

Use these links to rapidly review the document

[Table of Contents](#)

[TABLE OF CONTENTS](#)

[Table of Contents](#)

The information contained in this preliminary prospectus supplement and the accompanying prospectus is not complete and may be changed. This preliminary prospectus supplement and the accompanying prospectus are not an offer to sell these securities, and are not soliciting an offer to buy these securities, in any jurisdiction where the offer or sale is not permitted.

SUBJECT TO COMPLETION, DATED JUNE 8, 2020

Filed Pursuant to Rule 424(b)(5)
Registration No. 333-233042

PRELIMINARY PROSPECTUS SUPPLEMENT
(To Prospectus dated August 6, 2019)

\$100,000,000



MesaLabs

Common Stock

Mesa Laboratories, Inc.

We are offering approximately \$100,000,000 of shares of our common stock. The public offering price is \$ _____ per share.

Our common stock is listed on Nasdaq under the symbol "MLAB." On June 5, 2020, the last reported sale price of our common stock was \$247.20 per share.

Investing in our common stock involves risks. You should read this prospectus supplement and the accompanying prospectus carefully before you make an investment decision. See "Risk Factors" beginning on page S-10 of this prospectus supplement, as well as documents we file with the Securities and Exchange Commission (the "SEC") that are incorporated by reference herein for more information.

	<u>Per Share</u>	<u>Total</u>
Public offering price	\$	\$
Underwriting discount and commissions ⁽¹⁾	\$	\$
Proceeds to Mesa Laboratories, Inc. (before expenses)	\$	\$

⁽¹⁾ See "Underwriting" beginning on page S-19 of this prospectus supplement for additional information regarding underwriter compensation.

We have granted the underwriters an option, exercisable in whole or from time to time in part, to purchase up to an additional approximately \$15 million of shares of our common stock from us at the public offering price per share shown above, less discounts and commissions and exercisable for 30 days after the date of this prospectus supplement.

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

The underwriters expect to deliver the shares of common stock to purchasers on or about _____, 2020.

Joint Book-Running Managers

Jefferies

J.P. Morgan

Evercore ISI

The date of this prospectus supplement is

, 2020.

TABLE OF CONTENTS

Prospectus Supplement

	<u>Page</u>
ABOUT THIS PROSPECTUS SUPPLEMENT	S-1
FORWARD-LOOKING STATEMENTS	S-2
WHERE YOU CAN FIND MORE INFORMATION	S-4
INCORPORATION BY REFERENCE	S-5
SUMMARY	S-6
THE OFFERING	S-8
SUMMARY CONSOLIDATED FINANCIAL DATA	S-9
RISK FACTORS	S-10
USE OF PROCEEDS	S-12
CAPITALIZATION	S-13
CERTAIN U.S. FEDERAL INCOME TAX CONSIDERATIONS FOR NON-U.S. HOLDERS OF COMMON STOCK	S-15
UNDERWRITING	S-19
LEGAL MATTERS	S-27
EXPERTS	S-28

Prospectus

ABOUT THIS PROSPECTUS	1
WHERE YOU CAN FIND ADDITIONAL INFORMATION	2
INCORPORATION OF CERTAIN INFORMATION BY REFERENCE	2
SPECIAL NOTE REGARDING FORWARD-LOOKING STATEMENTS	3
RISK FACTORS	3
ABOUT THE COMPANY	4
DESCRIPTION OF CAPITAL STOCK	4
DESCRIPTION OF DEBT SECURITIES	6
DESCRIPTION OF DEPOSITARY SHARES	14
DESCRIPTION OF WARRANTS	14
DESCRIPTION OF PURCHASE CONTRACTS	15
DESCRIPTION OF UNITS	16
USE OF PROCEEDS	16
PLAN OF DISTRIBUTION	16
LEGAL MATTERS	20
EXPERTS	20

ABOUT THIS PROSPECTUS SUPPLEMENT

This document is in two parts. The first part is this prospectus supplement, which describes the specific terms of this offering. The second part is the accompanying base prospectus, which describes more general information about securities we may offer from time to time, some of which does not apply to this offering of common stock. Generally, when we refer to the prospectus, we are referring to both parts of this document combined. If information in this prospectus supplement or any related free writing prospectus differs from information in the accompanying prospectus, you should rely on the information in this prospectus supplement or the related free writing prospectus.

Except as the context otherwise requires, in this prospectus supplement and the accompanying prospectus, the terms "we," "us," "our," "the Company," and "Mesa Labs" refer to Mesa Laboratories, Inc. and its consolidated subsidiaries.

Currency amounts in this prospectus supplement are stated in U.S. dollars.

For investors outside of the United States: We have not, and the underwriters have not, done anything that would permit this offering or possession or distribution of this prospectus in any jurisdiction where action for that purpose is required, other than the United States. The distribution of this prospectus supplement and the accompanying prospectus and the offering of the shares of common stock in certain jurisdictions may be restricted by law. Persons who come into possession of this prospectus supplement, any related free writing prospectus and the accompanying prospectus should inform themselves about and observe any such restrictions. This prospectus supplement, any related free writing prospectus and the accompanying prospectus do not constitute, and may not be used in connection with, an offer or solicitation by anyone in any jurisdiction in which such offer or solicitation is not authorized or in which the person making such offer or solicitation is not qualified to do so or to any person to whom it is unlawful to make such offer or solicitation.

You should not consider any information in this prospectus supplement, any related free writing prospectus or the accompanying prospectus to be investment, legal or tax advice. You should consult your own counsel, accountant and other advisors for legal, tax, business, financial and related advice regarding the purchase of the shares of common stock. We are not making any representation to you regarding the legality of an investment in the shares of common stock by you under applicable investment or similar laws.

You should read and consider all information contained or incorporated by reference in this prospectus supplement, any related free writing prospectus and the accompanying prospectus that we provide or make available to you before making your investment decision.

We and the underwriters have not authorized anyone to provide you with information different from that contained or incorporated by reference in this prospectus supplement, the accompanying prospectus or any free writing prospectus we provide to you. Neither we nor the underwriters take any responsibility for, and cannot provide any assurance as to the reliability of, any information other than the information contained or incorporated by reference in this prospectus supplement, the accompanying prospectus or any free writing prospectus we provide to you. We and the underwriters are not making an offer of the common stock in any jurisdiction where the offer is not permitted. The information contained in this prospectus supplement, the accompanying prospectus or any free writing prospectus we provide you is accurate only as of its date, regardless of its time of delivery or of any sale of shares of our common stock. Our business, financial condition, results of operations and prospects may have changed since that date. You should not assume that the information contained or incorporated by reference in this prospectus supplement, the accompanying prospectus or any free writing prospectus is accurate as of any date other than the date on the front of that document.

FORWARD-LOOKING STATEMENTS

Certain statements included or incorporated by reference in this prospectus supplement, the accompanying prospectus and any related free writing prospectus we authorize to be delivered to you are "forward-looking statements" within the meaning of the U.S. federal securities laws. All statements other than historical factual information are forward-looking statements, including without limitation statements regarding projections of revenues, growth, operating results, profit margins, expenses, earnings, margins, tax rates, tax provisions, cash flows, liquidity, demand, competition, the effects of additional actions taken to become more efficient or lower costs; restructuring activities; acquisitions or divestitures and the integration of acquired businesses; changes in legal and regulatory matters; outstanding claims, legal proceedings, tax audits and assessments and other contingent liabilities; the duration and impact of the COVID-19 pandemic and the myriad of its effects on our business including related decreases in customer demand and spending; ability of the Company to achieve its financial and strategic objectives and continue to increase its revenues; foreign currency exchange rates and fluctuations in those rates; general economic, industry, and capital markets conditions; the timing of any of the foregoing; assumptions underlying any of the foregoing; and any other statements that address events or developments that Mesa Labs intends or believes will or may occur in the future. Terminology such as "believe," "anticipate," "should," "could," "intend," "will," "plan," "expect," "estimate," "project," "target," "may," "possible," "potential," "forecast" and "positioned" and similar references to future periods are intended to identify forward-looking statements, although not all forward-looking statements are accompanied by such words. Forward-looking statements are based on assumptions and assessments made by our management in light of their experience and perceptions of historical trends, current conditions, expected future developments and other factors they believe to be appropriate. These forward-looking statements are subject to a number of risks and uncertainties, including but not limited to the following:

- We have not identified any specific use of the net proceeds of this offering.
- The ongoing COVID-19 pandemic has had, and will likely continue to have, an adverse effect on certain aspects of our operations.
- Conditions in the global economy, the particular markets we serve and the financial markets may adversely affect our business and financial results.
- We face intense competition and if we are unable to compete effectively, we may experience decreased demand and decreased market share. Even if we compete effectively, we may be required to reduce prices for our products and services.
- Our growth depends in part on the timely development and commercialization, and customer acceptance, of enhanced and new products and services based on technological innovation.
- Any inability to consummate acquisitions at our historical rate and at appropriate prices, and to make appropriate investments that support our long-term strategy, could negatively impact our growth rate and stock price.
- Our acquisition of businesses, investments, joint ventures and other strategic relationships could negatively impact our financial statements.
- Our growth could suffer if the markets into which we sell our products and services decline, do not grow as anticipated or experience cyclicalities.
- A material weakness in our internal control over financial reporting that, if not effectively remediated, could result in material misstatements in our financial statements and other negative outcomes.
- Significant developments or uncertainties stemming from the U.S. government, including changes in U.S. trade policies, tariffs and the reaction of other countries thereto, could have an adverse effect on our business.
- Our reputation, ability to do business and financial statements may be impaired by improper conduct by any of our employees, agents or business partners.

[Table of Contents](#)

- Certain of our businesses are subject to extensive regulation by the United States Food and Drug Administration and by comparable agencies of other countries, as well as laws regulating fraud and abuse in the health care industry and the privacy and security of health information. Failure to comply with those regulations could adversely affect our reputation, ability to do business and financial statements.
- The health care industry and related industries that we serve have undergone, and are in the process of undergoing, significant changes in an effort to reduce costs, which could adversely affect our financial statements.
- Our operations, products and services expose us to the risk of environmental, health and safety liabilities, costs and violations that could adversely affect our business, reputation and financial statements.
- Our businesses are subject to extensive regulation; failure to comply with those regulations could adversely affect our financial statements and our business, including our reputation.
- If we do not or cannot adequately protect our intellectual property, or if third parties infringe our intellectual property rights, we may suffer competitive injury or expend significant resources enforcing our rights.
- The manufacture of many of our products is a highly exacting and complex process, and if we directly or indirectly encounter problems manufacturing products, our reputation, business and financial statements could suffer.

Forward-looking statements are not guarantees of future performance and actual results may differ materially from the results, developments and business decisions contemplated by our forward-looking statements. Accordingly, you should not place undue reliance on any such forward-looking statements. These forward-looking statements speak only as of the date of this prospectus supplement and are subject to a number of risks, uncertainties and assumptions. Except to the extent required by applicable law, we do not assume any obligation to update or revise any forward-looking statement, whether as a result of new information, future events and developments, or otherwise.

See "Item 1A. Risk Factors" in our Annual Report on Form 10-K for the fiscal year ended March 31, 2020 (the "2020 10-K") filed with the SEC under the Securities Exchange Act of 1934, as amended (the "Exchange Act"), and incorporated by reference into this prospectus supplement and the accompanying prospectus and the "Risk Factors" section in this prospectus supplement and the accompanying prospectus for a further discussion regarding some of the reasons that actual results may be materially different from those that we anticipate.

WHERE YOU CAN FIND MORE INFORMATION

We file annual, quarterly and current reports, proxy statements and other information with the SEC. Our SEC filings are available to the public over the Internet at the SEC's website at www.sec.gov. Copies of certain information filed by us with the SEC are also available on our website at www.mesalabs.com/investor-relations. Our website is not a part of this prospectus supplement or the accompanying prospectus.

INCORPORATION BY REFERENCE

The SEC allows us to incorporate by reference much of the information we file with the SEC, which means that we can disclose important information to you by referring you to those publicly available documents. The information that we incorporate by reference in this prospectus supplement is considered to be part of this prospectus supplement. Because we are incorporating by reference future filings with the SEC, this prospectus supplement is continually updated and those future filings may modify or supersede some of the information included or incorporated in this prospectus supplement. This means that you must look at all of the SEC filings that we incorporate by reference to determine if any of the statements in this prospectus supplement or in any document previously incorporated by reference have been modified or superseded. This prospectus supplement incorporates by reference the documents listed below filed by Mesa Labs and any future filings we make with the SEC under Sections 13(a), 13(c), 14 or 15(d) of the Exchange Act (in each case, other than those documents or the portions of those documents not deemed to be filed) until the offering of the securities under the registration statement is terminated or completed:

- [Annual Report on Form 10-K for the fiscal year ended March 31, 2020, as filed with the SEC on June 1, 2020;](#)
- Current Reports on Form 8-K filed with the SEC on [April 2, 2020](#), [May 15, 2020](#) and [June 4, 2020](#);
- [Current Report on Form 8-K/A filed on January 15, 2020](#); and
- The description of our common stock contained in our Registration Statement on Form 8-A filed with the SEC on April 2, 1984, including any amendments or reports filed for the purpose of updating such description, and as amended and superseded by the disclosure in "Description of Capital Stock" in the accompanying prospectus.

The foregoing list of documents supersedes and replaces the list set forth under "Where You Can Find Additional Information" in the accompanying prospectus.

You may request a copy of these filings, at no cost, by writing or telephoning us at the following address or phone number:

Mesa Laboratories, Inc.
12100 West Sixth Avenue
Lakewood, CO 80228
Attention: Investor Relations
303-987-8000

SUMMARY

This summary highlights information contained elsewhere in, or incorporated by reference into, this prospectus supplement and the accompanying prospectus. As a result, it does not contain all of the information that may be important to you or that you should consider before making an investment. You should read this entire prospectus supplement and accompanying prospectus, including the "Risk Factors" section in this prospectus supplement, the accompanying prospectus and the 2020 10-K, as well as our consolidated financial statements and the related notes thereto, our [Current Report on Form 8-K filed with the SEC on June 4, 2020](#) and the other documents incorporated by reference, which are described under "Where You Can Find More Information" on page S-4.

Mesa Laboratories, Inc.

Mesa Laboratories, Inc. designs, manufactures and markets quality control products and services. We are committed to solving some of the most critical quality control challenges in the pharmaceutical, healthcare, industrial safety, environmental, and food and beverage industries. Our business consists of four reportable segments: Sterilization and Disinfection Control; Instruments; Continuous Monitoring (formerly Cold Chain Monitoring); and with the acquisition of Gyros Protein Technologies Holding AB during the third quarter of our fiscal year ended March 31, 2020, Biopharmaceutical Development.

We strive to create shareholder value and further our purpose of Protecting the Vulnerable™ by growing our business both organically and through further acquisitions, by improving our operating efficiency, and by continuing to hire, develop and retain top talent.

As a business, we commit to our purpose of Protecting the Vulnerable™ every day by taking a customer-focused approach to developing, building, and delivering our products. We serve a broad set of industries that require dependable quality control and calibration solutions to ensure the safety and efficacy of the products they use, and by delivering the highest quality products possible, we are committed to protecting environment, products, and people.

Our revenues come from product sales, which includes hardware and software, and consumables; as well as services, which include installation, discrete maintenance services, and ongoing maintenance contracts. We grow our revenues organically by expanding our customer base, increasing sales volumes, and implementing price increases; and inorganically, through acquisitions.

We continue to focus on improving our operating efficiency, *The Mesa Way*, which is our customer-centric, lean-based system for continuously improving and operating a set of high-margin, niche businesses. *The Mesa Way* is based on four pillars:

- **Measure what matters:** We use "True North," our customer's perspective, to measure what matters most to customers and to set high standards for performance. We manage to leading indicators, whenever possible, which drives us to proactively avoid problems before they are apparent to our customers.
- **Empower Teams:** We move decision making as close to the customer as possible and provide the structure and real-time communication forum to align the whole organization towards surpassing customer expectations.
- **Steadily Improve:** We leverage a common and proven set of lean-based tools to identify the root cause of opportunities, prioritize our biggest opportunities, and enable change to be embraced and implemented quickly.
- **Always Learn:** We ensure that improvements are sustained, enabling us to raise performance expectations and repeat the cycle of improvement. Equally, this cycle strengthens the Mesa Labs team by providing endless learning opportunities for our employees and helps us to become an employer of choice in our communities.

Part of our strategy is to grow our business through acquisitions of strategically complementary businesses, and we typically have a pipeline of numerous acquisition opportunities at differing stages of evaluation. We generally seek to acquire companies that have leadership positions in quality niche markets, annual revenues between \$5.0 million and \$60.0 million, strong gross margins as a percentage of revenues and adjusted operating income growth potential, attractive returns on investment and a relatively low market and technology risk profile. In the ordinary course of our business, we continually seek acquisition targets that can accelerate our growth and further our overall strategy. We are evaluating numerous opportunities for such acquisitions, including some that may constitute "significant" acquisitions as defined by the SEC's Regulation S-X. Any of these acquisitions may have a material effect on our results of operations and financial condition.

Recent Developments

The COVID-19 pandemic has had a variety of adverse impacts on our operations, and these impacts are continuing. In particular, the sales process for some of our products and services involves our personnel being present on-site at customer facilities or participating in person at industry conferences, and COVID-19-related travel and access restrictions have severely affected our ability to do either of these activities. In addition, the impact of COVID-19 on general economic conditions has generally reduced demand for discretionary items, including discrete revenues from hardware and software that represented approximately 34% of our total revenues in the fiscal year ended March 31, 2020. We believe that COVID-19 will continue to have a negative impact during the remainder of the current fiscal year, although we are unable to quantify the expected operational and financial impacts at this time. We anticipate that the Sterilization and Disinfection Control division will experience the least adverse impact among our divisions. Our Continuous Monitoring and Biopharmaceutical Development divisions, which primarily serve biopharmaceutical and healthcare customers, experienced slower sales growth during March, continuing into the quarter ending June 30, 2020, but may see sales activity resume as healthcare markets return to historical conditions and normal operations; however, there may be an additional lag for hardware revenues that have longer sales and revenue recognition cycles. Our Instruments division experienced sales declines beginning in March and continuing into the quarter ending June 30, 2020 as our customers began to limit discretionary spending in response to economic uncertainty, and we expect this division, with a higher mix of industrial end markets and hardware, to be impacted more severely and for a longer period of time. We have taken a variety of measures to align our operations with the current health and economic environment and will continue to proactively monitor and endeavor to adapt to ongoing developments in recognition of the heightened levels of uncertainty resulting from COVID-19. However, given the uncertainty regarding the spread, or potential additional outbreaks, of the virus and the timing of economic recovery, performance and financial results may be different than anticipated.

Corporate Information

Mesa Laboratories, Inc. was organized on March 26, 1982 as a Colorado corporation. Our common stock is listed on Nasdaq under the ticker symbol "MLAB." Our executive offices are located at 12100 West Sixth Avenue; Lakewood, CO 80228, and our telephone number is 303-987-8000.

THE OFFERING

The following summary contains basic information about this offering. It does not contain all of the information that is important to you. You should read this prospectus supplement and the accompanying prospectus, the documents incorporated and deemed to be incorporated by reference in this prospectus supplement and the accompanying prospectus and any free writing prospectus we may provide you in connection with this offering carefully before making an investment decision.

As used in this section, references to "we," "us" and "our" mean Mesa Laboratories, Inc. excluding its subsidiaries and affiliates.

Issuer	Mesa Laboratories, Inc., a Colorado corporation		
Common stock we are offering	shares (or	shares if the underwriters' option is exercised in full)	
Common stock outstanding after this offering	shares (or	shares if the underwriters' option is exercised in full)	
Use of proceeds	We intend to use the net proceeds from this offering for general corporate purposes, which may include acquisitions. See "Use of Proceeds."		
Risk factors	See "Risk Factors" beginning on page S-10 of this prospectus supplement and page 3 of the accompanying prospectus, and the documents incorporated by reference in this prospectus supplement and the accompanying prospectus, for a discussion of risks you should carefully consider before deciding to invest in our common stock.		
Nasdaq symbol	"MLAB."		

The number of shares of common stock outstanding immediately after this offering that appears above is based on 4,396,536 shares of our common stock issued and outstanding as of May 31, 2020, and excludes:

- 268,315 shares of our common stock issuable upon exercise of outstanding options at a weighted average exercise price of \$109.33 per share;
- 26,102 shares of our common stock issuable upon vesting of outstanding restricted stock units at a weighted average grant date fair value per share of \$179.60;
- 21,686 shares of our common stock issuable upon vesting of outstanding performance stock units at a weighted average grant date fair value per share of \$204.68;
- 515,707 shares of our common stock reserved for issuance under the Mesa Laboratories, Inc. 2014 Equity Plan; and
- any shares of our common stock issuable upon the conversion of our 1.375% convertible senior notes due August 15, 2025 (the "Notes").

A description of our common stock is included in the accompanying prospectus under the caption "Description of Capital Stock."

SUMMARY CONSOLIDATED FINANCIAL DATA

The following table sets forth summary consolidated financial information. The summary consolidated financial information for the fiscal years ended March 31, 2020, 2019 and 2018 has been derived from our audited consolidated financial statements incorporated by reference into this prospectus supplement and the accompanying prospectus. Our consolidated financial statements are prepared and presented in accordance with generally accepted accounting principles in the United States, or U.S. GAAP. Our historical results are not necessarily indicative of results expected for future periods.

You should read this "Summary Consolidated Financial Data" section together with our consolidated financial statements and the related notes and the "Management's Discussion and Analysis of Financial Condition and Results of Operations" in our 2020 10-K, which is incorporated by reference into this prospectus supplement and the accompanying prospectus, and our [Current Report on Form 8-K filed with the SEC on June 4, 2020](#).

	As of and for the Year Ended March 31,		
	2020	2019	2018
	(\$ in thousands, except per share information)		
Revenues	\$ 117,687	\$ 103,135	\$ 96,179
Operating income ^(a)	7,494	9,781	2,183
Net income (loss) ^(a)	1,349	7,484	(2,962)
Earnings per share:			
Basic	0.32	1.95	(0.79)
Diluted	0.31	1.86	(0.79)
Dividends declared per share	0.64	0.64	0.64
Total assets	420,206	156,767	164,101
Total debt	\$ 140,278	\$ 22,738	\$ 46,260

^(a) Includes approximately \$0.3 million, \$4.8 million, and \$13.8 million of impairment of goodwill and long-lived assets for the fiscal years ended March 31, 2020, March 31, 2019 and March 31, 2018, respectively, primarily associated with our Cold Chain Packaging Division, which is no longer operating. Refer to Note 4. *Significant Transactions* and Note 8. *Goodwill and Long-Lived Assets* within Item 8. *Financial Statements and Supplementary Data* included in our 2020 10-K.

RISK FACTORS

An investment in our common stock is subject to certain risks. You should carefully consider the following risk factors and other information contained in this prospectus supplement, in the documents incorporated by reference in this prospectus supplement and in the accompanying prospectus, including our 2020 10-K, as supplemented or updated by our other filings with the SEC, before deciding whether this investment is suited to your particular circumstances. If any of these risks actually occurs, our business, financial condition, results of operations or prospects could be seriously harmed. The risks and uncertainties we have described are not the only ones facing the Company. Additional risks and uncertainties not presently known to us or that we currently deem immaterial may also affect our business operations.

Risks Related to this Offering and Our Common Stock

We have not identified any specific use of the net proceeds of this offering.

We intend to use the net proceeds of this offering for general corporate purposes, which may include, without limitation and in our sole discretion, working capital, capital expenditures, investments in or loans to our subsidiaries, share repurchases (including, but not limited to, repurchases of our common stock), dividends and investments and satisfaction of other obligations. We may use the net proceeds of this offering to continue pursuit of our acquisition strategy, but we may not be able to successfully identify and complete acquisitions, and acquisitions we complete may not provide the benefits we expect. The failure of our management to use the net proceeds from this offering effectively could have a material adverse effect on our business. See "Use of Proceeds."

The market price of our common stock may fluctuate significantly.

Significant fluctuations in the market price and trading volume of our common stock may result not only from general stock market conditions but also from a change in sentiment in the market regarding our operations, business prospects, future funding or this offering. In addition to the risk factors related to our business discussed in the "Risk Factors" section of the 2020 10-K and incorporated herein by reference, the price and volume volatility of our common stock may be affected by:

- developments in our business generally;
- quarterly variations in our operating results;
- regulatory changes affecting our operations;
- operating results that vary from the expectations of management, securities analysts and investors;
- changes in expectations as to our future financial performance;
- announcements of strategic developments, significant contracts, loss of significant contracts, acquisitions, divestitures or other dispositions and other material events by us or our competitors;
- the operating and securities price performance of other companies that investors believe are comparable to us;
- future sales of our equity or equity-related securities; and
- economic conditions and monetary and other governmental actions designed to address those conditions.

You may not receive dividends on the common stock.

Under applicable Colorado law, holders of our common stock are only entitled to receive such dividends as our board of directors may declare out of funds legally available for such payments. Although we have in the past declared cash dividends on our common stock, we are not required to do so and may reduce or eliminate our common stock dividend in the future. This could adversely affect the market price of our common stock. Further, even if we are permitted under our contractual obligations and Colorado law to declare and pay cash dividends on the shares of common stock, we may not have sufficient cash to do so.

The possibility of sales of our common stock in the future could reduce the market price of our common stock.

We are not restricted, other than as described in "Underwriting," from issuing additional shares of common stock, including securities that are convertible into or exchangeable for, or that represent the right to receive, common stock. In the future, we may sell additional shares of our common stock to raise capital or to acquire companies. We also expect to issue shares upon exercise of options or the vesting of equity awards under our compensation programs. Any of these events would dilute your ownership interest in Mesa Labs and any of these events or the perception that these sales or conversions or exchanges could occur may have an adverse impact on the price of our common stock. Furthermore, sales of a substantial amount of our common stock in the public market, or the perception that these sales may occur, could reduce the market price of our common stock. This could also impair our ability to raise additional capital through the sale of our securities.

The common stock is equity and is subordinate to our existing and future indebtedness and any preferred stock we may issue in the future.

Shares of our common stock are equity interests in Mesa Labs and do not constitute indebtedness. As such, shares of our common stock will rank junior to all indebtedness and other non-equity claims on Mesa Labs with respect to assets available to satisfy claims on Mesa Labs, including in a liquidation of Mesa Labs. Additionally, holders of our common stock may be subject to prior dividend and liquidation rights of holders of any preferred stock we may issue.

Our board of directors is authorized to issue additional classes or series of preferred stock without any action on the part of the shareholders. The board of directors also has the power, without shareholder approval, to set the terms of any such classes or series of preferred stock that may be issued, including voting rights, dividend rights, and preferences over our common stock with respect to dividends or upon our dissolution, winding-up and liquidation and other terms. If we issue preferred stock in the future that has a preference over our common stock with respect to the payment of dividends or upon our liquidation, dissolution, or winding up, or if we issue preferred stock with voting rights that dilute the voting power of our common stock, the rights of holders of our common stock or the market price of our common stock could be adversely affected.

Any future sales of our common stock or equity-linked securities in the public market or the perception that these sales might occur, including as a result of the issuance of any equity-linked securities or the conversion of any of our equity-linked securities, including the Notes, could lower the market price for our common stock.

Any future sales of our common stock or equity-linked securities in the public market or the perception that these sales might occur, including as a result of the issuance of any equity-linked securities or the conversion of any of our equity-linked securities, including the Notes, into shares of our common stock, could lower the market price for our common stock and could impair our ability to raise capital through the sale of additional equity or equity-linked securities. We are unable to predict the effect that sales may have on the prevailing market price of our common stock.

We and our directors and executive officers have agreed that for a period of 60 days after the date of this prospectus supplement, subject to specified exceptions, we or they will not offer, sell, contract to sell, pledge or otherwise dispose of, directly or indirectly, any shares of our common stock or securities convertible into or exchangeable or exercisable for any shares of our common stock. Sales of common stock or securities convertible into or exchangeable or exercisable for any shares of our common stock by us, our directors or executive officers after the expiration of the lockup period could have a material adverse effect on the trading price of our common stock.

USE OF PROCEEDS

We estimate that the net proceeds from this offering to us will be approximately \$ _____ million (or approximately \$ _____ million if the underwriters exercise their option to purchase additional shares in full), after deducting the underwriting discounts and other estimated expenses of this offering payable by us.

We intend to use the net proceeds from this offering for general corporate purposes, which may include acquisitions.

Pending use of the proceeds as described above, we intend to invest the proceeds of this offering in highly liquid cash equivalents or United States government securities.

The foregoing represents our intentions based upon our present plans and business conditions. The occurrence of unforeseen events or changed business conditions, however, could result in the application of the net proceeds from this offering in a manner other than as described in this prospectus supplement.

CAPITALIZATION

The following table presents our cash and cash equivalents and our capitalization as of March 31, 2020:

- on an actual basis; and
- on an as adjusted basis to give effect to the issuance and sale of 404,531 shares of our common stock in this offering, assuming a public offering price of \$247.20 per share, which is the last reported sale price of our common stock on Nasdaq on June 5, 2020, after deducting underwriting discounts and commissions and our estimated offering expenses.

The information in the table below is illustrative only, and our capitalization following the completion of this offering will be adjusted based on the actual public offering price and other terms of this offering determined at pricing.

The table below should be read in conjunction with the other information in this prospectus supplement, the accompanying prospectus and the documents that are incorporated by reference, including our consolidated financial statements and related notes.

	As of March 31, 2020	
	Actual	As Adjusted
	(\$ in thousands, except share information)	
Cash and cash equivalents	\$ 81,380	\$
Debt:		
Convertible senior notes, net of discounts and debt issuance costs	140,278	140,278
Total debt	\$ 140,278	\$ 140,278
Stockholders' equity:		
Common stock, no par value per share; 25,000,000 shares authorized, 4,387,140 shares outstanding, actual; 25,000,000 shares authorized, 4,791,671 shares outstanding, as adjusted	158,023	
Retained earnings	71,930	71,930
Accumulated other comprehensive (loss)	(9,940)	(9,940)
Total stockholders' equity ⁽¹⁾	\$ 220,013	\$
Total capitalization	\$ 360,291	\$

⁽¹⁾ The common stock shown in the table above excludes shares of common stock issuable upon the exercise of stock options, and vesting of restricted stock units or performance share units under the Mesa Laboratories, Inc. 2006 Stock Compensation Plan or Mesa Laboratories, Inc. 2014 Equity Plan and also excludes shares available for further issuance under the Mesa Laboratories, Inc. 2014 Equity Plan, as discussed in "The Offering."

The number of shares of our common stock outstanding as set forth in the table above as of March 31, 2020 excludes, as of that date:

- 286,362 shares of our common stock issuable upon exercise of outstanding options at a weighted average exercise price of \$107.72 per share;
- 27,678 shares of our common stock issuable upon vesting of outstanding restricted stock units at a weighted average grant date fair value per share of \$180.15;
- 21,686 shares of our common stock issuable upon vesting of outstanding performance stock units at a weighted average grant date fair value per share of \$204.68;

[Table of Contents](#)

- 499,548 shares of our common stock reserved for issuance under the Mesa Laboratories, Inc. 2014 Equity Plan;
- any shares of our common stock issuable upon the conversion of the Notes; and
- the shares that may be issued upon the exercise of the option of the underwriters in this offering to purchase additional shares from us.

**CERTAIN U.S. FEDERAL INCOME TAX CONSIDERATIONS FOR
NON-U.S. HOLDERS OF COMMON STOCK**

The following is a discussion of material U.S. federal income tax considerations relating to the ownership and disposition of our common stock by a non-U.S. holder. For purposes of this discussion, the term "non-U.S. holder" means a beneficial owner (other than a partnership or other pass-through entity) of our common stock that is not, for U.S. federal income tax purposes:

- an individual who is a citizen or resident of the United States;
- a corporation, or other entity treated as a corporation for U.S. federal income tax purposes, created or organized in or under the laws of the United States or any state thereof or the District of Columbia;
- an estate, the income of which is subject to U.S. federal income taxation regardless of its source; or
- a trust, if (a) a U.S. court is able to exercise primary supervision over the administration of the trust and one or more U.S. persons have authority to control all substantial decisions of the trust or (b) the trust has a valid election in effect to be treated as a U.S. person for U.S. federal income tax purposes.

This discussion is based on current provisions of the U.S. Internal Revenue Code of 1986, as amended (the "Code"), existing and proposed U.S. Treasury Regulations promulgated thereunder, current administrative rulings and judicial decisions, all as in effect as of the date of this prospectus supplement and all of which are subject to change or to differing interpretation, possibly with retroactive effect. Any change or differing interpretation could alter the tax consequences to non-U.S. holders described in this prospectus supplement. In addition, the Internal Revenue Service (the "IRS") could challenge one or more of the tax consequences described in this prospectus supplement. We have not obtained, and do not intend to obtain, a ruling from the IRS with respect to the U.S. federal income tax consequences of owning and disposing of our common stock.

We assume in this discussion that each non-U.S. holder holds shares of our common stock as a "capital asset" within the meaning of Section 1221 of the Code (generally, property held for investment). This discussion does not address all aspects of U.S. federal taxation that may be relevant to a particular non-U.S. holder in light of that non-U.S. holder's individual circumstances nor does it address the alternative minimum tax, the Medicare tax on net investment income, any U.S. federal non-income taxes, such as the estate tax, or any aspects of U.S. state, local or non-U.S. taxes. This discussion also does not consider any specific facts or circumstances that may apply to a non-U.S. holder and does not address the special tax rules applicable to particular non-U.S. holders, such as:

- insurance companies;
- tax-exempt organizations;
- foreign governments;
- financial institutions;
- brokers, dealers or traders in securities;
- pension plans;
- controlled foreign corporations;
- passive foreign investment companies;
- owners that hold our common stock as part of a straddle, hedge, conversion transaction, synthetic security or other integrated investment; and
- certain U.S. expatriates.

In addition, this discussion does not address the tax treatment of partnerships or other entities that are pass-through entities for U.S. federal income tax purposes or persons who hold their common stock through partnerships or other pass-through entities. A partner in a partnership or other pass-through entity that will

[Table of Contents](#)

hold our common stock should consult his, her or its own tax advisor regarding the tax consequences of the acquisition, ownership and disposition of our common stock through a partnership or other pass-through entity, as applicable.

Prospective non-U.S. holders of our common stock should consult their own tax advisors regarding the U.S. federal, state, local and non-U.S. income and other tax considerations of acquiring, holding and disposing of our common stock.

Distributions on our Common Stock

Distributions on our common stock generally will constitute dividends for U.S. federal income tax purposes to the extent paid from our current or accumulated earnings and profits, as determined under U.S. federal income tax principles. If a distribution exceeds our current and accumulated earnings and profits, the excess will be treated as a tax-free return of the non-U.S. holder's investment, up to such holder's tax basis in the common stock. Any remaining excess will be treated as capital gain, subject to the tax treatment described below under the heading "Gain on Disposition of Common Stock." Any distributions will also be subject to the discussions below under the headings "Information Reporting and Backup Withholding" and "FATCA."

Other than dividends that are effectively connected with the non-U.S. holder's conduct of a U.S. trade or business (and, if required by an applicable income tax treaty, are attributable to a U.S. "permanent establishment" maintained by such non-U.S. holder), dividends paid to a non-U.S. holder generally will be subject to withholding of U.S. federal income tax at a 30% rate or such lower rate as may be specified by an applicable income tax treaty between the United States and such holder's country of residence.

Dividends that are treated as effectively connected with a trade or business conducted by a non-U.S. holder within the United States, and, if an applicable income tax treaty so provides, that are attributable to a permanent establishment or a fixed base maintained by the non-U.S. holder within the United States, are generally exempt from the 30% withholding tax if the non-U.S. holder satisfies applicable certification and disclosure requirements. However, such U.S. effectively connected income is taxed on a net income basis at the same U.S. federal income tax rates applicable to U.S. persons (as defined in the Code). Any U.S. effectively connected income received by a non-U.S. holder that is classified as a corporation for U.S. federal income tax purposes may also, under certain circumstances, be subject to an additional "branch profits tax" at a 30% rate or such lower rate as may be specified by an applicable income tax treaty between the United States and such holder's country of residence.

A non-U.S. holder of our common stock who claims the benefit of an applicable income tax treaty between the United States and such holder's country of residence generally will be required to provide a properly executed IRS Form W-8BEN or W-8BEN-E (or successor form) and satisfy applicable certification and other requirements. Non-U.S. holders are urged to consult their own tax advisors regarding their entitlement to benefits under a relevant income tax treaty and the specific methods available to them to satisfy these requirements.

A non-U.S. holder that is eligible for a reduced rate of U.S. withholding tax under an income tax treaty may obtain a refund or credit of any excess amounts withheld by timely filing an appropriate claim with the IRS.

Gain on Disposition of Common Stock

In general (subject to the discussion below under the headings "Information Reporting and Backup Withholding" and "FATCA"), a non-U.S. holder will not be subject to U.S. federal income tax on gain recognized upon such holder's sale, exchange or other disposition of shares of our common stock unless:

- the gain is effectively connected with the non-U.S. holder's conduct of a trade or business in the United States, and if an applicable income tax treaty so provides, the gain is attributable to a permanent establishment or fixed base maintained by the non-U.S. holder in the United States; in these cases, the non-U.S. holder will be taxed on a net income basis at the same U.S. federal income tax rates applicable to U.S. persons (as defined in the Code), and if the non-U.S. holder is a foreign corporation, the branch profits tax described above under the heading "Distributions on our Common Stock" also may apply;
- the non-U.S. holder is an individual present in the United States for 183 days or more in the taxable year of the disposition and certain other requirements are met, in which case the non-U.S. holder will be subject to a 30% tax (or such lower rate as may be specified by an applicable income tax treaty) on the net gain derived from the disposition, which may be offset by U.S.-source capital losses of the non-U.S. holder, if any, provided the non-U.S. holder has timely filed U.S. federal income tax returns with respect to such losses; or
- we are or have been, at any time during the five-year period preceding such disposition (or the non-U.S. holder's holding period, if shorter) a "U.S. real property holding corporation" and, if shares of our common stock are "regularly traded on an established securities market" (as defined by applicable Treasury Regulations), the non-U.S. holder held 5% or more of our outstanding common stock, directly, indirectly or constructively, during the shorter of the 5-year period ending on the date of the disposition or the period that the non-U.S. holder held our common stock. We believe that we are not currently, and we do not anticipate becoming, a "U.S. real property holding corporation" for U.S. federal income tax purposes.

Information Reporting and Backup Withholding

We or the applicable agent must report the gross amount of the distributions on our common stock paid to each non-U.S. holder and the tax withheld, if any, with respect to such distributions annually to the IRS and to each non-U.S. holder. Dividends paid to a non-U.S. holder subject to withholding of U.S. federal income tax, as described above under the heading "Distributions on our Common Stock," will generally be exempt from U.S. backup withholding, provided the applicable withholding agent does not have actual knowledge or reason to know the holder is a U.S. person and if the non-U.S. holder complies with specific certification procedures to establish that the holder is not a U.S. person (as defined in the Code). Generally, a non-U.S. holder will comply with such procedures if it provides a properly executed IRS Form W-8BEN or W-8BEN-E (or other applicable Form W-8) or otherwise meets documentary evidence requirements for establishing that it is a non-U.S. holder, or otherwise establishes an exemption.

Information reporting and backup withholding generally will apply to the proceeds of a disposition of our common stock by a non-U.S. holder effected by or through the U.S. office of any broker, U.S. or foreign, unless the holder certifies its status as a non-U.S. holder as described above and satisfies certain other requirements, or otherwise establishes an exemption (provided that the applicable withholding agent does not have actual knowledge or reason to know that such holder is a U.S. person). Generally, information reporting and backup withholding will not apply to a payment of disposition proceeds to a non-U.S. holder where the transaction is effected outside the United States through a non-U.S. office of a broker. However, for information reporting purposes, dispositions effected through a non-U.S. office of a broker with substantial U.S. ownership or operations generally will be treated in a manner similar to dispositions effected through a U.S. office of a broker. Non-U.S. holders should consult their own tax advisors regarding the application of the information reporting and backup withholding rules to them.

[Table of Contents](#)

Copies of information returns may be made available to the tax authorities of the country in which the non-U.S. holder resides or is incorporated under the provisions of a specific treaty or agreement.

Backup withholding is not an additional tax. Rather, any amounts withheld under the backup withholding rules from a payment to a non-U.S. holder can be refunded or credited against the non-U.S. holder's U.S. federal income tax liability, if any, provided that an appropriate claim is timely filed with the IRS.

FATCA

Provisions of the Code commonly known as the Foreign Account Tax Compliance Act ("FATCA") generally impose a U.S. federal withholding tax at a rate of 30% on dividends on our common stock if paid to a foreign entity unless: (i) if the foreign entity is a "foreign financial institution," the foreign entity undertakes certain due diligence, reporting, withholding, and certification obligations, (ii) if the foreign entity is not a "foreign financial institution," the foreign entity identifies certain of its U.S. investors, if any, or (iii) the foreign entity is otherwise exempt under FATCA.

While the withholding obligations described above would also apply to gross proceeds from the sale of assets that could produce U.S.-source dividends and interest, recently proposed Treasury Regulations, which state that taxpayers may rely on the proposed regulations until final regulations are issued, eliminate this requirement. Accordingly, withholding under FATCA generally will apply to payments of dividends on our common stock, but not to payments of gross proceeds from a sale or other disposition of our common stock. If withholding under FATCA is required on any payment related to our common stock, investors not otherwise subject to withholding (or that otherwise would be entitled to a reduced rate of withholding) on such payment may be required to seek a refund or credit from the IRS. An intergovernmental agreement between the United States and an applicable foreign country may modify the requirements described in this section. Non-U.S. holders should consult their own tax advisors regarding the possible implications of FATCA on their investment in our common stock.

The preceding discussion of material U.S. federal income tax considerations is for prospective investors' information only. It is not legal or tax advice. Prospective investors should consult their own tax advisors regarding the particular U.S. federal, state, local and non-U.S. tax consequences of purchasing, holding and disposing of our common stock, including the consequences of any proposed changes in applicable laws.

UNDERWRITING

Subject to the terms and conditions set forth in the underwriting agreement, dated June , 2020, among us and Jefferies LLC and J.P. Morgan Securities LLC, as the representatives of the underwriters named below and the joint book-running managers of this offering, we have agreed to sell to the underwriters, and each of the underwriters has agreed, severally and not jointly, to purchase from us, the respective number of shares of common stock shown opposite its name below:

<u>Underwriters</u>	<u>Number of Shares</u>
Jefferies LLC	
J.P. Morgan Securities LLC	
Evercore Group L.L.C.	
Total	

The underwriting agreement provides that the obligations of the several underwriters are subject to certain conditions precedent such as the receipt by the underwriters of officers' certificates and legal opinions and approval of certain legal matters by their counsel. The underwriting agreement provides that the underwriters will purchase all of the shares of common stock if any of them are purchased. If an underwriter defaults, the underwriting agreement provides that the purchase commitments of the nondefaulting underwriters may be increased or the underwriting agreement may be terminated. We have agreed to indemnify the underwriters and certain of their controlling persons against certain liabilities, including liabilities under the Securities Act, and to contribute to payments that the underwriters may be required to make in respect of those liabilities.

The underwriters have advised us that, following the completion of this offering, they currently intend to make a market in the common stock as permitted by applicable laws and regulations. However, the underwriters are not obligated to do so, and the underwriters may discontinue any market-making activities at any time without notice in their sole discretion. Accordingly, no assurance can be given as to the liquidity of the trading market for the common stock, that you will be able to sell any of the common stock held by you at a particular time or that the prices that you receive when you sell will be favorable. Sales of shares made outside of the United States may be made by affiliates of the underwriters.

The underwriters are offering the shares of common stock subject to their acceptance of the shares of common stock from us and subject to prior sale. The underwriters reserve the right to withdraw, cancel or modify offers to the public and to reject orders in whole or in part.

Commission and Expenses

The underwriters have advised us that they propose to offer the shares of common stock to the public at the public offering price set forth on the cover page of this prospectus supplement and to certain dealers, which may include the underwriters, at that price less a concession not in excess of \$ per share of common stock. The underwriters may allow, and certain dealers may reallow, a discount from the concession not in excess of \$ per share of common stock to certain brokers and dealers. After the offering, the initial public offering price, concession and reallowance to dealers may be reduced by the representatives. No such reduction will change the amount of proceeds to be received by us as set forth on the cover page of this prospectus.

[Table of Contents](#)

The following table shows the public offering price, the underwriting discounts and commissions that we are to pay the underwriters and the proceeds, before expenses, to us in connection with this offering. Such amounts are shown assuming both no exercise and full exercise of the underwriters' option to purchase additional shares.

	Per Share		Total	
	Without Option to Purchase Additional Shares	With Option to Purchase Additional Shares	Without Option to Purchase Additional Shares	With Option to Purchase Additional Shares
Public offering price	\$	\$	\$	\$
Underwriting discounts and commissions paid by us	\$	\$	\$	\$
Proceeds to us, before expenses	\$	\$	\$	\$

We estimate expenses payable by us in connection with this offering, other than the underwriting discounts and commissions referred to above, will be approximately \$250,000. We have also agreed to reimburse the underwriters for certain expenses incurred in connection with the offering in an amount up to \$10,000. The underwriters have agreed to reimburse us for certain of our expenses.

Listing

Our common stock is listed on Nasdaq under the trading symbol "MLAB."

Option to Purchase Additional Shares

We have granted to the underwriters an option, exercisable for 30 days from the date of this prospectus supplement, to purchase, from time to time, in whole or in part, up to an additional approximately \$15 million of shares of common stock from us at the public offering price set forth on the cover page of this prospectus supplement, less underwriting discounts and commissions. If the underwriters exercise this option, each underwriter will be obligated, subject to specified conditions, to purchase a number of additional shares of common stock proportionate to that underwriter's initial purchase commitment as indicated in the table above.

No Sales of Similar Securities

We, and our executive officers and directors, have agreed, subject to specified exceptions, not to directly or indirectly:

- sell, offer, contract or grant any option to sell (including any short sale), pledge, transfer, establish an open "put equivalent position" within the meaning of Rule 16a-1(h) under the Exchange Act, or
- otherwise dispose of any shares of common stock, options or warrants to acquire shares of common stock, or securities exchangeable or exercisable for or convertible into shares of common stock currently or hereafter owned either of record or beneficially, or
- publicly announce an intention to do any of the foregoing for a period of 60 days after the date of this prospectus supplement without the prior written consent of Jefferies LLC and J.P. Morgan Securities LLC.

This restriction terminates after the close of trading of the common stock on and including the 60th day after the date of this prospectus supplement.

[Table of Contents](#)

Jefferies LLC and J.P. Morgan Securities LLC may, in their sole discretion and at any time or from time to time before the termination of the 60-day period release all or any portion of the securities subject to lock-up agreements. There are no existing agreements between the underwriters and any of our shareholders who will execute a lock-up agreement, providing consent to the sale of shares prior to the expiration of the lock-up period.

Stabilization

The underwriters have advised us that they, pursuant to Regulation M under the Exchange Act, and certain persons participating in the offering may engage in short sale transactions, stabilizing transactions, syndicate covering transactions or the imposition of penalty bids in connection with this offering. These activities may have the effect of stabilizing or maintaining the market price of the common stock at a level above that which might otherwise prevail in the open market. Establishing short sales positions may involve either "covered" short sales or "naked" short sales.

"Covered" short sales are sales made in an amount not greater than the underwriters' option to purchase additional shares of our common stock in this offering. The underwriters may close out any covered short position by either exercising their option to purchase additional shares of our common stock or purchasing shares of our common stock in the open market. In determining the source of shares to close out the covered short position, the underwriters will consider, among other things, the price of shares available for purchase in the open market as compared to the price at which they may purchase shares through the option to purchase additional shares.

"Naked" short sales are sales in excess of the option to purchase additional shares of our common stock. The underwriters must close out any naked short position by purchasing shares in the open market. A naked short position is more likely to be created if the underwriters are concerned that there may be downward pressure on the price of the shares of our common stock in the open market after pricing that could adversely affect investors who purchase in this offering.

A stabilizing bid is a bid for the purchase of shares of common stock on behalf of the underwriters for the purpose of fixing or maintaining the price of the common stock. A syndicate covering transaction is the bid for or the purchase of shares of common stock on behalf of the underwriters to reduce a short position incurred by the underwriters in connection with the offering. Similar to other purchase transactions, an underwriter's purchases to cover the syndicate short sales may have the effect of raising or maintaining the market price of our common stock or preventing or retarding a decline in the market price of our common stock. As a result, the price of our common stock may be higher than the price that might otherwise exist in the open market. A penalty bid is an arrangement permitting the underwriters to reclaim the selling concession otherwise accruing to a syndicate member in connection with the offering if the common stock originally sold by such syndicate member is purchased in a syndicate covering transaction and therefore has not been effectively placed by such syndicate member.

Neither we nor any of the underwriters make any representation or prediction as to the direction or magnitude of any effect that the transactions described above may have on the price of our common stock. The underwriters are not obligated to engage in these activities and, if commenced, any of the activities may be discontinued at any time.

Electronic Distribution

A prospectus supplement and the accompanying prospectus in electronic format may be made available by e-mail or on the websites or through online services maintained by one or more of the underwriters or their affiliates. In those cases, prospective investors may view offering terms online and may be allowed to place orders online. The underwriters may agree with us to allocate a specific number of shares of common stock for sale to online brokerage account holders. Any such allocation for online distributions will be made by the underwriters on the same basis as other allocations. Other than the prospectus supplement and the

[Table of Contents](#)

accompanying prospectus in electronic format, the information on the underwriters' websites and any information contained in any other website maintained by any of the underwriters is not part of this prospectus supplement and the accompanying prospectus, has not been approved and/or endorsed by us or the underwriters and should not be relied upon by investors.

Other Activities and Relationships

The underwriters and certain of their affiliates are full-service financial institutions engaged in various activities, which may include securities trading, commercial and investment banking, financial advisory, investment management, investment research, principal investment, hedging, financing and brokerage activities. The underwriters and certain of their affiliates have, from time to time, performed, currently are performing, and may in the future perform, various commercial and investment banking and financial advisory services for us and our affiliates, for which they received or will receive customary fees and expenses.

In the ordinary course of their various business activities, the underwriters and certain of their affiliates may make or hold a broad array of investments and actively trade debt and equity securities (or related derivative securities) and financial instruments (including bank loans) for their own account and for the accounts of their customers, and such investment and securities activities may involve securities and/or instruments issued by us and our affiliates. Any such short positions could adversely affect future trading prices of the common stock offered hereby. The underwriters and certain of their respective affiliates may also communicate independent investment recommendations, market color or trading ideas and/or publish or express independent research views in respect of such securities or instruments and may at any time hold, or recommend to clients that they acquire, long and/or short positions in such securities and instruments.

Other than in the United States, no action has been taken by us or the underwriters that would permit a public offering of the securities offered by this prospectus in any jurisdiction where action for that purpose is required. The securities offered by this prospectus supplement may not be offered or sold, directly or indirectly, nor may this prospectus supplement or any other offering material or advertisements in connection with the offer and sale of any such securities be distributed or published in any jurisdiction, except under circumstances that will result in compliance with the applicable rules and regulations of that jurisdiction. Persons into whose possession this prospectus supplement comes are advised to inform themselves about and to observe any restrictions relating to the offering and the distribution of this prospectus supplement. This prospectus supplement does not constitute an offer to sell or a solicitation of an offer to buy any securities offered by this prospectus supplement in any jurisdiction in which such an offer or a solicitation is unlawful.

Disclaimers About Non-U.S. Jurisdictions

Australia

This prospectus supplement is not a disclosure document for the purposes of Australia's Corporations Act 2001 (Cth) of Australia, or Corporations Act, has not been lodged with the Australian Securities & Investments Commission and is only directed to the categories of exempt persons set out below. Accordingly, if you receive this prospectus supplement in Australia:

You confirm and warrant that you are either:

- a "sophisticated investor" under Section 708(8)(a) or (b) of the Corporations Act;
- a "sophisticated investor" under Section 708(8)(c) or (d) of the Corporations Act and that you have provided an accountant's certificate to the company which complies with the requirements of section 708(8)(c)(i) or (ii) of the Corporations Act and related regulations before the offer has been made;
- a person associated with the Company under Section 708(12) of the Corporations Act; or

[Table of Contents](#)

- a "professional investor" within the meaning of Section 708(11)(a) or (b) of the Corporations Act. To the extent that you are unable to confirm or warrant that you are an exempt sophisticated investor, associated person or professional investor under the Corporations Act, any offer made to you under this prospectus supplement is void and incapable of acceptance.

You warrant and agree that you will not offer any of the securities issued to you pursuant to this prospectus supplement for resale in Australia within 12 months of those securities being issued unless any such resale offer is exempt from the requirement to issue a disclosure document under section 708 of the Corporations Act.

Canada

- A. **Resale Restrictions.** The distribution of the shares in Canada is being made only in the provinces of Ontario, Quebec, Alberta and British Columbia on a private placement basis exempt from the requirement that we prepare and file a prospectus with the securities regulatory authorities in each province where trades of these securities are made. Any resale of the shares in Canada must be made under applicable securities laws which may vary depending on the relevant jurisdiction, and which may require resales to be made under available statutory exemptions or under a discretionary exemption granted by the applicable Canadian securities regulatory authority. Purchasers are advised to seek legal advice prior to any resale of the securities.
- B. **Representations of Canadian Purchasers.** By purchasing shares in Canada and accepting delivery of a purchase confirmation, a purchaser is representing to and the dealer from whom the purchase confirmation is received that:
- the purchaser is entitled under applicable provincial securities laws to purchase the shares of common stock without the benefit of a prospectus qualified under those securities laws as it is an "accredited investor" as defined under National Instrument 45-106 — Prospectus Exemptions;
 - the purchaser is a "permitted client" as defined in National Instrument 31-103 — Registration Requirements, Exemptions and Ongoing Registrant Obligations;
 - where required by law, the purchaser is purchasing as principal and not as agent; and
 - the purchaser has reviewed the text above under Resale Restrictions.
- C. **Conflicts of Interest.** Canadian purchasers are hereby notified that the underwriters are relying on the exemption set out in section 3A.3 or 3A.4, if applicable, of National Instrument 33-105 — Underwriting Conflicts from having to provide certain conflict of interest disclosure in this document.
- D. **Statutory Rights of Action.** Securities legislation in certain provinces or territories of Canada may provide a purchaser with remedies for rescission or damages if the prospectus supplement (including any amendment thereto) such as this document contains a misrepresentation, provided that the remedies for rescission or damages are exercised by the purchaser within the time limit prescribed by the securities legislation of the purchaser's province or territory. The purchaser of these securities in Canada should refer to any applicable provisions of the securities legislation of the purchaser's province or territory for particulars of these rights or consult with a legal advisor.
- E. **Enforcement of Legal Rights.** All of our directors and officers as well as the experts named herein may be located outside of Canada and, as a result, it may not be possible for Canadian purchasers to effect service of process within Canada upon us or those persons. All or a substantial portion of our assets and the assets of those persons may be located outside of Canada and, as a result, it may not be possible to satisfy a judgment against us or those persons in Canada or to enforce a judgment obtained in Canadian courts against us or those persons outside of Canada.
- F. **Taxation and Eligibility for Investment.** Canadian purchasers of shares of common stock should consult their own legal and tax advisors with respect to the tax consequences of an investment in the company

[Table of Contents](#)

in their particular circumstances and about the eligibility of the shares of common stock for investment by the purchaser under relevant Canadian legislation.

European Economic Area

In relation to each Member State of the European Economic Area (each, an "EEA Member State"), no offer of shares of common stock may be made to the public in that EEA Member State other than:

- (a) to any legal entity which is a "qualified investor" as defined in the Prospectus Regulation;
- (b) to fewer than 150 natural or legal persons (other than qualified investors as defined in the Prospectus Regulation), as permitted under the Prospectus Regulation, subject to obtaining the prior consent of the representatives; or
- (c) in any other circumstances falling within Article 1(4) of the Prospectus Regulation,

provided that no such offer of shares shall require the Company or the representatives to publish a prospectus pursuant to Article 3 of the Prospectus Regulation or supplement a prospectus pursuant to Article 23 of the Prospectus Regulation.

Each person in an EEA Member State who initially acquires any shares or to whom any offer is made will be deemed to have represented, acknowledged and agreed to and with each of the representatives and the Company that it is a "qualified investor" within the meaning of the law in that EEA Member State implementing Article 2(1)(e) of the Prospectus Regulation. In the case of any shares being offered to a financial intermediary as that term is used in Article 3(2) of the Prospectus Regulation, each such financial intermediary will be deemed to have represented, acknowledged and agreed that the shares acquired by it in the offer have not been acquired on a non-discretionary basis on behalf of, nor have they been acquired with a view to their offer or resale to, persons in circumstances which may give rise to an offer of any shares to the public other than their offer or resale in an EEA Member State to qualified investors as so defined or in circumstances in which the prior consent of the representatives has been obtained to each such proposed offer or resale.

For the purposes of this provision, the expression "offer of shares to the public" in relation to any shares in any EEA Member State means the communication in any form and by any means of sufficient information on the terms of the offer and the shares to be offered so as to enable an investor to decide to purchase or subscribe the shares, and the expression "Prospectus Regulation" means Regulation (EU) 2017/1129.

Hong Kong

No securities have been offered or sold, and no securities may be offered or sold, in Hong Kong, by means of any document, other than to persons whose ordinary business is to buy or sell securities, whether as principal or agent; or to "professional investors" as defined in the Securities and Futures Ordinance (Cap. 571) of Hong Kong, or the SFO, and any rules made under that Ordinance; or in other circumstances which do not result in the document being a "prospectus" as defined in the Companies Ordinance (Cap. 32) of Hong Kong, or the CO, or which do not constitute an offer or invitation to the public for the purpose of the CO or the SFO. No document, invitation or advertisement relating to the securities has been issued or may be issued or may be in the possession of any person for the purpose of issue (in each case whether in Hong Kong or elsewhere), which is directed at, or the contents of which are likely to be accessed or read by, the public of Hong Kong (except if permitted under the securities laws of Hong Kong) other than with respect to securities which are or are intended to be disposed of only to persons outside Hong Kong or only to "professional investors" as defined in the SFO and any rules made under that Ordinance.

This prospectus supplement has not been registered with the Registrar of Companies in Hong Kong. Accordingly, this prospectus supplement may not be issued, circulated or distributed in Hong Kong, and the securities may not be offered for subscription to members of the public in Hong Kong. Each person acquiring the securities will be required, and is deemed by the acquisition of the securities, to confirm that

[Table of Contents](#)

he is aware of the restriction on offers of the securities described in this prospectus supplement and the relevant offering documents and that he is not acquiring, and has not been offered any securities in circumstances that contravene any such restrictions.

Israel

This document does not constitute a prospectus under the Israeli Securities Law, 5728-1968, or the Securities Law, and has not been filed with or approved by the Israel Securities Authority. In Israel, this prospectus is being distributed only to, and is directed only at, and any offer of the shares of common stock is directed only at, (i) a limited number of persons in accordance with the Israeli Securities Law and (ii) investors listed in the first addendum, or the Addendum, to the Israeli Securities Law, consisting primarily of joint investment in trust funds, provident funds, insurance companies, banks, portfolio managers, investment advisors, members of the Tel Aviv Stock Exchange, underwriters, venture capital funds, entities with equity in excess of NIS 50 million and "qualified individuals," each as defined in the Addendum (as it may be amended from time to time), collectively referred to as qualified investors (in each case, purchasing for their own account or, where permitted under the Addendum, for the accounts of their clients who are investors listed in the Addendum). Qualified investors are required to submit written confirmation that they fall within the scope of the Addendum, are aware of the meaning of same and agree to it.

Japan

This offering has not been and will not be registered under the Financial Instruments and Exchange Law of Japan (Law No. 25 of 1948 of Japan, as amended), or FIEL, and the Initial Purchaser will not offer or sell any securities, directly or indirectly, in Japan or to, or for the benefit of, any resident of Japan (which term as used herein means any person resident in Japan, including any corporation or other entity organized under the laws of Japan), or to others for re-offering or resale, directly or indirectly, in Japan or to, or for the benefit of, any resident of Japan, except pursuant to an exemption from the registration requirements of, and otherwise in compliance with, the FIEL and any other applicable laws, regulations and ministerial guidelines of Japan.

Singapore

This prospectus supplement has not been and will not be lodged or registered as a prospectus with the Monetary Authority of Singapore. Accordingly, this prospectus supplement and any other document or material in connection with the offer or sale, or invitation for subscription or purchase, of the shares of common stock may not be circulated or distributed, nor may the shares of common stock be offered or sold, or be made the subject of an invitation for subscription or purchase, whether directly or indirectly, to persons in Singapore other than (i) to an institutional investor under Section 274 of the Securities and Futures Act, Chapter 289 of Singapore, or the SFA, (ii) to a relevant person pursuant to Section 275(1), or any person pursuant to Section 275(1A), and in accordance with the conditions specified in Section 275, of the SFA, or (iii) otherwise pursuant to, and in accordance with the conditions of, any other applicable provision of the SFA.

Where the shares of common stock are subscribed or purchased under Section 275 of the SFA by a relevant person which is:

- (a) a corporation (which is not an accredited investor (as defined in Section 4A of the SFA)) the sole business of which is to hold investments and the entire share capital of which is owned by one or more individuals, each of whom is an accredited investor; or
- (b) a trust (where the trustee is not an accredited investor) whose sole purpose is to hold investments and each beneficiary of the trust is an individual who is an accredited investor, securities (as defined in Section 239(1) of the SFA) of that corporation or the beneficiaries' rights and interest (howsoever

[Table of Contents](#)

described) in that trust shall not be transferred within six months after that corporation or that trust has acquired the securities pursuant to an offer made under Section 275 of the SFA except:

- (i) to an institutional investor or to a relevant person defined in Section 275(2) of the SFA, or to any person arising from an offer referred to in Section 275(1A) or Section 276(4)(i)(B) of the SFA;
- (ii) where no consideration is or will be given for the transfer;
- (iii) where the transfer is by operation of law;
- (iv) as specified in Section 276(7) of the SFA; or
- (v) as specified in Regulation 32 of the Securities and Futures (Offers of Investments) (Shares and Debentures) Regulations 2005 of Singapore.

Switzerland

The securities may not be publicly offered in Switzerland and will not be listed on the SIX Swiss Exchange, or the SIX, or on any other stock exchange or regulated trading facility in Switzerland. This prospectus supplement has been prepared without regard to the disclosure standards for issuance prospectuses under art. 652a or art. 1156 of the Swiss Code of Obligations or the disclosure standards for listing prospectuses under art. 27 ff. of the SIX Listing Rules or the listing rules of any other stock exchange or regulated trading facility in Switzerland. Neither this prospectus supplement nor any other offering or marketing material relating to the securities or this offering may be publicly distributed or otherwise made publicly available in Switzerland.

Neither this prospectus supplement nor any other offering or marketing material relating to this offering, the company or the securities have been or will be filed with or approved by any Swiss regulatory authority. In particular, this prospectus supplement will not be filed with, and the offer of securities will not be supervised by, the Swiss Financial Market Supervisory Authority FINMA, and the offer of securities has not been and will not be authorized under the Swiss Federal Act on Collective Investment Schemes, or the CISA. The investor protection afforded to acquirers of interests in collective investment schemes under the CISA does not extend to acquirers of securities.

United Kingdom

This prospectus supplement is only being distributed to, and is only directed at, persons in the United Kingdom that are qualified investors within the meaning of Article 2(1)(e) of the Prospectus Regulation that are also (i) investment professionals falling within Article 19(5) of the Financial Services and Markets Act 2000 (Financial Promotion) Order 2005, as amended, or the Order, and/or (ii) high net worth entities falling within Article 49(2)(a) to (d) of the Order and other persons to whom it may lawfully be communicated (each such person being referred to as a relevant person).

This prospectus supplement and its contents are confidential and should not be distributed, published or reproduced (in whole or in part) or disclosed by recipients to any other persons in the United Kingdom. Any person in the United Kingdom that is not a relevant person should not act or rely on this document or any of its contents.

LEGAL MATTERS

Certain legal matters in connection with the offering of our common stock will be passed upon for us by Davis Graham & Stubbs LLP, Denver, Colorado. Certain legal matters in connection with the offering of the common stock will be passed upon for the underwriters by Latham & Watkins LLP, San Diego, California.

EXPERTS

Plante & Moran, PLLC independent registered public accounting firm, has audited our consolidated financial statements included in our Annual Report on [Form 10-K for the year ended March 31, 2020](#), and the effectiveness of our internal control over financial reporting as of March 31, 2020, as set forth in their report, which is incorporated by reference in this prospectus and elsewhere in the registration statement. Our financial statements are incorporated by reference in reliance on Plante & Moran, PLLC's reports, given on their authority as experts in accounting and auditing.

PROSPECTUS

MESA LABORATORIES, INC.



Debt Securities

Common Stock

Preferred Stock

Depositary Shares

Warrants

Purchase Contracts

Units

By this prospectus, we may offer and sell from time to time, in amounts, on terms and at prices that will be determined at the time of offering in one or more offerings, debt securities, common stock, preferred stock, depositary shares, warrants, purchase contracts, units or any combination thereof as described in this prospectus. The warrants may be convertible into or exercisable or exchangeable for common stock or preferred stock, the preferred stock may be convertible into or exchangeable for common stock and the debt securities may be convertible into or exchangeable for common stock or preferred stock. You should carefully read this prospectus, any prospectus supplement and any related free writing prospectus, as well as any documents incorporated in any of the foregoing by reference, before you invest in our securities. This prospectus may not be used to sell our securities unless accompanied by a prospectus supplement. The prospectus supplement or any related free writing prospectus may also add to, update, supplement or clarify information contained in this prospectus.

Our common stock is traded on the Nasdaq Global Select Market under the symbol "MLAB."

We may offer and sell our securities to or through one or more agents, underwriters, dealers or other third parties or directly to one or more purchasers on a continuous or delayed basis. If agents, underwriters or dealers are used to sell our securities, we will name them and describe their compensation in a prospectus supplement. The price to the public of our securities and the net proceeds we expect to receive from the sale of such securities will also be set forth in a prospectus supplement.

INVESTING IN OUR SECURITIES INVOLVES A HIGH DEGREE OF RISK. YOU SHOULD CAREFULLY REVIEW THE RISKS AND UNCERTAINTIES REFERENCED UNDER THE HEADING "RISK FACTORS" ON PAGE 3 OF THIS PROSPECTUS AS WELL AS THOSE CONTAINED IN THE APPLICABLE PROSPECTUS SUPPLEMENT AND ANY RELATED FREE WRITING PROSPECTUS, AND IN THE OTHER DOCUMENTS THAT ARE INCORPORATED BY REFERENCE INTO THIS PROSPECTUS OR THE APPLICABLE PROSPECTUS SUPPLEMENT.

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 August 6, 2019.

TABLE OF CONTENTS

ABOUT THIS PROSPECTUS	1
WHERE YOU CAN FIND ADDITIONAL INFORMATION	2
INCORPORATION OF CERTAIN INFORMATION BY REFERENCE	2
SPECIAL NOTE REGARDING FORWARD-LOOKING STATEMENTS	3
RISK FACTORS	3
ABOUT THE COMPANY	4
DESCRIPTION OF CAPITAL STOCK	4
DESCRIPTION OF DEBT SECURITIES	6
DESCRIPTION OF DEPOSITARY SHARES	14
DESCRIPTION OF WARRANTS	14
DESCRIPTION OF PURCHASE CONTRACTS	15
DESCRIPTION OF UNITS	16
USE OF PROCEEDS	16
PLAN OF DISTRIBUTION	16
LEGAL MATTERS	20
EXPERTS	20

ABOUT THIS PROSPECTUS

This prospectus is part of an automatic shelf registration statement that we filed with the Securities and Exchange Commission, or the SEC, as a "well-known seasoned issuer" as defined in Rule 405 under the Securities Act of 1933, as amended, or the Securities Act. Under this shelf registration, we may offer shares of our common stock and preferred stock, debt securities, depositary shares, warrants to purchase common stock or preferred stock, purchase contracts, units, or any combination thereof, from time to time in one or more offerings. This prospectus only provides you with a general description of the securities we may offer. Each time we offer our securities under this prospectus, we will provide a prospectus supplement that will contain more specific information about the specific terms of the offering. We may also authorize one or more free writing prospectuses to be provided to you that may contain material information relating to these offerings. This prospectus may not be used to sell our securities unless accompanied by a prospectus supplement. Each such prospectus supplement and any related free writing prospectus that we may authorize to be provided to you may also add, update or change information contained in this prospectus or in documents incorporated by reference into this prospectus. We urge you to carefully read this prospectus, any applicable prospectus supplement and any related free writing prospectus, together with the information incorporated herein by reference as described under the headings "Where You Can Find Additional Information" and "Incorporation of Certain Information by Reference" before you invest in our securities.

We have not authorized anyone to provide you with information in addition to or different from that contained or incorporated by reference into this prospectus, any applicable prospectus supplement and any related free writing prospectus. We take no responsibility for, and can provide no assurances as to the reliability of, any information not contained in this prospectus, any applicable prospectus supplement or any related free writing prospectus that we may authorize to be provided to you. This prospectus is an offer to sell only the securities offered hereby, but only under circumstances and in jurisdictions where it is lawful to do so. You should assume that the information in this prospectus, any applicable prospectus supplement or any related free writing prospectus is accurate only as of the date on the front of the document and that any information incorporated by reference is accurate only as of the date of the document incorporated by reference, regardless of the time of delivery of this prospectus, any applicable prospectus supplement or any related free writing prospectus, or any sale of a security. Our business, financial condition, results of operations and prospects may have changed since those dates.

This prospectus contains summaries of certain provisions contained in some of the documents described herein, but reference is made to the actual documents for complete information. All of the summaries are qualified in their entirety by the actual documents. Copies of some of the documents referred to herein have been filed, will be filed or will be incorporated by reference as exhibits to the registration statement of which this prospectus is a part, and you may obtain copies of those documents as described below under the heading "Where You Can Find Additional Information."

Unless otherwise mentioned or unless the context requires otherwise, throughout this prospectus, any applicable prospectus supplement and any related free writing prospectus, the words "Mesa," "we," "us," "our," the "company" or similar references refer to Mesa Laboratories, Inc. and its subsidiaries; and the term "securities" refers collectively to our common stock, preferred stock, debt securities, depositary shares, warrants to purchase common stock or preferred stock, purchase contracts, units, or any combination of the foregoing securities.

This prospectus and the information incorporated herein by reference contain references to trademarks, service marks and trade names owned by us or other companies. Solely for convenience, trademarks, service marks and trade names referred to in this prospectus and the information incorporated herein, including logos, artwork, and other visual displays, may appear without the ® or ™ symbols, but such references are not intended to indicate, in any way, that we will not assert, to the fullest extent under applicable law, our rights or the rights of the applicable licensor to these

[Table of Contents](#)

trademarks, service marks and trade names. We do not intend our use or display of other companies' trade names, service marks or trademarks to imply a relationship with, or endorsement or sponsorship of us by, any other companies. All trademarks, service marks and trade names included or incorporated by reference into this prospectus, any applicable prospectus supplement or any related free writing prospectus are the property of their respective owners.

WHERE YOU CAN FIND ADDITIONAL INFORMATION

This prospectus is part of a registration statement that we have filed with the SEC. Certain information in the registration statement has been omitted from this prospectus in accordance with the rules of the SEC. We are subject to the information requirements of the Securities Exchange Act of 1934, as amended, or the Exchange Act, and, in accordance therewith, file annual, quarterly and special reports, proxy statements and other information with the SEC. These documents may be accessed through the SEC's Electronic Data Gathering, Analysis and Retrieval system, or EDGAR, via electronic means, including the SEC's home page on the Internet (www.sec.gov) or on our website at www.mesalabs.com/investor-relations. The information contained in, or that can be accessed through, our website is not part of this prospectus.

INCORPORATION OF CERTAIN INFORMATION BY REFERENCE

The SEC allows us to incorporate by reference the information and reports we file with it, which means that we can disclose important information to you by referring you to these documents. The information incorporated by reference is an important part of this prospectus. Information in this prospectus supersedes information incorporated by reference that we filed with the SEC prior to the date of this prospectus, while information that we file after the date hereof with the SEC will automatically update and supersede the information in this prospectus. We are incorporating by reference the documents listed below, which we have already filed with the SEC, and any future filings we make with the SEC under Sections 13(a), 13(c), 14 or 15(d) of the Exchange Act, except as to any portion of any future report or document that is not deemed filed under such provisions, after the date of this prospectus and prior to the termination of this offering:

- [Annual Report on Form 10-K for the year ended March 31, 2019](#), as filed with the SEC on June 3, 2019, including [Amendment No. 1](#) thereto, as filed with the SEC on July 18, 2019;
- [Quarterly Report on Form 10-Q for the fiscal quarter ended June 30, 2019](#), as filed with the SEC on July 30, 2019;
- Current Reports on Form 8-K, as filed with the SEC on [May 10, 2019](#) and [June 5, 2019](#);
- [Current reports on Form 8-K/A, as filed with the SEC on August 5, 2019; and](#)
- The description of our common stock contained in our Registration Statement on Form 8-A filed on April 2, 1984, including any amendments or reports filed for the purpose of updating such description, and as amended and superseded by the disclosure in "Description of Capital Stock" in this prospectus.

You may request a copy of these filings, at no cost, by writing or telephoning us at the following address or phone number:

Mesa Laboratories, Inc.
12100 West Sixth Avenue
Lakewood, CO 80228
Attention: Investor Relations
303-987-8000

[Table of Contents](#)

You may also access these documents, free of charge on the SEC's website at www.sec.gov or on our website at www.mesalabs.com/investor-relations. The information contained in, or that can be accessed through, our website is not part of this prospectus.

This prospectus is part of a registration statement we filed with the SEC. We have incorporated exhibits into this registration statement. You should read the exhibits carefully for provisions that may be important to you.

SPECIAL NOTE REGARDING FORWARD-LOOKING STATEMENTS

This prospectus, including the documents that we incorporate by reference, contains forward-looking statements within the meaning of Section 27A of the Securities Act and Section 21E of the Exchange Act. Any statements about our expectations, beliefs, plans, objectives, assumptions or future events or performance are not historical facts and may be forward-looking. These statements are often, but are not always, made through the use of words or phrases such as "may," "will," "could," "should," "expects," "intends," "plans," "anticipates," "believes," "estimates," "predicts," "projects," "potential," "continue," and similar expressions, or the negative of these terms, or similar expressions. Accordingly, these statements involve estimates, assumptions and uncertainties which could cause actual results to differ materially from those expressed in them. Any forward-looking statements are qualified in their entirety by reference to the factors discussed throughout this report, and in particular those factors referenced in the section "Risk Factors."

This prospectus contains forward- looking statements that are based on our management's belief and assumptions and on information currently available to our management. These statements relate to future events or our future financial performance, and involve known and unknown risks, uncertainties and other factors that may cause our actual results, levels of activity, performance or achievements to be materially different from any future results, levels of activity, performance or achievements expressed or implied by these forward-looking statements. Forward-looking statements include, but are not limited to, statements about: the acceptance by the market of our products, the implementation of our business model, strategic plans for our business, including potential divestitures of divisions (and the timing of such divestitures) and acquisitions of businesses or new products, products and technology, the scope of protection we are able to establish and maintain for intellectual property rights covering our products and technology, estimates of our expenses, future revenues and capital requirements, our ability to maintain and establish key customer relationships, and our financial performance, developments relating to our competitors and our industry. Given these uncertainties, you should not place undue reliance on these forward-looking statements. You should read this prospectus, any supplements to this prospectus and the documents that we incorporate by reference in this prospectus with the understanding that our actual future results may be materially different from what we expect. Except as required by law, we do not undertake any obligation to update or revise any forward-looking statements contained in this prospectus or any supplement to this prospectus, whether as a result of new information, future events or otherwise.

RISK FACTORS

Investing in our securities involves a high degree of risk. You should carefully consider the risks described in the documents incorporated by reference in this prospectus and any prospectus supplement, as well as other information we include or incorporate by reference into this prospectus and any applicable prospectus supplement, before making an investment decision. Our business, financial condition or results of operations could be materially adversely affected by the materialization of any of these risks. The trading price of our securities could decline due to the materialization of any of these risks, and you may lose all or part of your investment. This prospectus and the documents incorporated herein by reference also contain forward-looking statements that involve risks and uncertainties. Actual results could differ materially from those anticipated in these forward-looking

[Table of Contents](#)

statements as a result of certain factors, including the risks described in the documents incorporated herein by reference, including (i) our most recent annual report on [Form 10-K](#) which is on file with the SEC and is incorporated herein by reference and (ii) other documents we file with the SEC that are deemed incorporated by reference into this prospectus.

ABOUT THE COMPANY

Mesa Laboratories, Inc. designs, manufactures, and markets quality control products and services, many of which are required by regulatory requirements. Our philosophy is to manufacture products of exceptional quality and provide a high level of ongoing service for those products. Our revenues come from product sales, which include hardware and software, and consumables; as well as services, which include installation, discrete maintenance services, and ongoing maintenance contracts. Our strategic goals are to continue to grow revenues and profits through three key strategies—(1) improving our commercial channels, (2) introducing new products to the market, and (3) seeking out companies or product lines to acquire.

We were incorporated in Colorado in 1982. Our principal executive offices and corporate headquarters are located at 12100 West Sixth Ave., Lakewood, Colorado 80228, and our telephone number is 303-987-8000. Our website is www.mesalabs.com. The information contained in or connected to our website is not incorporated by reference into this prospectus and should not be considered a part hereof.

DESCRIPTION OF CAPITAL STOCK

In the discussion that follows, we have summarized selected provisions of our Articles of Incorporation and our Bylaws, relating to our capital stock. You should read our Articles of Incorporation and our Bylaws for more details regarding the provisions we describe below and for other provisions that may be important to you. We have filed copies of those documents with the SEC, and they are incorporated by reference as exhibits to the registration statement. Please read "Where You Can Find More Information."

Our authorized capital stock consists of 25,000,000 shares of common stock, no par value, and 1,000,000 shares of preferred stock, no par value. The following is a summary of the material provisions of the common stock and the preferred stock contained in our Articles of Incorporation and Bylaws.

Common Stock

As of August 5, 2019, there were 3,923,982 shares of common stock issued and outstanding.

The holders of our common stock are entitled to one vote per share on all matters to be voted upon by the stockholders. The holders of common stock are entitled to receive ratably dividends, if any, as may be declared from time to time by the board of directors out of funds legally available for that purpose. In the event of our liquidation, dissolution or winding up, the holders of common stock are entitled to share ratably in all assets remaining after payment of liabilities. The common stock has no preemptive or conversion rights or other subscription rights. There are no redemption or sinking fund provisions applicable to the common stock. Issued shares of common stock for which appropriate consideration have been received are non-assessable and shareholders are not liable for the debts or other obligations of the company.

Preferred Stock

As of August 5, 2019, there were no shares of preferred stock issued and outstanding.

Our Articles of Incorporation authorize our board of directors, subject to any limitations prescribed by law, without further stockholder approval, to establish and to issue from time to time one

[Table of Contents](#)

or more classes or series of preferred stock, no par value per share, covering up to an aggregate of 1,000,000 shares of preferred stock. Each class or series of preferred stock will cover the number of shares and will have the powers, preferences, rights, qualifications, limitations and restrictions determined by the board of directors.

Certain Provisions of Our Articles of Incorporation and Bylaws and Colorado Law

Certain provisions of our Articles of Incorporation and our Bylaws could make our acquisition by a third party, a change in our incumbent directors, or a similar change of control more difficult. These provisions, which are summarized below, may discourage certain types of takeover practices and inadequate takeover bids. These provisions are also designed to encourage persons seeking to acquire control of us to first negotiate with our board of directors. These provisions of our Articles of Incorporation and Bylaws may also be significant because they define certain of the aspects of our corporate governance.

Election of Directors. Our Bylaws provide that the board of directors may increase the size of our board and designate the directors to fill the vacancies.

No Cumulative Voting. Our Articles of Incorporation provide that no shareholder is permitted to cumulate its votes in the election of directors.

Advance Notice Bylaws. Our Bylaws require a shareholder seeking to nominate a candidate for election as director or to propose other business at a meeting of shareholders to provide us notice of the proposed candidate or business within a specified period in advance of the meeting.

Exclusive Forum. Our Bylaws provide that unless the Company consents in writing to the selection of an alternative forum, the sole and exclusive forum for any of the following shall be a state court within the State of Colorado, or, if no state court located within the State of Colorado has jurisdiction, the federal district court for the District of Colorado: (i) any claim that is based upon a violation of a duty under the laws of Colorado by a current or former director, officer, or shareholder in such capacity, (ii) any derivative action or proceeding brought on behalf of the Company, (iii) any action asserting a claim arising pursuant to any provision of the Colorado Business Corporation Act, the Articles of Incorporation or the Bylaws, (iv) any action asserting a claim governed by the internal affairs doctrine that is not included in (i) through (iii).

Limitations on Liability. Our Articles of Incorporation provide that no person who is or was a director will be personally liable to us or to our shareholders for monetary damages for breach of fiduciary duty as a director, so long as such director acted in good faith, subject to certain exceptions under the Colorado Business Corporation Act.

We have also obtained policies of directors' and officers' liability insurance. These policies insure our directors and officers against the cost of defense, settlement or payment of a judgment under certain circumstances. The existence of such limitation on liability, indemnification and insurance may impede a change of control of us to the extent that a hostile acquirer seeks to litigate its contest for control with our directors and officers.

Transfer Agent

The transfer agent for our common stock is Computershare Trust Company, N.A. Its address is 8742 Lucent Blvd., Suite 225, Highlands Ranch, Colorado 80129 and its telephone number is (303) 262-0600.

Listing

Our common stock is quoted on the Nasdaq Global Select Market, or Nasdaq under the trading symbol "MLAB."

DESCRIPTION OF DEBT SECURITIES

General

The debt securities that we may offer by this prospectus consist of notes, debentures, or other evidences of our indebtedness, which we refer to collectively as "debt securities." This prospectus describes certain general terms and provisions of the debt securities. When we offer to sell a particular series of debt securities, we will describe the specific terms for the debt securities in a supplement to this prospectus. The prospectus supplement will also indicate whether the general terms and provisions described in this prospectus apply to a particular series of debt securities. The debt securities will be issued under an indenture between us and a trustee named in the prospectus supplement. We have summarized select portions of the form of the indenture below. The summary is not complete. The form of the indenture has been filed as an exhibit to the registration statement, and you should read the indenture for provisions that may be important to you.

In this description, the words "Mesa," "we," "us," and "our" refer only to Mesa Laboratories, Inc., and not to any of our subsidiaries or affiliates. Additional or different provisions that are applicable to a particular series of debt securities will, if material, be described in a prospectus supplement relating to the offering of debt securities of that series. These provisions may include, among other things and to the extent applicable, the following:

- the title of the debt securities;
- the extent, if any, to which the debt securities are subordinated in right of payment to our other indebtedness;
- any provisions relating to any security provided for the debt securities;
- any limit on the aggregate principal amount of the debt securities;
- the persons to whom any interest on the debt securities will be payable, if other than the registered holders thereof on the regular record date therefor;
- the date or dates on which the principal of the debt securities will be payable;
- the rate or rates at which the debt securities will bear interest, if any, and the date or dates from which interest will accrue;
- the dates on which interest will be payable and the regular record dates for interest payment dates;
- the place or places where the principal of and any premium and interest on the debt securities will be payable;
- the period or periods, if any, within which, and the price or prices at which, the debt securities may be redeemed, in whole or in part, at our option;
- our obligation, if any, to redeem or purchase the debt securities pursuant to sinking fund or similar provisions and the terms and conditions of any such redemption or purchase;
- the denominations in which the debt securities will be issuable, if other than denominations of \$1,000 and any integral multiple thereof;
- the currency, currencies or currency units, if other than currency of the United States of America, in which payment of the principal of and any premium or interest on the debt

[Table of Contents](#)

securities will be payable, and the terms and conditions of any elections that may be made available with respect thereto;

- any index or formula used to determine the amount of payments of principal of and any premium or interest on the debt securities;
- whether the debt securities are to be issued in whole or in part in the form of one or more global securities and, if so, the identity of the depositary, if any, for the global securities;
- the terms and conditions, if any, pursuant to which the debt securities are convertible into or exchangeable for our common stock or other securities of us or any other person;
- the principal amount (or any portion of the principal amount) of the debt securities which will be payable upon any declaration of acceleration of the maturity of the debt securities pursuant to an event of default; and
- the applicability to the debt securities of the provisions described in "—Defeasance" below.

We may issue debt securities at a discount from their stated principal amount. Federal income tax considerations and other special considerations applicable to any debt security issued with original issue discount (an "original issue discount security") may be described in an applicable prospectus supplement.

If the purchase price of any series of the debt securities is payable in a foreign currency or currency unit or if the principal of or any premium or interest on any series of the debt securities is payable in a foreign currency or currency unit, the restrictions, elections, general tax considerations, specific terms, and other information with respect to the debt securities and the applicable foreign currency or currency unit will be set forth in an applicable prospectus supplement.

Unless otherwise indicated in an applicable prospectus supplement:

- the debt securities will be issued only in fully registered form (without coupons) in denominations of \$1,000 or integral multiples thereof; and
- payment of principal, premium, if any, and interest on the debt securities will be payable, and the exchange, conversion, and transfer of debt securities will be registrable, at our office or agency maintained for those purposes and at any other office or agency maintained for those purposes. No service charge will be made for any registration of transfer or exchange of the debt securities, but we may require payment of a sum sufficient to cover any tax or other governmental charge imposed in connection therewith.

Global Securities

The debt securities of a series may be issued in whole or in part in the form of one or more global securities that will be deposited with, or on behalf of, a depositary or its nominee identified in an applicable prospectus supplement. Unless and until it is exchanged in whole or in part for debt securities in registered form, a global security may not be registered for transfer or exchange except:

- by the depositary to a nominee of the depositary;
- by a nominee of the depositary to the depositary or another nominee of the depositary;
- by the depositary or any nominee of the depositary to a successor depositary or a nominee of the successor depositary; or
- in any other circumstances described in an applicable prospectus supplement.

[Table of Contents](#)

The specific terms of the depositary arrangement with respect to any debt securities to be represented by a global security will be described in an applicable prospectus supplement. We expect that the following provisions will apply to depositary arrangements.

Unless otherwise specified in an applicable prospectus supplement, any global security that represents debt securities will be registered in the name of the depositary or its nominee. Upon the deposit of a global security with or on behalf of the depositary for the global security, the depositary will credit, on its book-entry registration and transfer system, the respective principal amounts of the debt securities represented by the global security to the accounts of institutions that are participants in such system. The accounts to be credited will be designated by the underwriters or agents of the debt securities or by us, if the debt securities are offered and sold directly by us.

Ownership of beneficial interests in debt securities represented by a global security will be limited to participants in the book-entry registration and transfer system of the applicable depositary or persons that may hold interests through those participants. Ownership of those beneficial interests by participants will be shown on, and the transfer of ownership will be effected only through, records maintained by the depositary or its nominee for such global security. Ownership of such beneficial interests by persons that hold through such participants will be shown on, and the transfer of such ownership will be effected only through, records maintained by the participants. The laws of some jurisdictions require that specified purchasers of securities take physical delivery of their securities in definitive form. These laws may impair your ability to transfer beneficial interests in a global security.

So long as the depositary for a global security, or its nominee, is the registered owner of the global security, the depositary or the nominee, as the case may be, will be considered the sole owner or holder of the debt securities represented by the global security for all purposes under the applicable indenture. Unless otherwise specified in an applicable prospectus supplement, owners of beneficial interests in the global security will not be entitled to have any of the debt securities represented by the global security registered in their names, will not receive or be entitled to receive physical delivery of any such debt securities in certificated form, and will not be considered the owners or holders of the debt securities for any purpose under the applicable indenture. Accordingly, each person owning a beneficial interest in debt securities represented by a global security must rely on the procedures of the applicable depositary and, if the person is not a participant in the book-entry registration and transfer system of the applicable depositary, on the procedures of the participant through which the person owns its interest, to exercise any rights of an owner or holder of debt securities under the applicable indenture.

We understand that, under existing industry practices, if an owner of a beneficial interest in debt securities represented by a global security desires to give any notice or take any action that an owner or holder of debt securities is entitled to give or take under the applicable indenture:

- the applicable depositary would authorize its participants to give the notice or take the action; and
- the participants would authorize persons owning the beneficial interests through the participants to give the notice or take the action or would otherwise act upon the instructions of the persons owning the beneficial interests.

Principal of and any premium and interest on debt securities represented by a global security will be payable in the manner described in an applicable prospectus supplement. Payment of principal of, and any premium or interest on, debt securities represented by a global security will be made to the applicable depositary or its nominee, as the case may be, as the registered owner or the holder of the global security. None of us, the trustee, any paying agent, or the registrar for debt securities represented by a global security will have any responsibility or liability for any aspect of the records relating to or payments made on account of beneficial ownership interests in those debt securities or for maintaining, supervising, or reviewing any records relating to those beneficial ownership interests.

Certain Covenants

Maintenance of Office or Agency. We will be required to maintain an office or agency in each place of payment for each series of debt securities for notice and demand purposes and for the purposes of presenting or surrendering debt securities for payment, registration of transfer, or exchange.

Paying Agents, Etc. If we act as our own paying agent with respect to any series of debt securities, on or before each due date of the principal of or interest on any of the debt securities of that series, we will be required to segregate and hold in trust for the benefit of the persons entitled to payment a sum sufficient to pay the amount due and to notify the trustee promptly of our action or failure to act. If we have one or more paying agents for any series of debt securities, prior to each due date of the principal of or interest on any debt securities of that series, we will be required to deposit with a paying agent a sum sufficient to pay the amount due and, unless the paying agent is the trustee, to promptly notify the trustee of our action or failure to act. All moneys paid by us to a paying agent for the payment of principal of or interest on any debt securities that remain unclaimed for two years after the principal or interest has become due and payable may be repaid to us, and thereafter the holder of those debt securities may look only to us for payment thereof.

Existence. We will be required to, and will be required to cause our subsidiaries to, preserve and keep in full force and effect our and their existence, charter rights, statutory rights, and franchises, except to the extent that our board of directors determines that the preservation thereof no longer is desirable in the conduct of our business.

Restrictive Covenants. Any restrictive covenants applicable to any series of debt securities will be described in an applicable prospectus supplement.

Events of Default

When we use the term "Event of Default" with respect to debt securities of any series, we generally mean:

1. We default in the payment of any interest on any debt security of that series when due, which default continues for 30 days;
2. We default in the payment when due of the principal of or premium, if any, on any debt security of that series when due;
3. We default in the deposit of any sinking fund payment when due, if applicable;
4. We default in the performance, or breach, of certain of our covenants set forth in the applicable indenture, such as covenants relating to:
 - the requirement that we maintain an office in the United States where debt securities of that series may be presented or surrendered for payment and registration of transfer or exchange and where notices and demands may be served upon us in respect of debt securities of that series and the applicable indenture,
 - the requirement to hold in trust funds for payments with respect to debt securities of that series if we act as paying agent with respect to debt securities of that series, and
 - the requirement that we deliver to the trustee an officer's certificate relating to compliance with conditions and covenants of the indenture (other than a covenant included in the indenture solely for the benefit of a series of debt securities other than that series), which default or breach continues for 90 days after written notice thereof has been given to us as provided in the indenture;

[Table of Contents](#)

5. We default in the performance, or breach, of any other of our covenants in the applicable indenture (other than a covenant included in such indenture solely for the benefit of a series of debt securities other than that series), which default or breach continues for 180 days after written notice thereof has been given to us as provided in the applicable indenture;
6. Specified events of bankruptcy, insolvency, or reorganization involving us or certain of our subsidiaries; and
7. Any other Event of Default provided with respect to debt securities of that series issued under the applicable indenture.

Pursuant to the Trust Indenture Act, the trustee is required, within 90 calendar days after the occurrence of a default in respect of any series of debt securities, to give to the holders of the debt securities of that series notice of all uncured defaults known to it, except that other than in the case of a default of the character contemplated in clause (1) or (2) above, the trustee may withhold notice if and so long as it in good faith determines that the withholding of notice is in the interests of the holders of the debt securities of that series.

If an Event of Default described in clause (6) above occurs, the principal of, premium, if any, and accrued interest on the debt securities of that series will become immediately due and payable without any declaration or other act on the part of the trustee or any holder of the debt securities of that series. If any other Event of Default with respect to debt securities of any series occurs and is continuing, either the trustee or the holders of at least 25% in principal amount of the debt securities of that series may declare the principal amount of all debt securities of that series to be due and payable immediately. However, at any time after a declaration of acceleration with respect to debt securities of any series has been made, but before a judgment or decree based on such acceleration has been obtained, the holders of a majority in principal amount of the debt securities of that series may, under specified circumstances, rescind and annul such acceleration. See "—Modification and Waiver" below.

Subject to the duty of the trustee to act with the required standard of care during an Event of Default, the trustee will have no obligation to exercise any of its rights or powers under the applicable indenture at the request or direction of the holders of debt securities, unless holders of debt securities shall have furnished to the trustee reasonable security or indemnity. Subject to the provisions of the applicable indenture, including those requiring security or indemnification of the trustee, the holders of a majority in principal amount of the debt securities of any series will have the right to direct the time, method, and place of conducting any proceeding for any remedy available to the trustee, or exercising any trust or power conferred on the trustee, with respect to the debt securities of that series.

No holder of a debt security of any series will have any right to institute any proceeding with respect to the applicable indenture or for any remedy thereunder unless:

- the holder has previously given to the trustee written notice of a continuing Event of Default;
- the holders of at least 25% in aggregate principal amount of the outstanding debt securities of the same series have requested the trustee to institute a proceeding in respect of the Event of Default;
- the holder or holders have furnished reasonable indemnity to the trustee to institute the proceeding as trustee;
- the trustee has not received from the holders of a majority in principal amount of the outstanding debt securities of the same series a direction inconsistent with the request; and
- the trustee has failed to institute the proceeding within 60 calendar days.

[Table of Contents](#)

However, the limitations described above do not apply to a suit instituted by a holder of a debt security for enforcement of payment of the principal of and interest on such debt security on or after the applicable due dates for the payment of such principal and interest.

We may be required to furnish to the trustee annually a statement as to our performance of our obligations under the applicable indenture and as to any default in our performance.

Any additional Events of Default with respect to any series of debt securities, and any variations from the foregoing Events of Default applicable to any series of debt securities, will be described in an applicable prospectus supplement.

Modification and Waiver

In general, modifications and amendments of an indenture may be made by us and the trustee with the consent of the holders of not less than a majority in principal amount of the debt securities of each series affected thereby. However, no modification or amendment of an indenture may, without the consent of the holder of each debt security affected thereby:

- change the stated maturity of, or any installment of principal of, or interest on, any debt security;
- reduce the principal amount of, the rate of interest on, or the premium, if any, payable upon the redemption of, any debt security;
- reduce the amount of principal of an original issue discount security payable upon acceleration of the maturity thereof;
- change the place or currency of payment of principal of, or premium, if any, or interest on any debt security;
- impair the right to institute suit for the enforcement of any payment on or with respect to any debt security on or after the stated maturity or prepayment date thereof; or
- reduce the percentage in principal amount of debt securities of any series required for modification or amendment of applicable indenture or for waiver of compliance with certain provisions of the applicable indenture or for waiver of certain defaults.

The holders of at least a majority in principal amount of the debt securities of any series may, on behalf of the holders of all debt securities of that series, waive our compliance with specified covenants of the indenture. The holders of at least a majority in principal amount of the debt securities of any series may, on behalf of the holders of all debt securities of that series, waive any past default under the indenture with respect to that series, except:

- a default in the payment of the principal of, or premium, if any, or interest on, any debt security of that series; or
- a default of a provision of the indenture that cannot be modified or amended without the consent of the holder of each debt security of that series.

Defeasance

Unless otherwise specified in a prospectus supplement applicable to a particular series of debt securities and except as described below, upon compliance with the applicable requirements described below, we:

1. will be deemed to have been discharged from our obligations with respect to the debt securities of that series; or

2. will be released from our obligations to comply with certain covenants described under "—Certain Covenants" above with respect to the debt securities of that series, and the occurrence of an event described in any of clauses (3), (4), (5), (6), and (7) under "—Events of Default" above will no longer be an Event of Default with respect to the debt securities of that series except to the limited extent described below.

Following any defeasance described in clause (1) or (2) above, we will continue to have specified obligations under the indentures, including obligations to register the transfer or exchange of debt securities of the applicable series; replace destroyed, stolen, lost, or mutilated debt securities of the applicable series; maintain an office or agency in respect of the debt securities of the applicable series; and hold funds for payment to holders of debt securities of the applicable series in trust. In the case of any defeasance described in clause (2) above, any failure by us to comply with our continuing obligations may constitute an Event of Default with respect to the debt securities of the applicable series as described in clause (5) under "—Events of Defaults" above.

In order to effect any defeasance described in clause (1) or (2) above, we must irrevocably deposit with the trustee, in trust, money or specified government obligations (or depository receipts therefor) that through the payment of principal and interest in accordance with their terms will provide money in an amount sufficient to pay all of the principal of, premium, if any, and interest on the debt securities of such series on the dates such payments are due in accordance with the terms of such debt securities. In addition:

- no Event of Default or event which with the giving of notice or lapse of time, or both, would become an Event of Default under an indenture shall have occurred and be continuing on the date of such deposit;
- no Event of Default described in clause (6) under "—Events of Default" above or event that with the giving of notice or lapse of time, or both, would become an Event of Default described in such clause (6) shall have occurred and be continuing at any time on or prior to the 90th calendar day following the date of deposit;
- in the event of any defeasance described in clause (1) above, we shall have delivered an opinion of counsel, stating that (a) we have received from, or there has been published by, the IRS a ruling or (b) there has been a change in applicable federal law, in either case to the effect that, among other things, the holders of the debt securities of such series will not recognize gain or loss for United States federal income tax purposes as a result of such deposit or defeasance and will be subject to United States federal income tax in the same manner as if such defeasance had not occurred; and
- in the event of any defeasance described in clause (2) above, we shall have delivered an opinion of counsel to the effect that, among other things, the holders of the debt securities of such series will not recognize gain or loss for United States federal income tax purposes as a result of such deposit or defeasance and will be subject to United States federal income tax in the same manner as if such defeasance had not occurred.

If we fail to comply with our remaining obligations under an indenture with respect to the debt securities of the applicable series following a defeasance described in clause (2) above and the debt securities of that series are declared due and payable because of the occurrence of any undefeased Event of Default, the amount of money and government obligations on deposit with the trustee may be insufficient to pay amounts due on the debt securities of that series at the time of the acceleration resulting from such Event of Default. However, we will remain liable in respect of such payments.

Satisfaction and Discharge

We, at our option, may satisfy and discharge an indenture (except for specified obligations of us and the trustee, including, among others, the obligations to apply money held in trust) when:

- either:
 1. all of our debt securities previously authenticated and delivered under the applicable indenture (subject to specified exceptions relating to debt securities that have otherwise been satisfied or provided for) have been delivered to the trustee for cancellation; or
 2. all of our debt securities not previously delivered to the trustee for cancellation have become due and payable, will become due and payable at their stated maturity within one year, or are to be called for redemption within one year under arrangements satisfactory to the trustee for the giving of notice of redemption by the trustee, and we have deposited or caused to be deposited with the trustee as trust funds for such purpose an amount sufficient to pay and discharge the entire indebtedness on such debt securities, for principal and any premium and interest to the date of such deposit (in the case of debt securities which have become due and payable) or to the stated maturity or redemption date, as the case may be;
- we have paid or caused to be paid all other sums payable by us under the applicable indenture; and
- we have delivered to the trustee an officer's certificate and an opinion of counsel, each to the effect that all conditions precedent relating to the satisfaction and discharge of the applicable indenture have been satisfied.

Limitations on Merger and Other Transactions

Prior to the satisfaction and discharge of an indenture, we may not consolidate with or merge with or into any other person, or transfer all or substantially all of our properties and assets to another person unless:

- either:
 1. we are the continuing or surviving person in the consolidation or merger; or
 2. the person (if other than us) formed by the consolidation or into which we are merged or to which all or substantially all of our properties and assets are transferred is a corporation, partnership, limited liability company, business trust, trust or other legal entity organized and validly existing under the laws of the United States, any State thereof, or the District of Columbia, and expressly assumes, by a supplemental indenture, all of our obligations under the debt securities and the applicable indenture;
- immediately after the transaction and the incurrence or anticipated incurrence of any indebtedness to be incurred in connection therewith, no Event of Default exists; and
- an officer's certificate is delivered to the trustee to the effect that both of the conditions set forth above have been satisfied and an opinion of outside counsel has been delivered to the trustee to the effect that the first condition set forth above has been satisfied.

The continuing, surviving, or successor person will succeed to and be substituted for us with the same effect as if it had been named in the indenture as a party thereto, and thereafter the predecessor person will be relieved of all obligations and covenants under the indenture and the debt securities.

Governing Law

The indenture, and the debt securities issued thereunder will be, governed by, and construed in accordance with, the laws of the State of New York.

Regarding the Trustee

The indenture contains specified limitations on the rights of the trustee, should it become our creditor within three months of, or subsequent to, a default by us to make payment in full of principal of or interest on any series of debt securities issued pursuant to the applicable indenture when and as the same becomes due and payable, to obtain payment of claims, or to realize for its own account on property received in respect of any such claim as security or otherwise, unless and until such default is cured. However, the trustee's rights as our creditor will not be limited if the creditor relationship arises from, among other things:

- the ownership or acquisition of securities issued under any indenture or having a maturity of one year or more at the time of acquisition by the trustee;
- specified advances authorized by a receivership or bankruptcy court of competent jurisdiction or by the indenture;
- disbursements made in the ordinary course of business in its capacity as indenture trustee, transfer agent, registrar, custodian, or paying agent or in any other similar capacity;
- indebtedness created as a result of goods or securities sold in a cash transaction or services rendered or premises rented; or
- the acquisition, ownership, acceptance, or negotiation of specified drafts, bills of exchange, acceptances, or other obligations.

The indenture does not prohibit the trustee from serving as trustee under any other indenture to which we may be a party from time to time or from engaging in other transactions with us. If the trustee acquires any conflicting interest within the meaning of the Trust Indenture Act of 1939 and there is an Event of Default with respect to any series of debt securities, the trustee must eliminate the conflict or resign.

DESCRIPTION OF DEPOSITARY SHARES

We may offer depositary shares (either separately or together with other securities) representing fractional shares of preferred stock of any series. In connection with the issuance of any depositary shares, we will enter into a deposit agreement with a bank or trust company, as depositary, which will be named in the applicable prospectus supplement. Depositary shares will be evidenced by depositary receipts issued pursuant to the related deposit agreement. Immediately following our issuance of the security related to the depositary shares, we will deposit the shares of preferred stock with the relevant depositary and will cause the depositary to issue, on our behalf, the related depositary receipts. Subject to the terms of the deposit agreement, each owner of a depositary receipt will be entitled, in proportion to the fraction of a share of preferred stock represented by the related depositary share, to all the rights, preferences and privileges of, and will be subject to all of the limitations and restrictions on, the preferred stock represented by the depositary receipt (including, if applicable, dividend, voting, conversion, exchange, redemption, sinking fund, repayment at maturity, subscription and liquidation rights).

DESCRIPTION OF WARRANTS

We may issue warrants for the purchase of debt securities, common stock, preferred stock, depositary shares, or any combination thereof. We may issue warrants independently or together with

[Table of Contents](#)

any other securities offered by a prospectus supplement. Warrants may be attached to or separate from such securities. Each series of warrants will be issued under a separate warrant agreement we will enter into with a warrant agent specified in the applicable prospectus supplement. The warrant agent will act solely as our agent in connection with the warrants of a particular series and will not assume any obligation or relationship of agency or trust for or with any holders or beneficial owners of warrants.

The applicable prospectus supplement will describe the terms of the warrants in respect of which this prospectus is being delivered, including, to the extent applicable, the following:

- the title of the warrants;
- the aggregate number of the warrants;
- the price or prices at which the warrants will be issued;
- the designation, number or principal amount and terms of the debt securities, common stock, preferred stock, and/or depositary shares purchasable upon exercise of the warrants;
- the designation and terms of the other securities, if any, with which the warrants are issued and the number of warrants issued with each security;
- the date, if any, on and after which the warrants and the related underlying securities will be separately transferable;
- whether the warrants will be issued in registered form or bearer form;
- the price at which each underlying security purchasable upon exercise of the warrants may be purchased;
- the date on which the right to exercise the warrants will commence and the date on which that right will expire;
- the identity of the warrant agent;
- the maximum or minimum number of the warrants that may be exercised at any one time;
- information with respect to book-entry procedures, if any;
- a discussion of any material federal income tax considerations; and
- any other terms of the warrants, including terms, procedures, and limitations relating to the transferability, exchange, and exercise of the warrants.

DESCRIPTION OF PURCHASE CONTRACTS

We may issue purchase contracts, including contracts obligating holders to purchase from us, and for us to sell to holders, a specific or varying number of debt securities, shares of our common stock or preferred stock, depositary shares, warrants or securities of an entity unaffiliated with us, or any combination of the above, at a future date or dates. Alternatively, the purchase contracts may obligate us to purchase from holders, and obligate holders to sell to us, a specific or varying number or amount of debt securities, shares of our common stock or preferred stock, depositary shares, warrants or other property. The price per share of preferred stock or common stock or price of other securities may be fixed at the time the purchase contracts are issued or may be determined by reference to a specific formula described in the purchase contracts. We may issue purchase contracts separately or as a part of units each consisting of a purchase contract and debt securities, preferred securities, common securities, warrants or debt obligations of third parties, including U.S. Treasury securities, securing the holder's obligations under the purchase contract. The purchase contracts may require us to make periodic payments to holders, or may require holders to make periodic payments to us, and the payments may be unsecured or pre-funded on some basis. The purchase contracts may require holders to secure the

[Table of Contents](#)

holder's obligations in a specified manner that we will describe in the applicable prospectus supplement which we file with the SEC in connection with a public offering relating to the purchase contracts.

The applicable prospectus supplement will describe the terms of any purchase contracts in respect of which this prospectus is being delivered, including, to the extent applicable, the following:

- whether the purchase contracts obligate the holder or us to purchase or sell, or both purchase and sell the securities subject to purchase under the purchase contract, and the nature and amount of each of those securities, or the method of determining those amounts;
- whether the purchase contracts are to be prepaid or not;
- whether the purchase contracts are to be settled by delivery, or by reference or linkage to the value, performance or level of the securities subject to purchase under the purchase contract;
- any acceleration, cancellation, termination or other provisions relating to the settlement of the purchase contracts; and
- whether the purchase contracts will be issued in fully registered or global form.

DESCRIPTION OF UNITS

We may issue units comprising one or more securities described in this prospectus in any combination. Units may also include debt obligations of third parties, such as U.S. Treasury securities. Each unit will be issued so that the holder of the unit also is the holder of each security included in the unit. Thus, the holder of each unit will have the rights and obligations of a holder of each included security. The unit agreement under which a unit is issued may provide that the securities included in the unit may not be held or transferred separately at any time or at any time before a specified date.

USE OF PROCEEDS

We intend to use the net proceeds from this offering for general corporate purposes or for other purposes described in a prospectus supplement.

PLAN OF DISTRIBUTION

We may sell the securities offered by this prospectus from time to time in one or more transactions, including without limitation:

- directly to purchasers;
- through agents;
- to or through underwriters or dealers;
- through a combination of these methods; or
- in any other manner permitted by law.

Each time we sell securities, we will provide a prospectus supplement that will name any underwriter, dealer or agent involved in the offer and sale of the securities. The prospectus supplement will also set forth the terms of the offering, including the purchase price of the securities and the proceeds to the issuer(s) from the sale of the securities, any underwriting discounts and other items constituting underwriters' compensation and any discounts or concessions allowed or reallocated or paid to dealers and any securities exchanges on which the securities may be listed. Each time we sell securities, we will describe the method of distribution of the securities in the prospectus supplement relating to the transaction.

[Table of Contents](#)

In addition, the manner in which we may sell some or all of the securities covered by this prospectus includes, without limitation, through:

- a block trade in which a broker-dealer will attempt to sell as agent, but may position or resell a portion of the block, as principal, in order to facilitate the transaction;
- purchases by a broker-dealer, as principal, and resale by the broker-dealer for its account;
- ordinary brokerage transactions and transactions in which a broker solicits purchasers; or
- privately negotiated transactions.

We may also enter into hedging transactions. For example, we may:

- enter into transactions with a broker-dealer or affiliate thereof in connection with which such broker-dealer or affiliate will engage in short sales of the common stock pursuant to this prospectus, in which case such broker-dealer or affiliate may use shares of common stock received from us to close out its short positions;
- sell securities short and redeliver such shares to close out our short positions;
- enter into option or other types of transactions that require us to deliver common stock to a broker-dealer or an affiliate thereof, who will then resell or transfer the common stock under this prospectus;
- loan or pledge the common stock to a broker-dealer or an affiliate thereof, who may sell the loaned shares or, in an event of default in the case of a pledge, sell the pledged shares pursuant to this prospectus.

In addition, we may enter into derivative or hedging transactions with third parties, or sell securities not covered by this prospectus to third parties in privately negotiated transactions. In connection with such a transaction, the third parties may sell securities covered by and pursuant to this prospectus and an applicable prospectus supplement or pricing supplement, as the case may be. If so, the third party may use securities borrowed from us or others to settle such sales and may use securities received from us to close out any related short positions. We may also loan or pledge securities covered by this prospectus and an applicable prospectus supplement to third parties, who may sell the loaned securities or, in an event of default in the case of a pledge, sell the pledged securities pursuant to this prospectus and the applicable prospectus supplement or pricing supplement, as the case may be.

A prospectus supplement with respect to each series of securities will state the terms of the offering of the securities, including:

- the terms of the offering;
- the name or names of any underwriters or agents and the amounts of securities underwritten or purchased by each of them, if any;
- the public offering price or purchase price of the securities and the net proceeds to be received by us from the sale;
- any delayed delivery arrangements;
- any initial public offering price;
- any underwriting discounts or agency fees and other items constituting underwriters' or agents' compensation;
- any discounts or concessions allowed or reallowed or paid to dealers; and

[Table of Contents](#)

- any securities exchange on which the securities may be listed.

The offer and sale of the securities described in this prospectus by us, the underwriters or the third parties described above may be effected from time to time in one or more transactions, including privately negotiated transactions, either:

- at a fixed price or prices, which may be changed;
- at market prices prevailing at the time of sale;
- at prices related to the prevailing market prices; or
- at negotiated prices.

General

Any public offering price and any discounts, commissions, concessions or other items constituting compensation allowed or reallocated or paid to underwriters, dealers, agents or remarketing firms may be changed from time to time. Underwriters, dealers, agents and remarketing firms that participate in the distribution of the offered securities may be "underwriters" as defined in the Securities Act. Any discounts or commissions they receive from us and any profits they receive on the resale of the offered securities may be treated as underwriting discounts and commissions under the Securities Act. We will identify any underwriters, agents or dealers and describe their commissions, fees or discounts in the applicable prospectus supplement or pricing supplement, as the case may be.

Underwriters and Agents

If underwriters are used in a sale, they will acquire the offered securities for their own account. The underwriters may resell the offered securities in one or more transactions, including negotiated transactions. These sales may be made at a fixed public offering price or prices, which may be changed, at market prices prevailing at the time of the sale, at prices related to such prevailing market price or at negotiated prices. We may offer the securities to the public through an underwriting syndicate or through a single underwriter. The underwriters in any particular offering will be mentioned in the applicable prospectus supplement or pricing supplement, as the case may be.

Unless otherwise specified in connection with any particular offering of securities, the obligations of the underwriters to purchase the offered securities will be subject to certain conditions contained in an underwriting agreement that we will enter into with the underwriters at the time of the sale to them. The underwriters will be obligated to purchase all of the securities of the series offered if any of the securities are purchased, unless otherwise specified in connection with any particular offering of securities. Any initial public offering price and any discounts or concessions allowed, reallocated or paid to dealers may be changed from time to time.

We may designate agents to sell the offered securities. Unless otherwise specified in connection with any particular offering of securities, the agents will agree to use their best efforts to solicit purchases for the period of their appointment. We may also sell the offered securities to one or more remarketing firms acting as principals for their own accounts or as agents for us. These firms will remarket the offered securities upon purchasing them in accordance with a redemption or repayment pursuant to the terms of the offered securities. A prospectus supplement or pricing supplement, as the case may be, will identify any remarketing firm and will describe the terms of its agreement, if any, with us and its compensation.

In connection with offerings made through underwriters or agents, we may enter into agreements with such underwriters or agents pursuant to which we receive our outstanding securities in consideration for the securities being offered to the public for cash. In connection with these arrangements, the underwriters or agents may also sell securities covered by this prospectus to hedge

their positions in these outstanding securities, including in short sale transactions. If so, the underwriters or agents may use the securities received from us under these arrangements to close out any related open borrowings of securities.

Dealers

We may sell the offered securities to dealers as principals. We may negotiate and pay dealers' commissions, discounts or concessions for their services. The dealer may then resell such securities to the public either at varying prices to be determined by the dealer or at a fixed offering price agreed to with us at the time of resale. Dealers engaged by us may allow other dealers to participate in resales.

Direct Sales

We may choose to sell the offered securities directly. In this case, no underwriters or agents would be involved.

Institutional Purchasers

We may authorize agents, dealers or underwriters to solicit certain institutional investors to purchase offered securities on a delayed delivery basis pursuant to delayed delivery contracts providing for payment and delivery on a specified future date. The applicable prospectus supplement or pricing supplement, as the case may be, will provide the details of any such arrangement, including the offering price and commissions payable on the solicitations.

We will enter into such delayed contracts only with institutional purchasers that we approve. These institutions may include commercial and savings banks, insurance companies, pension funds, investment companies and educational and charitable institutions.

Indemnification; Other Relationships

We may have agreements with agents, underwriters, dealers and remarketing firms to indemnify them against certain civil liabilities, including liabilities under the Securities Act. Agents, underwriters, dealers and remarketing firms, and their affiliates, may engage in transactions with, or perform services for, us in the ordinary course of business. This includes commercial banking and investment banking transactions.

Market Making, Stabilization and Other Transactions

There is currently no market for any of the offered securities other than our common stock, which is listed on Nasdaq. If the offered securities are traded after their initial issuance, they may trade at a discount from their initial offering price, depending upon prevailing interest rates, the market for similar securities and other factors. While it is possible that an underwriter could inform us that it intended to make a market in the offered securities, such underwriter would not be obligated to do so, and any such market making could be discontinued at any time without notice. Therefore, no assurance can be given as to whether an active trading market will develop for the offered securities. We have no current plans for listing of the debt securities, preferred stock or warrants on any securities exchange; any such listing with respect to any particular debt securities, preferred stock or warrants will be described in the applicable prospectus supplement or pricing supplement, as the case may be.

In connection with any offering, the underwriters may purchase and sell shares of common stock in the open market. These transactions may include short sales, syndicate covering transactions and stabilizing transactions. Short sales involve syndicate sales of common stock in excess of the number of shares to be purchased by the underwriters in the offering, which creates a syndicate short position. "Covered" short sales are sales of shares made in an amount up to the number of shares represented

[Table of Contents](#)

by the underwriters' over-allotment option. In determining the source of shares to close out the covered syndicate short position, the underwriters will consider, among other things, the price of shares available for purchase in the open market as compared to the price at which they may purchase shares through the over-allotment option. Transactions to close out the covered syndicate short involve either purchases of the common stock in the open market after the distribution has been completed or the exercise of the over-allotment option. The underwriters may also make "naked" short sales of shares in excess of the over-allotment option. The underwriters must close out any naked short position by purchasing shares of common stock in the open market. A naked short position is more likely to be created if the underwriters are concerned that there may be downward pressure on the price of the shares in the open market after pricing that could adversely affect investors who purchase in the offering. Stabilizing transactions consist of bids for or purchases of shares in the open market while the offering is in progress for the purpose of pegging, fixing or maintaining the price of the securities.

In connection with any offering, the underwriters may also engage in penalty bids. Penalty bids permit the underwriters to reclaim a selling concession from a syndicate member when the securities originally sold by the syndicate member are purchased in a syndicate covering transaction to cover syndicate short positions. Stabilizing transactions, syndicate covering transactions and penalty bids may cause the price of the securities to be higher than it would be in the absence of the transactions. The underwriters may, if they commence these transactions, discontinue them at any time.

LEGAL MATTERS

The validity of the securities offered by this prospectus and certain other legal matters will be passed upon for us by Davis Graham & Stubbs LLP, Denver, Colorado. If certain legal matters in connection with an offering of the securities made by this prospectus are passed on by counsel for the underwriters of such offering, that counsel will be named in the applicable prospectus supplement related to that offering.

EXPERTS

Plante & Moran, PLLC independent registered public accounting firm, has audited our consolidated financial statements included in our [Annual Report on Form 10-K for the year ended March 31, 2019](#), and the effectiveness of our internal control over financial reporting as of March 31, 2019, as set forth in their report, which is incorporated by reference in this prospectus and elsewhere in the registration statement. Our consolidated financial statements are incorporated by reference in reliance on Plante & Moran, PLLC's reports, given on their authority as experts in accounting and auditing.

\$100,000,000



MesaLabs

MESA LABORATORIES, INC.

Common Stock

Prospectus Supplement

Joint Book-Running Managers

Jefferies

J.P. Morgan

Evercore ISI

June , 2020
