submit to a court of appropriate jurisdiction the question whether such indemnification by it is against public policy as expressed in the Securities Act of 1933 and will be governed by the final adjudication of such issue.

SIGNATURES

Pursuant to the requirements of the Securities Act of 1933, as amended, the Registrant has duly caused this registration statement on Form S-1 to be signed on its behalf by the undersigned, thereunto duly authorized, in the City of Stamford, State of Connecticut, on the 4th day of August, 2021.

SEMA4 HOLDINGS CORP.

By: /s/ Eric Schadt
Eric Schadt
Chief Executive Officer

POWER OF ATTORNEY

KNOW ALL PERSONS BY THESE PRESENTS, that each person whose signature appears below hereby constitutes and appoints Eric Schadt, Daniel Clark and Joshua Ruch, and each of them, as his or her true and lawful attorneys-in-fact, proxies and agents, each with full power of substitution and resubstitution and full power to act without the other, for him or her in any and all capacities, to sign any and all amendments to this registration statement (including post-effective amendments or any abbreviated registration statement and any amendments thereto filed pursuant to Rule 462(b) increasing the number of securities for which registration is sought), and to file the same, with all exhibits thereto and other documents in connection therewith, with the Securities and Exchange Commission, granting unto said attorneys-in-fact, proxies and agents full power and authority to do and perform each and every act and thing requisite and necessary to be done in connection therewith, as fully for all intents and purposes as he or she might or could do in person, hereby ratifying and confirming all that said attorneys-in-fact, proxies and agents, or their or his or her substitute or substitutes, may lawfully do or cause to be done by virtue hereof.

Pursuant to the requirements of the Securities Act of 1933, as amended, this registration statement on Form S-1 has been signed by the following persons in the capacities and on the dates indicated.

Signature	Title	Date
/s/ Eric Schadt Eric Schadt	Chief Executive Officer and Director (Principal Executive Officer)	August 4, 2021
/s/ Isaac Ro Isaac Ro	Chief Financial Officer (Principal Financial Officer)	August 4, 2021
/s/ Shawn Assad Shawn Assad	Chief Accounting Officer (Principal Accounting Officer)	August 4, 2021
/s/ Joshua Ruch Joshua Ruch	Chairman and Director	August 4, 2021
/s/ Dennis Charney Dennis Charney	Director	August 4, 2021
/s/ Eli D. Casdin Eli D. Casdin	Director	August 4, 2021
/s/ Emily Leproust Emily Leproust	Director	August 4, 2021

/s/ Jason Ryan	Director	August 4, 2021
Jason Ryan		
/s/ Michael Pellini Michael Pellini	Director	August 4, 2021
/s/ Nat Turner Nat Turner	Director	August 4, 2021
/s/ Rachel Sherman Rachel Sherman	Director	August 4, 2021

FENWICK

902 Broadway Suite 14 New York, NY 10010-6035 212.430.2600 Fenwick.com

August 4, 2021

Sema4 Holdings Corp.
333 Ludlow Street, North Tower, 8th Floor
Stamford, Connecticut
Ladies and Gentlemen:

At your request, we have examined the Registration Statement on Form S-1 filed by Sema4 Holdings Corp., a Delaware corporation (the "Company"), with the Securities and Exchange Commission (the "Commission") on August 4, 2021 (the "Registration Statement"), in connection with the registration under the Securities Act of 1933, as amended (the "Securities Act"), of: (1) the issuance by the Company of an aggregate of up to 21,995,000 shares of Class A Common Stock, par value \$0.0001 per share ("Common Stock"), of the Company, consisting of (a) up to 14,758,333 shares of Common Stock (the "Public Warrant Shares") that are issuable upon the exercise of 14,758,333 public warrants to purchase Common Stock of the Company (the "*Public Warrants*"); and (b) up to 7,236,667 shares of Common Stock (the "*Private Placement Warrant Shares*") that are issuable upon the exercise of 7,236,667 private placement warrants to purchase Common Stock of the Company (the "Private Placement Warrants") following the public resale of the Private Placement Warrants by the Selling Security holders pursuant to the prospectus included in the Registration Statement; (2) the offer and resale by the selling securityholders defined and listed in the Registration Statement (the "Selling Securityholders") of up to an aggregate of 236,223,522 shares of Common Stock consisting of (a) up to 35,000,000 shares of Common Stock (the "PIPE Shares") issued in connection with a private placement described in more detail in the Registration Statement; (b) up to 11,068,750 shares of Common Stock (the "Founder Shares") issued in connection with the consummation of the Company's business combination (the "Business Combination") as described in more detail in the Registration Statement; (c) up to 149,856,840 shares of Common Stock (the "Sema4 Holder Shares") issued pursuant to that certain Agreement and Plan of Merger, dated February 9, 2021 (as amended, the "Merger Agreement"), in connection with the consummation of the Business Combination as described in more detail in the Registration Statement; (d) up to 14,039,689 shares of Common Stock (the "Equity Award Shares") issuable upon the exercise of certain equity awards of the Company (the "Equity Awards"); (e) up to 19,021,576 shares of Common Stock (the "Earn-Out Shares") that certain of the Selling Securityholders have the contingent right to receive upon the achievement of certain stock price-based vesting conditions pursuant to the Merger Agreement; and (f) up to 7,236,667 Private Placement Warrant Shares issuable upon the exercise of the Private Placement Warrants; and (3) the offer and resale by certain of the Selling Securityholders of up to 7,236,667 Private Placement Warrants.

In connection with our opinion expressed below, we have also examined originals or copies of the prospectus prepared in connection with the Registration Statement (the "*Prospectus*"), the Company's Amended and Restated Certificate of Incorporation (the "*Certificate of Incorporation*"), the Company's Restated Bylaws (the "*Bylaws*"), the Warrant Agreement, dated September 1, 2020 (the "*Warrant Agreement*"), among the Company and Continental Stock Transfer & Trust Company, the Merger Agreement, the Equity Awards, certain corporate proceedings of the Company's board of directors and stockholders relating to the Registration Statement, the Certificate of Incorporation and the Bylaws, and such other agreements, documents, certificates and statements of the Company, its transfer agent, its warrant agent and public or government officials, as we have deemed advisable, and have examined such

questions of law as we have considered necessary. We have assumed the authenticity of all documents submitted to us as originals, the genuineness of all signatures on documents submitted to us, the conformity to originals of all documents submitted to us as copies, and the absence of any undisclosed termination, waiver or amendment to any document reviewed by us. In giving our opinion, we have also relied upon a good standing certificate issued by the Delaware Secretary of State and representations made to us by the Company, including representations that the Company has available a sufficient number of authorized shares of Common Stock that are not currently outstanding or reserved for issuance under other outstanding securities or equity plans of the Company, to enable the Company to issue and deliver all of the shares of Common Stock to be sold by the Selling Securityholders pursuant to the Registration Statement and the Prospectus. We also have assumed that the Warrant Agreement, at the time of the exercise of the Public Warrants and Private Placement Warrants in exchange for Public Warrant Shares and Private Placement Warrant Agent (as defined in the Warrant Agreement).

We render this opinion only with respect to, and express no opinion herein concerning the application or effect of the laws of any jurisdiction other than, the existing Delaware General Corporation Law and, solely with respect to whether or not the Private Placement Warrants are the valid and binding obligations of the Company, the existing laws of the State of New York.

This opinion is qualified by, and is subject to, and we render no opinion with respect to, the following limitations and exceptions to the enforceability of the Private Placement Warrants:

- 1. The effect of the laws of bankruptcy, insolvency, reorganization, arrangement, moratorium, fraudulent conveyance, assignment for the benefit of creditors, and other similar laws now or hereinafter in effect relating to or affecting the rights and remedies of creditors, including the effect of statutory or other laws regarding fraudulent transfers or preferential transfers.
- 2. The effect of general principles of equity and similar principles, including, without limitation, concepts of materiality, reasonableness, good faith and fair dealing, public policy and unconscionability, and the possible unavailability of specific performance, injunctive relief, or other equitable remedies, regardless of whether considered in a proceeding in equity or at law.

We express no opinion regarding the effectiveness of any waiver or stay, extension or of unknown future rights. Further, we express no opinion regarding the effect of provisions relating to indemnification, exculpation or contribution to the extent such provisions may be held unenforceable as contrary to federal or state securities laws or public policy.

Based upon the foregoing, we are of the opinion that,

- 1. The Public Warrant Shares have been duly authorized and, when issued and delivered upon exercise of the Public Warrants in the manner and for the consideration stated in the Public Warrants, will be validly issued, fully paid and non-assessable.
- 2. The Private Placement Warrant Shares have been duly authorized and, when issued and delivered upon exercise of the Private Placement Warrants following the public resale of the Private Placement Warrants by the Selling Securityholders pursuant to the Prospectus in the manner and for the consideration stated in the Private Placement Warrants, will be validly issued, fully paid and non-assessable.

- 3. The PIPE Shares have been duly authorized and are validly issued, fully paid and non-assessable.
- 4. The Founder Shares have been duly authorized and are validly issued, fully paid and non-assessable.
- 5. The Sema4 Holder Shares have been duly authorized and are validly issued, fully paid and non-assessable.
- 6. The Equity Award Shares have been duly authorized and, when issued and delivered upon exercise of the applicable Equity Awards in the manner and for the consideration stated in the applicable Equity Awards, will be validly issued, fully paid and non-assessable.
- 7. The Earn-Out Shares have been duly authorized and, when issued and delivered in accordance with the Merger Agreement, will be validly issued, fully paid and non-assessable.
- 8. The Private Placement Warrants constitute valid and binding obligations of the Company, enforceable against the Company in accordance with their terms.

We consent to the use of this opinion as an exhibit to the Registration Statement and further consent to all references to us, if any, in the Registration Statement, the Prospectus and any amendments thereto. We do not thereby admit that we are within the category of persons whose consent is required under Section 7 of the Securities Act or the rules and regulations of the Commission thereunder. This opinion is intended solely for use in connection with sale of the securities to be sold by the Selling Securityholders pursuant to the Registration Statement and the Prospectus and is not to be relied upon for any other purpose. In providing this letter, we are opining only as to the specific legal issues expressly set forth above, and no opinion shall be inferred as to any other matter or matters. This opinion is rendered on, and speaks only as of, the date of this letter first written above, and does not address any potential change in facts or law that may occur after the date of this opinion letter. We assume no obligation to advise you of any fact, circumstance, event or change in the law or the facts that may hereafter be brought to our attention, whether or not such occurrence would affect or modify any of the opinions expressed herein.

Very Truly Yours,

/s/ Fenwick &

Fenwick & West LLP

CONSENT OF INDEPENDENT REGISTERED PUBLIC ACCOUNTING FIRM

We hereby consent to the use in the Proxy Statement constituting a part of this Registration Statement on Form S-1 of our report dated May 4, 2021 relating to the financial statements of CM Life Sciences, Inc. which is contained in that Proxy Statement, and to the reference to our Firm under the caption "Experts" in the Prospectus.

/s/ WithumSmith+Brown, PC

New York, New York August 4, 2021

Consent of Independent Registered Public Accounting Firm

We consent to the reference to our firm under the caption "Experts" and to the use of our report dated May 6, 2021, with respect to the financial statements of Mount Sinai Genomics, Inc. included in the Registration Statement (Form S-1) and related Prospectus of Sema4 Holdings Corp. for the registration of its Class A common stock and warrants.

/s/ Ernst & Young LLP

New York, NY August 4, 2021