UNITED STATES SECURITIES AND EXCHANGE COMMISSION Washington, D.C. 20549

AMENDMENT NO. 1 TO FORM S-3 REGISTRATION STATEMENT UNDER THE SECURITIES ACT OF 1933

PRECIPIO, INC.

(Exact name of registrant as specified in its charter)

Delaware (State or other jurisdiction of incorporation or organization) 91-1789357 (I.R.S. Employer Identification No.)

4 Science Park New Haven, Connecticut 06511 (203) 787-7888

(Address, including zip code and telephone number, including area code, of registrant's principal executive offices)

Ilan Danieli Chief Executive Officer Precipio, Inc. 4 Science Park New Haven, Connecticut 06511 (203) 787-7888

(Name, address, including zip code and telephone number, including area code, of agent for service)

Copies to:

Thomas A. Rose Sichenzia Ross Ference LLP 1185 Avenue of the Americas, 37th Floor New York, NY 10036 (212) 930-9700

Approximate date of commencement of proposed sale to the public: As soon as practicable after this Registration Statement becomes effective.

If the only securities being registered on this Form are being offered pursuant to dividend or interest reinvestment plans, please check the following box: \Box

If any of the securities being registered on this Form are to be offered on a delayed or continuous basis pursuant to Rule 415 under the Securities Act of 1933, other than securities offered only in connection with dividend or interest reinvestment plans, check the following box: If this Form is filed to register additional securities for an offering pursuant to Rule 462(b) under the Securities Act, please check the following box and list the Securities Act registration statement number of the earlier effective registration statement for the same offering. \square If this Form is a post-effective amendment filed pursuant to Rule 462(c) under the Securities Act, check the following box and list the Securities Act registration statement number of the earlier effective registration statement for the same offering. \square If this Form is a registration statement pursuant to General Instruction I.D. or a post-effective amendment thereto that shall become effective upon filing with the Commission pursuant to Rule 462(e) under the Securities Act, check the following box. \square If this Form is a post-effective amendment to a registration statement filed pursuant to General Instruction I.D. filed to register additional securities or additional classes of securities pursuant to Rule 413(b) under the Securities Act, check the following box. \square Indicate by check mark whether the registrant is a large accelerated filer, an accelerated filer, a non-accelerated filer, a smaller reporting company, or an emerging growth company. See the definitions of "large accelerated filer," "accelerated filer," "smaller reporting company" and "emerging growth company" in Rule 12b-2 of the Exchange Act. Large Accelerated Filer □ Accelerated Filer **Emerging Growth** Company If an emerging growth company, indicate by check mark if the registrant has elected not to use the extended

CALCULATION OF REGISTRATION FEE

transition period for complying with any new or revised financial accounting standards provided pursuant to Section

7(a)(2)(B) of the Securities Act. \square

Title of each class of securities to be registered(1)	Amount to be registered	Proposed maximum aggregate offering price(2)	Amount of registration fee(3)
Common Stock, \$0.01 par value per share	(2)	(3)	
Preferred Stock, \$0.01 par value per share	(2)	(3)	
Debt Securities	(2)	(3)	
Warrants	(2)	(3)	
Total		\$ 50,000,000	\$6,490.00

(1) There are being registered hereunder such indeterminate number of shares of common stock and preferred stock, such indeterminate principal amount of debt securities and such indeterminate number of warrants to purchase common stock, preferred stock or debt securities as shall have an aggregate initial offering price not to exceed \$50,000,000. If any debt securities are issued at an original issue discount, then the principal amount of such debt securities shall be in such greater amount as shall result in an aggregate initial offering price not to exceed \$50,000,000, less the aggregate dollar amount of all securities previously issued hereunder. Any securities registered hereunder may be sold separately or as units with other securities registered hereunder. The securities registered also include such indeterminate number of shares of common stock and preferred stock and amount of debt securities as may be issued upon conversion of or exchange for preferred stock or debt securities that provide for conversion or exchange, upon exercise of warrants or pursuant to the antidilution provisions of any such securities. In addition, pursuant to Rule 416(a) under the

- Securities Act, the shares being registered hereunder include such indeterminate number of shares of common stock and preferred stock as may be issuable with respect to the shares being registered hereunder as a result of stock splits, stock dividends or similar transactions.
- (2) The proposed maximum offering price per unit will be determined from time to time by the Registrant in connection with, and at the time of, the issuance of the securities and is not specified as to each class of security pursuant to General Instruction II.D. of Form S-3 under the Securities Act.
- (3) Calculated pursuant to Rule 457(o) under the Securities Act based on the proposed maximum aggregate offering price of all securities listed.

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

EXPLANATORY NOTE

This registration statement contains:

a base prospectus that covers the offering, issuance and sale by the registrant of up to a maximum aggregate offering price of \$50,000,000 of the registrant's common stock, preferred stock, debt securities and/or warrants from time to time in one or more offerings; and

The base prospectus immediately follows this explanatory note. The specific terms of any securities to be offered pursuant to the base prospectus will be specified in one or more prospectus supplements to the base prospectus. The sales agreeent prospectus immediately follows the base prospectus.

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

PRELIMINARY PROSEPCTUS Subject to Completion dated April 9, 2020

\$50,000,000 Common Stock Preferred Stock Debt Securities Warrants

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From time to time, we may offer up to \$50,000,000 of any combination of the securities described in this prospectis in one or more offerings. We may also offer securities as may be issuable upon conversion, redemption, repurchase, exchange or exercise of any securities registered hereunder, including any applicable antidilution provisions.

This prospectus provides a general description of the securities we may offer. We will provide specific terms of these offerings and securities in one or more supplements to this prospectus, which may also supplement, update or amend information contained in this document. You should carefully read this prospectus and any accompanying prospectus supplement, together with the documents we incorporate by reference, before you invest in any of these securities.

We may sell these securities on a continuous or delayed basis directly, through agents, dealers or underwriters as designated from time to time, or through a combination of these methods. We reserve the sole right to accept, and together with any agents, dealers and underwriters, reserve the right to reject, in whole or in part, any proposed purchase of securities. If any agents, dealers or underwriters are involved in the sale of any securities offered by this prospectus, the applicable prospectus supplement will set forth any applicable commissions or discounts. Our net proceeds from the sale of securities also will be set forth in the applicable prospectus supplement, as well as the specific terms of the plan of distribution.

Our common stock is listed on The NASDAQ Capital Market under the symbol "PRPO". The last reported sale price of our common stock on April 8, 2020 was \$0.58 per share. Each prospectus supplement will indicate if the securities offered thereby will be listed on any securities exchange.

Investing in our securities involves a high degree of risk. See "Risk Factors" on page 8 in this prospectus to read about the factors you should consider before buying shares of our common stock

Neither the Securities and Exchange Commission nor any state securities commission has approved or disapproved of these securities or passed upon the adequacy or accuracy of this prospectus. Any representation to the contrary is a criminal offense.

The date of this prospectus is April 9, 2020

TABLE OF CONTENTS

	Page
About This Prospectus	1
Prospectus Summery	2
Risk Factors	8
Cautionary Note Regarding Forward-Looking Statements	9
Use of Proceeds	10
Dividend Policy	11
Description of Capital Stock	11
Description of Debt Securities	15
Description of Warrants	15
Legal Ownership of Securities	<u>17</u>
Plan of Distribution	20
Legal Matters	22
Experts	22
Where You Can Find More Information	22
Incorporation of Certain Information by Reference	23

ABOUT THIS PROSPECTUS

This prospectus is a part of a registration statement on Form S-3 that we filed with the Securities and Exchange Commission, or SEC, utilizing a "shelf" registration process. Under this shelf registration process, we may sell any combination of the securities described in this prospectus in one or more offerings up to a total aggregate offering price of \$50,000,000. This prospectus provides you with a general description of the securities we may offer.

Each time we sell securities under this prospectus, we will provide a prospectus supplement that will contain specific information about the terms of that 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. The 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 any documents that we have incorporated by reference into this prospectus. You should 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 heading "Incorporation of Certain Information by Reference," before investing in any of the securities offered.

THIS PROSPECTUS MAY NOT BE USED TO CONSUMMATE A SALE OF SECURITIES UNLESS IT IS ACCOMPANIED BY A PROSPECTUS SUPPLEMENT.

Neither we, nor any agent, underwriter or dealer has authorized any person to give any information or to make any representation other than those contained or incorporated by reference into this prospectus, any applicable prospectus supplement or any related free writing prospectus prepared by or on behalf of us or to which we have referred you. This prospectus, any applicable supplement to this prospectus or any related free writing prospectus do not constitute an offer to sell or the solicitation of an offer to buy any securities other than the registered securities to which they relate, nor do this prospectus, any applicable supplement to this prospectus or any related free writing prospectus constitute an offer to sell or the solicitation of an offer to buy securities in any jurisdiction to any person to whom it is unlawful to make such offer or solicitation in such jurisdiction.

You should not assume that the information contained in this prospectus, any applicable prospectus supplement or any related free writing prospectus is accurate on any date subsequent to the date set forth on the front of the document or that any information we have incorporated by reference is correct on any date subsequent to the date of the document incorporated by reference, even though this prospectus, any applicable prospectus supplement or any related free writing prospectus is delivered, or securities are sold, on a later date.

This prospectus and the information incorporated herein by reference 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 More Information."

PROSPECTUS SUMMARY

This summary does not contain all of the information you should consider in making your investment decision. You should read the entire prospectus carefully, especially the "Risk Factors" and our financial statements and the related notes from our Annual Report on Form 10-K for the fiscal year ended December 31, 2019, filed with the SEC on March 27, 2020, before deciding to invest in shares of our common stock.

Overview

Precipio, Inc., and its subsidiaries, (collectively, "we", "us", "our", the "Company" or "Precipio") is a cancer diagnostics company providing diagnostic products and services to the oncology market. We have built and continue to develop a platform designed to eradicate the problem of misdiagnosis by harnessing the intellect, expertise and technologies developed within academic institutions, and delivering quality diagnostic information to physicians and their patients worldwide. We operate a cancer diagnostic laboratory located in New Haven, Connecticut and have partnered with various academic institutions to capture the expertise, experience and technologies developed within academia to provide a better standard of cancer diagnostics and aim to solve the growing problem of cancer misdiagnosis. We also operate a research and development facility in Omaha, Nebraska which focuses on development of various technologies, among them IV-Cell, HemeScreen and ICE-COLD-PCR, or ICP, the patented technology described further below, which we exclusively licensed from Dana-Farber Cancer Institute, Inc., or Dana-Farber, at Harvard University. The research and development center focuses on the development of these technologies, which we believe will enable us to commercialize these and other technologies developed with our current and future academic partners. The facility in Omaha was also recently certified as a CLIA and CAP facility, and we have begun conducting several molecular tests internally that we had previously outsourced to other laboratories. Our platform also connects patients, physicians and diagnostic experts residing within academic institutions.

Industry

We believe that there is currently a significant problem with unaddressed rates of misdiagnosis across numerous disease states (particularly in blood-related cancers) due to an inefficient and commoditized industry. We believe that the diagnostic industry focuses primarily on competitive pricing and test turnaround times, at the expense of quality and accuracy. Increasingly complex disease states are met with eroding specialization rather than increased expertise. According to a study conducted by the National Coalition of Health, this results in an industry with cancer misdiagnosis rates up to 28%, which is failing to meet the needs of physicians, patients and the healthcare system as a whole. New technologies offer improved accuracy; however, many are either inaccessible or are not economically practical for clinical use. Despite much publicity of the industry transitioning from fee-per-service to value-based payments, this transition has not yet occurred in diagnostics. When a patient is misdiagnosed, physicians end up administering incorrect treatments, often creating adverse effects rather than improving outcomes. We believe that Insurance Providers, Medicare and Medicaid waste valuable dollars on the application of incorrect treatments and can incur substantial downstream costs. Most importantly however, patients pay the ultimate price of misdiagnosis with increased morbidity and mortality. According to a report by Pinnacle Health, the estimated cost of misdiagnosis within the healthcare system is \$750 billion annually. We are of the view that the academic path of specialization produces the critical expertise necessary to correctly diagnose disease and that academic institutions have an unlocked potential to address this problem. Our solution is to create an exclusive platform that harnesses academic expertise and proprietary technologies to deliver the highest standard of diagnostic accuracy and patient care. Physicians, hospitals, payers and, most importantly, patients all benefit from more accurate diagnostics.

Market

As a services and technology commercialization company, we currently participate in two components within the U.S. domestic oncology diagnostics market. The first is the anatomic pathology services market, which is estimated to reach a \$26.1 billion annual market by 2024 with a compound annual growth rate of 6.16%. The second component is the reagents market.

Our Platform

Our platform is designed to provide physicians and their patients access to necessary academic expertise and technology in order to better provide diagnoses. To our knowledge, we are the only company focused on addressing the issue of diagnostic accuracy with an innovative, robust and scalable business model by:

- Providing physicians and their patients access to world-class academic experts and technologies;
- Leveraging the largest network of academic experts by adding numerous leading academic institutions to our platform;
- Allowing payers to benefit from quality-based outcomes to their patients and increase the likelihood of cost savings; and
- Enabling cross-collaboration between physicians and academic institutions to advance research and discovery.

Our agreements with various academic institutions are part of a unique platform that, to our knowledge, is not offered by other commercial laboratories. Our customers are oncologists who biopsy their patients in order to confirm or rule out the presence of cancer. After our customers send the samples to us, we conduct all the technical tests at our New Haven facility. We then transmit the test results to the pathologists within our academic network who have access to our laboratory information system from their respective offices, enabling them to review and render their diagnostic interpretation of the test results for reporting. In partnership with an academic institution, we have developed a proprietary algorithm that is applied to each sample submitted to us for testing, resulting in our ability to render a more precise and accurate diagnosis. The final results are prepared by academic pathologists and integrated into the final report by us, and are then delivered electronically through our portal to the referring clinician. The patient's insurance is billed for the services; we are paid for the technical work done at our laboratory; and academic institutions either bill the patient insurance or are paid by us for their diagnostic interpretation.

Our Technology

We have developed IV-Cell, a proprietary culture media that addresses the problem of selective culturing – by creating a universal media that enables simultaneous culturing of all 4 hematopoietic cell lineages. This ensures that no cell lineage is missed in the diagnostic process, and the technician is able to select any of the 4 lineages during the culturing process.

1. IV-Cell

We have developed IV-Cell, a proprietary culture media that addresses the problem of selective culturing – by creating a universal media that enables simultaneous culturing of all 4 hematopoietic cell lineages. This ensures that no cell lineage is missed in the diagnostic process, and the technician is able to select any of the 4 lineages during the culturing process.

The diagnostic process of hematopoietic diseases involves chromosomal analysis by conducting cell-culture based tests by a cytogenetics laboratory to imitate in-vivo conditions. The four groups of cell lineages cultured are:

- Myeloid cells indicating myeloid neoplasms (MDS, AML, CML);
- B-cells indicating B-cell neoplasms (B-cell lymphoma, mantle cell lymphoma);
- T-cells indicating T-cell neoplasms (T-cell lymphoma); and
- Plasma cells indicating plasma cell neoplasms (multiple myeloma).

The cytogeneticist must decide up front which cell lineage to select to be cultured. In most cases, due to specimen limitation, low cellularity, or cell viability, the cytogeneticist can select only one of the above cell lines to culture. Often, the initial clinical suspicion is not in line with the final diagnosis determined by the pathologist based on the rest of the work up. Our internal data has shown that this occurs in approximately 50% of bone marrow biopsies. If the wrong cell lineage is selected, the diagnosis may be compromised (or return a false negative diagnosis) because the lab will be culturing and investigating the wrong cells.

IV-Cell was validated in our laboratory in parallel with existing commercially available reagents and has successfully demonstrated superior results. Subsequently, IV-Cell has been used at our laboratory for the past 2 years on >1,000 clinical specimens, producing superior diagnostic results. IV-Cell also produces chromosomes with an average band resolution of 500, approximately 25% higher than achieved with standard culture media.

We intend to commercialize this technology by providing major laboratories with access to the media. This can be achieved via a direct supply contract, whereby we will contract with a manufacturer (under license) to produce the media, and supply it to laboratories.

2. HemeScreen

Each year, an estimated 140,000 patients are diagnosed with diseases in the MPN or MDS blood cancer categories. The National Comprehensive Cancer Network (the "NCCN") guidelines require that these patients be tested for genetic mutations in four key genes:

- JAK2 (V617F);
- JAK2 (exon 12);
- CALR; and
- MPL

Precipio has developed and patented a proprietary screening panel for all 4 genes in one rapid scanning panel, HemeScreen. The test screens for the presence of these mutations in a very economic manner. Due to the improved

economics, laboratories can reduce the batch requirements for the test while still enjoying a positive economic model and reducing the turnaround time for results, providing improved clinical service to physicians.

The clinical significance of these mutations is substantial to patient treatment. A positive result in either of the JAK2 mutations indicates the patient may be eligible for a targeted therapy. A positive result in the CALR or MPL gene indicates a good prognosis, meaning the disease is less aggressive, and the physician may therefore choose to treat the patient in a less aggressive manner. The results of these genetic tests are critical to determining a treatment plan, and therefore the importance, and the speed of which the results are delivered, may significantly impact patient care.

At the current reimbursement levels (approximately \$600 for full panel at Medicare rates) and given the costs to run the tests, laboratories running the test in house must either batch samples to gain efficiency, or send the test out to another reference laboratory. Most hospital laboratories don't have the volume and patient frequency to economically justify running the test, and therefore they send the test out. This has created an industry average turnaround time for results of between 2-4 weeks (depending on the lab providing the test).

Precipio offers two HemeScreen commercial options:

- 1. Reference the send-out to Precipio. We offer an average of a 2-day turnaround time for the test, markedly better than the industry average of approximately 2 weeks.
- 2. Precipio to provide the reagents on an RUO (Research Use Only) basis, and a laboratory can set up the test In-house test as an LDT (Laboratory Developed Test).

At an average reimbursement rate of approximately \$600 per test, the US Market Revenue Potential is approximately \$84 million per year, in addition to international demand.

3. ICE-COLD-PCR

ICP technology was developed at Harvard and is licensed exclusively to us by Dana-Farber. ICP is a unique, proprietary, patented specimen enrichment technology that increases the sensitivity of molecular based tests from approximately 90-95% to 99.99%. Traditional molecular testing is done on tumor biopsies. These tests are typically conducted at disease onset, when the patient undergoes a biopsy. In the typical course of treatment, a patient is rarely re-biopsied, and therefore, genetic information is based solely on the initial biopsy. Tumors are known to shed cells into the patient's bloodstream where they circulate alongside normal cells; however, existing testing methodologies are not sufficiently sensitive to differentiate between tumor and normal cells. The increased sensitivity provided by ICP allows for testing of genetic mutations that occur within tumors to be conducted on peripheral blood samples, termed liquid biopsies. This technical capability enables physicians to test for genetic mutations through a simple blood test rather than an invasive biopsy extracted from the actual tumor. The results of such tests can be used for diagnosis, prognosis and therapeutic decisions. The technology is encapsulated within a chemical (reagent) used during the specimen preparation process, which enriches (amplifies) the tumor DNA detected within the blood sample while suppressing the normal DNA. In addition to offering this technology as a clinical service, we are developing panels that will be sold as reagent kits to other laboratories to enable this testing in their facilities, thereby improving their test sensitivity and more accurate diagnoses via liquid biopsies. The business model of selling reagents to other laboratories expands the reach and impact of our technology while eliminating the reimbursement risks from running the tests in-house.

Gene sequencing is performed on tissue biopsies taken surgically from the tumor site in order to identify potential therapies that will be more effective in treating the patient. There are several limitations to this process. First, surgical procedures have several limitations, including:

- Cost: surgical procedures are usually performed in a costly hospital environment;
- Surgical access: various tumor sites are not always accessible (e.g. brain tumors), in which cases no biopsy is available for diagnosis;
- Risk: patient health may not permit undergoing an invasive surgery; therefore, a biopsy cannot be
 obtained at all; and
- Time: the process of scheduling and coordinating a surgical procedure often takes time, delaying the start of patient treatment.

Second, there are several tumor-related limitations that provide a challenge to obtaining such genetic information from a tumor:

- Tumors are heterogeneous by nature: a tissue sample from one area of the tumor may not properly represent the tumor's entire genetic composition; thus, the diagnostic results from a tumor may be incomplete and non-representative.
- Metastases: in order to accurately test a patient with metastatic disease, ideally an individual biopsy
 sample should be taken from each site (if those sites are even known). These biopsies are very
 difficult to obtain; therefore, physicians often rely on biopsies taken only from the primary tumor
 site.

We license the ICP technology from Dana-Farber through a license agreement referred to herein as the License Agreement. The License Agreement grants us an exclusive license to the ICP technology, subject to a nonexclusive license granted to the U.S. government, in the areas of mutation detection using Sanger (di-deoxy) sequencing and mitochondrial DNA analysis for all research, diagnostic, prognostic and therapeutic uses in humans, animals, viruses, bacteria, fungi, plants or fossilized material. The License Agreement also grants us a non-exclusive license in the areas of mutation detection using DHPLC, surveyor-endonuclease-based mutation detection and next generation sequencing techniques. We paid Dana-Farber an initial license fee and are required to make milestone payments with respect to the first five licensed products or services we develop using the licensed technology, as well as royalties ranging from high single to low double digits on net sales of licensed products and services for sales made by us and sales made to any distributors. The License Agreement remains in effect until we cease to sell licensed products or services under said agreement. Dana-Farber has the right to immediately terminate the License Agreement if (i) we cease to carry on our business with respect to licensed products and services, (ii) we fail to make any payments under the License Agreement (subject to a cure period), (iii) we fail to comply with due diligence obligations under the License Agreement (subject to a cure period), (iv) we default in our obligations to procure and maintain insurance as required by the License Agreement, (v) any of our officers is convicted of a felony relating to the manufacture, use, sale or importation of licensed products under the License Agreement, (vi) we materially breach any provision of the License Agreement (subject to a cure period), or (vii) we or Dana-Farber become insolvent. We may terminate the License Agreement for convenience upon 180 days' prior written notice.

Our Products & Services

Our initial product offering consists of clinical diagnostic services harnessing the expertise of pathologists from premier academic institutions and the commercialization and application of our various technologies. Our clinical diagnostic services focus on the diagnosis of different hematopoietic or blood-related cancers and the delivery of an accurate diagnosis to oncologists, with demonstrated superior results through the harnessing of subspecialized academic pathologists. We intend to enter into additional partnerships with premiere academic institutions during 2020 that will further broaden and strengthen our academic expert network. Our cutting-edge liquid biopsy technology, ICP, enables detection of abnormalities in blood samples down to as low as .01%. Our proprietary cytogenetics media IV-Cell enables laboratories to arrive at more accurate results while reducing inventory and other operating costs. Our proprietary HemeScreen panel enables hospitals and laboratories to run an important genetic mutation test at a lower cost, resulting in faster results delivered to physicians and their patients. Our customers are oncologists, hospitals, reference laboratories, and pharma and biotech companies. These technologies enable our customers to achieve more accurate results for their patients, with improved economics as well as clinical outcomes.

We built and obtained CLIA and CAP certifications to operate our New Haven laboratory. The laboratory is approximately 3,000 square feet and has several sub-departments such as flow cytometry, immuno-histochemistry, cytogenetics, and molecular testing. The laboratory is currently operated by fourteen lab technicians/technologists and is supervised by a laboratory manager, technical director and a medical director. Our laboratory is inspected every two years by a Connecticut state-appointed inspector and/or CAP. Furthermore, the laboratory supervisors and medical director must conduct a self-inspection every two years (rotating with the state inspection) and must submit those results to the state department of health.

Recent Developments

On March 26, 2020, the Company entered into an amendment agreement (the "March 2020 Amendment") amending the terms of that certain Amendment No. 2 Agreement dated April 16, 2019 and the securities purchase agreement dated May 14, 2019. As a result of the March 2020 amendment, (i) the maturity date of the April 2019 Bridge Notes and the May 2019 Bridge Notes was extended three months from April 16, 2020 to July 16, 2020, (ii) the floor price at which conversions may occur under the April 2019 Bridge Notes and the May 2019 Bridge Notes was amended from \$2.25 to \$0.40, and (iii) guaranteed interest on the April 2019 Bridge Notes and the May 2019 Bridge Notes was amended from twelve months to eighteen months.

On March 26, 2020, the Company entered into a purchase agreement with Lincoln Park (the "LP Purchase Agreement"), pursuant to which Lincoln Park has agreed to purchase from the Company up to an aggregate of \$10,000,000 of common stock of the Company (subject to certain limitations) from time to time over the term of the LP Purchase Agreement. Pursuant to the terms of the LP Purchase Agreement, on March 26, 2020, the Company issued 250,000 shares of its common stock to Lincoln Park as consideration for its commitment to purchase shares of common stock of the Company under the LP Purchase Agreement (the "Commitment Shares"). Also on March 26, 2020, the Company entered into a registration rights agreement with Lincoln Park (the "LP Registration Rights Agreement"), pursuant to which on March 27, 2020, the Company filed with the SEC a registration statement on Form S-1 to register for resale under the Securities Act of 1933, as amended, or the Securities Act, 1,770,000 shares of common stock that may be issued to Lincoln Park under the LP Purchase Agreement. As of the filing of this Form S-3, the Form S-1 has not yet been declared effective by the SEC.

Corporate Information

Precipio, Inc. was incorporated in Delaware on March 6, 1997. Our principal office is located at 4 Science Park, New Haven, Connecticut 06511. Our website address is www.precipiodx.com. We do not incorporate the information on or accessible through our website into this prospectus, and you should not consider any information on, or that can be accessed through, our website as part of this prospectus. Our current and future annual reports on Form 10-K, quarterly reports on Form 10-Q, current reports on Form 8-K and other filings with the SEC are available, free of charge, through our website as soon as reasonably practicable after we electronically file such materials with,

or furnish them to, the SEC. Our SEC filings can be accessed through the investors section of our website. The information contained on, or accessible through, our website is not intended to be part of this prospectus or any report we file with, or furnish to, the SEC and incorporated by reference herein. Our common stock trades on the NASDAQ Capital Market, or NASDAQ, under the symbol "PRPO."

The Securities We May Offer

We may offer shares of our common stock and preferred stock, various series of debt securities and warrants to purchase any of such securities, up to a total aggregate offering price of \$50,000,000 from time to time in one or more offerings under this prospectus, together with any applicable prospectus supplement and any related free writing prospectus, at prices and on terms to be determined by market conditions at the time of the relevant offering. This prospectus provides you with a general description of the securities we may offer. Each time we offer a type or series of securities under this prospectus, we will provide a prospectus supplement that will describe the specific amounts, prices and other important terms of the securities, including, to the extent applicable:

- designation or classification;
- aggregate principal amount or aggregate offering price;
- · maturity;
- original issue discount;
- rates and times of payment of interest or dividends;
- redemption, conversion, exchange or sinking fund terms;
- ranking;
- restrictive covenants:
- voting or other rights;
- conversion or exchange prices or rates and any provisions for changes to or adjustments in the conversion
 or exchange prices or rates and in the securities or other property receivable upon conversion or
 exchange; and
- important U.S. federal income tax considerations.

The 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 we have incorporated by reference. However, no prospectus supplement or free writing prospectus will offer a security that is not registered and described in this prospectus at the time of the effectiveness of the registration statement of which this prospectus is a part.

We may sell the securities directly to investors or through underwriters, dealers or agents. We, and our underwriters or agents, reserve the right to accept or reject all or part of any proposed purchase of securities. If we do offer securities through underwriters or agents, we will include in the applicable prospectus supplement:

- the names of those underwriters or agents;
- applicable fees, discounts and commissions to be paid to them;
- details regarding over-allotment options, if any; and
- the estimated net proceeds to us.

This prospectus may not be used to consummate a sale of securities unless it is accompanied by a prospectus supplement.

Common Stock. We may issue shares of our common stock from time to time. Holders of our common stock are entitled to one vote per share in the election of directors and on all other matters on which stockholders are entitled or permitted to vote. Holders of our common stock are not entitled to cumulative voting rights. Subject to the terms of any then outstanding series of preferred stock, the holders of our common stock are entitled to dividends in the amounts and at times as may be declared by the board of directors out of funds legally available therefor. Upon liquidation or dissolution, holders of our common stock are entitled to share ratably in all net assets available for distribution to stockholders after we have paid, or provided for payment of, all of our debts and liabilities, and after payment of any liquidation preferences to holders of any then outstanding shares of preferred stock. Holders of our common stock have no redemption, conversion or preemptive rights. There are no sinking fund provisions applicable to our common stock. The rights, preferences and privileges of the holders of our common stock are subject to the rights of the holders of shares of any series of preferred stock that we may issue in the future.

Preferred Stock. We may issue shares of our preferred stock from time to time, in one or more series. Our board of directors has the authority to issue preferred stock in one or more classes or series and to fix the designations, powers, preferences and rights, and the qualifications, limitations or restrictions thereof, including dividend rights, conversion rights, voting rights, terms of redemption, liquidation preferences and the number of shares constituting any class or series, without further vote or action by the stockholders.

If we sell any series of preferred stock under this prospectus, we will fix the designations, powers, preferences and rights of such series of preferred stock, as well as the qualifications, limitations or restrictions thereof, in the certificate of designation relating to that series. We will file as an exhibit to the registration statement of which this prospectus is a part, or will incorporate by reference from reports that we file with the SEC, the form of any certificate of designation that describes the terms of the series of preferred stock that we are offering before the issuance of the related series of preferred stock. We urge you to read the applicable prospectus supplement (and any free writing prospectus that we may authorize to be provided to you) related to the series of preferred stock being offered, as well as the complete certificate of designation that contains the terms of the applicable series of preferred stock.

Debt Securities. We may issue debt securities from time to time, in one or more series, as either senior or subordinated debt or as senior or subordinated convertible debt. The senior debt securities will rank equally with any other unsecured and unsubordinated debt. The subordinated debt securities will be subordinate and junior in right of payment, to the extent and in the manner described in the instrument governing the debt, to all of our senior indebtedness. Convertible debt securities will be convertible into our common stock or preferred stock. Conversion may be mandatory or at the holder's option and would be at prescribed conversion rates.

The debt securities will be issued under one or more documents called indentures, which are contracts between us and a national banking association or other eligible party, as trustee. In this prospectus, we have summarized certain general features of the debt securities. We urge you, however, to read the applicable prospectus supplement (and any free writing prospectus that we may authorize to be provided to you) related to the series of debt securities being offered, as well as the complete indentures that contain the terms of the debt securities. A form of indenture has been filed as an exhibit to the registration statement of which this prospectus is a part, and supplemental indentures and forms of debt securities containing the terms of the debt securities being offered will be filed as exhibits to the registration statement of which this prospectus is a part or will be incorporated by reference from reports that we file with the SEC.

Warrants. We may issue warrants for the purchase of common stock, preferred stock and/or debt securities in one or more series. We may issue warrants independently or together with common stock, preferred stock and/or debt securities, and the warrants may be attached to or separate from these securities. In this prospectus, we have summarized certain general features of the warrants. We urge you, however, to read the applicable prospectus supplement (and any free writing prospectus that we may authorize to be provided to you) related to the particular series of warrants being offered, as well as the complete warrant agreements and warrant certificates that contain the terms of the warrants. Forms of the warrant agreements and forms of warrant certificates containing the terms of the warrants being offered have been filed as exhibits to the registration statement of which this prospectus is a part, and supplemental warrant agreements and forms of warrant certificates will be filed as exhibits to the registration statement of which this prospectus is a part or will be incorporated by reference from reports that we file with the SEC.

We will evidence each series of warrants by warrant certificates that we will issue. Warrants may be issued under an applicable warrant agreement that we enter into with a warrant agent. We will indicate the name and address of the warrant agent, if applicable, in the prospectus supplement relating to the particular series of warrants being offered.

RISK FACTORS

Investing in our securities involves a high degree of risk. Please see the Risk Factors set forth in Part I, Item 1A of our most recent Annual Report on Form 10-K, as amended on Form 10-K/A, and Part II or our Quarterly Reports on Form 10-Q, and other filings we make with the SEC, which are incorporated by reference into this prospectus. Additional risk factors may be included in a prospectus supplement relating to a particular offering of securities. Before making an investment decision, you should carefully consider these risks as well as other information we include or incorporate by reference in this prospectus. The risks and uncertainties we have described are not the only risks and uncertainties we face. Additional risks and uncertainties not presently known to us or that we currently deem immaterial may also affect our business operations. These risks could materially affect our business, results of operations or financial condition and cause the value of our securities to decline.

CAUTIONARY NOTE REGARDING FORWARD-LOOKING STATEMENTS

This prospectus, each prospectus supplement, and the documents incorporated by reference into this prospectus and each prospectus supplement contain forward-looking statements within the meaning of Section 27A of the Securities Act of 1933, as amended (the "Securities Act"), and Section 21E of the Exchange Act, which are subject to the "safe harbor" created by those sections. The forward-looking statements are based on our management's belief and assumptions and on information currently available to our management. Although we believe that the expectations reflected in these forward-looking statements are reasonable, these statements relate to our strategy, future operations, future financial position, future revenue, projected costs, prospects, plans, objectives of management and expected market growth, 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 to be materially different from any future results, levels of activity, performance or achievements or implied by these forward-looking statements. Forward-looking statements in this prospectus include, but are not limited to, statements about:

- the progress, timing and amount of expenses associated with our development and commercialization activities;
- our plans and ability to develop and commercialize new products and services, and make improvements to our existing products and services;
- our ability or the amount of time it will take to achieve successful reimbursement of our existing and future
 products and services from third-party payors, such as commercial insurance companies and health
 maintenance organizations, and government insurance programs, such as Medicare and Medicaid;
- the accuracy of our estimates of the size and characteristics of the markets that may be addressed by our products;
- the success of our study to demonstrate the impact of academic pathology expertise on diagnostic accuracy, and any other studies or trials we may conduct;
- our intention to seek, and our ability to establish, strategic collaborations or partnerships for the development or sale of our products and the effectiveness of such collaborations or partnerships;
- our expectations as to future financial performance, expense levels and liquidity sources;
- our anticipated cash needs and our estimates regarding our capital requirements and our needs for additional financing, as well as our ability to obtain such additional financing on reasonable terms;
- our anticipated cash needs and our estimates regarding our capital requirements and our needs for additional financing, as well as our ability to obtain such additional financing on reasonable terms;
- our ability to compete with other companies that are or may be developing or selling products that are competitive with our products;
- our ability to build a sales force to market our products and services, and anticipated increases in our sales and marketing costs due to an expansion in our sales force and marketing activities;
- federal and state regulatory requirements, including potential United States Food and Drug Administration regulation of our products or future products;
- anticipated trends and challenges in our potential markets;
- our ability to attract and retain key personnel; and

• other factors discussed elsewhere in this prospectus

In some cases, you can identify forward-looking statements by terminology such as "may," "will," "should," "expects," "intends," "plans," "anticipates," "believes," "estimates," "predicts," "potential," "continue" or the negative of these terms or other comparable terminology. These statements are only predictions. You should not place undue reliance on forward-looking statements because they involve known and unknown risks, uncertainties and other factors, which are, in some cases, beyond our control and which could materially affect results. Factors that may cause actual results to differ materially from current expectations include, among other things, those listed under "Risk Factors" and elsewhere in this prospectus. If one or more of these risks or uncertainties occur, or if our underlying assumptions prove to be incorrect, actual events or results may vary significantly from those implied or projected by the forward-looking statements. No forward-looking statement is a guarantee of future performance. You should read this prospectus and the documents that we reference in this prospectus and have filed with the SEC as exhibits to the registration statement, of which this prospectus is a part, completely and with the understanding that our actual future results may be materially different from any future results expressed or implied by these forward-looking statements.

The forward-looking statements in this prospectus represent our views as of the date of this prospectus. We anticipate that subsequent events and developments will cause our views to change. However, while we may elect to update these forward-looking statements at some point in the future, we have no current intention of doing so except to the extent required by applicable law. You should, therefore, not rely on these forward-looking statements as representing our views as of any date subsequent to the date of this prospectus.

USE OF PROCEEDS

We will retain broad discretion over the use of the net proceeds from the sale of the securities offered hereby. Except as described in any applicable prospectus supplement or in any free writing prospectuses that we may authorize to be provided to you in connection with a specific offering, we currently intend to use the net proceeds from the sale of the securities offered hereby, if any, for working capital and general corporate purposes, including research and development expenses and capital expenditures, which may include costs of funding future acquisitions or for any other purpose we describe in the applicable prospectus supplement.

We will set forth in the applicable prospectus supplement or free writing prospectus our intended use for the net proceeds received from the sale of any securities sold pursuant to the prospectus supplement or free writing prospectus. Pending the use of net proceeds, we plan to invest the net proceeds in short-term interest-bearing investment-grade securities, certificates of deposit or government securities.

DIVIDEND POLICY

We have never declared or paid dividends on our common stock. We do not anticipate paying any dividends on our common stock in the foreseeable future. We currently intend to retain all available funds and any future earnings to fund the development and growth of our business. Any future determination to declare dividends will be subject to the discretion of our board of directors and will depend on various factors, including applicable laws, our results of operations, financial condition, future prospects and any other factors deemed relevant by our board of directors. Investors should not purchase our common stock with the expectation of receiving cash dividends.

DESCRIPTION OF CAPITAL STOCK

Our authorized capital stock consists of 150,000,000 shares of common stock, par value \$0.01 per share, and 15,000,000 shares of preferred stock, par value \$0.01 per share. As of March 26, 2020, there were 8,870,129 shares of our common stock outstanding and 47 shares of Series B preferred stock outstanding convertible into an aggregate of 117,500 shares of common stock. In addition, as of March 26, 2020, options to purchase 815,380 shares of our common stock were outstanding at a weighted average exercise price of \$5.84 per share, 98,726 shares of our common stock were reserved for future grants under our stock option plans and warrants to purchase 909,189 shares of our common stock were outstanding at a weighted average exercise price of \$19.46 per share.

The following description of our capital stock and provisions of our amended and restated certificate of incorporation, amended and restated by-laws and certificate of designation are summaries of material terms and provisions and are qualified by reference to our amended and restated certificate of incorporation, amended and restated by-laws and certificates of designation, copies of which have been previously filed with the SEC.

Common Stock

We may issue shares of our common stock from time to time. Holders of our common stock are entitled to one vote per share on all matters to be voted upon by the stockholders. Holders of our common stock do not have cumulative voting rights in the election of directors. Subject to the preferences that may be applicable to any then outstanding preferred stock, holders of common stock are entitled to receive ratably such dividends, if any, as may be declared by our Board of Directors out of funds legally available therefor. Upon the liquidation, dissolution, or winding up of our company, holders of common stock are entitled to share ratably in all of our assets which are legally available for distribution after payment of all debts and other liabilities and liquidation preference of any outstanding preferred stock. There are no sinking fund provisions applicable to our common stock. Holders of common stock have no preemptive, subscription, redemption or conversion rights. The rights, preferences and privileges of holders of common stock are subject to, and may be adversely affected by, the rights of the holders of shares of any series of preferred stock that we have designated and issued and may designate and issue in the future.

Preferred Stock

We may issue shares of our preferred stock from time to time, in one or more series. The 15,000,000 shares of preferred stock authorized under our amended and restated certificate of incorporation are undesignated as to preferences, privileges and restrictions, other than as set forth herein. Our Board of Directors will determine the rights, preferences and privileges of the shares of each wholly unissued series, and any qualifications, limitations or restrictions thereon, including dividend rights, conversion rights, terms of redemption or repurchase, liquidation preferences, sinking fund terms and the number of shares constituting any series or the designation of any series.

We will incorporate by reference into the registration statement of which this prospectus is a part the form of any certificate of designation that describes the terms of the series of preferred stock we are offering before the issuance of the related series of preferred stock. We urge you, however, to read the applicable prospectus supplement (and any related free writing prospectus that we may authorize to be provided to you) related to the series of preferred stock being offered, as well as the complete certificate of designation that contains the terms of the applicable series of preferred stock.

If we issue and sell shares of preferred stock pursuant to this prospectus, together with any applicable prospectus supplement or free writing prospectus, the shares will be fully paid and nonassessable.

The General Corporation Law of the State of Delaware, the state of our incorporation, provides that the holders of preferred stock will have the right to vote separately as a class (or, in some cases, as a series) on an amendment to our amended and restated certificate of incorporation if the amendment would change the par value, the number of authorized shares of the class or the powers, preferences or special rights of the class or series so as to adversely affect the class or series, as the case may be. This right is in addition to any voting rights that may be provided for in the applicable certificate of designation.

Our Board of Directors may authorize the issuance of preferred stock with voting or conversion rights that could adversely affect the voting power or other rights of the holders of our common stock. The issuance of preferred stock, while providing flexibility in connection with possible acquisitions, financings and other corporate purposes, could, among other things, have the effect of delaying, deferring or preventing a change in our control and may adversely affect the market price of our common stock and the voting and other rights of the holders of our common stock.

Series B Preferred Stock

On August 25, 2017, we filed a Certificate of Designation of Preferences, Rights and Limitations of Series B Convertible Preferred Stock (the "Series B Certificate of Designation") with the State of Delaware, which designates 6,900 shares of our preferred stock as Series B Senior Convertible Preferred Stock (the "Series B Preferred Stock"). The Series B Preferred Stock has a stated value of \$1,000 per share and a par value of \$0.01 per share.

If, prior to the second anniversary of the original issue date of the Series B Preferred Stock, we sell or grant any option to purchase or sell or grant any right to reprice, or otherwise dispose of or issue, any of our common stock or securities convertible into or exercisable for shares of our common stock at an effective price per share that is lower than the then effective Series B Conversion Price (as defined below), then the Series B Conversion Price will be reduced to equal the higher of (A) such lower price or (B) \$0.75, subject to an exception for the following types of issuances (i) issuances to our employees, officers or directors pursuant to any stock or option plan adopted by a majority of the non-employee members of our Board of Directors or committee thereof, (ii) issuances upon the exercise or exchange of any securities issued in connection with the August 2017 Offering or convertible into shares of common stock issued and outstanding on the date of the underwriting agreement entered into in connection with the August 2017 Offering, provided that such securities have not been amended since the date of the underwriting agreement to increase the number of securities or decrease the exercise, exchange or conversion price, or (iii) issuances pursuant to acquisitions or strategic transactions approved by a majority of the disinterested members of our Board of Directors, provided that such securities are "restricted securities" under Rule 144 and carry no registration rights that require or permit the filing of any registration statement in connection therewith during the 90-day period following the original issuance date of the Series B Preferred Stock, and provided that any such issuance is to a person or its equity holders that is an operating company or an owner of an asset in a business synergistic with the business of our company and will provide our company with additional benefits in addition to the investment of funds, but will not include a transaction in which we issue securities primarily for the purpose of raising capital or to an entity whose primary business is investing in securities (the issuances referred to in (i) through (iii) above, the "Exempt Issuances").

In the event of a liquidation, the holders of Series B Preferred Shares are entitled to an amount equal to the par value of the Series B Preferred Stock and thereafter to participate on an as-converted-to-common stock basis with holders of the common stock in any distribution of our assets to the holders of the common stock. The Series B Certificate of Designation provides, among other things, that we will not pay any dividends on shares of common stock (other than dividends in the form of common stock) unless and until such time as we pay dividends on each Series B Preferred Share on an as-converted basis. Other than as set forth in the previous sentence, the Series B Certificate of Designation provides that no other dividends will be paid on Series B Preferred Shares and that we will pay no dividends (other than dividends in the form of common stock) on shares of common stock unless we simultaneously comply with the previous sentence. The Series B Certificate of Designation does not provide for any restriction on the repurchase of Series B Preferred Shares by us while there is any arrearage in the payment of dividends on the Series B Preferred Shares. There are no sinking fund provisions applicable to the Series B Preferred Shares.

In addition, in the event we consummate a merger or consolidation with or into another person or other reorganization event in which our shares of common stock are converted or exchanged for securities, cash or other property, or we sell, lease, license, assign, transfer, convey or otherwise dispose of all or substantially all of our assets or we or another person acquire 50% or more of our outstanding shares of common stock, then following such event, the holders of the Series B Preferred Shares will be entitled to receive upon conversion of the Series B Preferred Shares the same kind and amount of securities, cash or property which the holders would have received had they converted the Series B Preferred Shares immediately prior to such fundamental transaction. Any successor to us or surviving entity is required to assume the obligations under the Series B Preferred Shares.

Notwithstanding the foregoing, in the event we are not the surviving entity of a fundamental transaction or in the event of a reverse merger or similar transaction where we are the surviving entity, then, automatically and contemporaneous with the consummation of such transaction, the surviving entity (or our company in the event of a reverse merger or similar transaction) will purchase the then outstanding shares of Series B Preferred Stock by paying and issuing, in the event that such consideration given to the holders of our common stock is non-cash consideration,

as the case may be, to each holder an amount equal to the cash consideration plus the non-cash consideration in the form issuable to the holders of our common stock (in the case of a reverse merger or similar transaction, shares of common stock issuable to the holders of the acquired company) per share of our common stock in the fundamental transaction multiplied by the number of shares of common stock underlying the shares of Series B Preferred Stock held by the holder on the date immediately prior to the consummation of the fundamental transaction. Such amount will be paid in the same form and mix (whether securities, cash or property, or any combination of the foregoing) as the consideration received by holders of our common stock in the fundamental transaction.

With certain exceptions, as described in the Series B Certificate of Designation, shares of Series B Preferred Stock, or Series B Preferred Shares, have no voting rights. However, as long as any shares of Series B Preferred Shares remain outstanding, the Series B Certificate of Designation provides that we may not, without the affirmative vote of holders of a majority of the then-outstanding Series B Preferred Shares, (a) alter or change adversely the powers, preferences or rights given to the Series B Preferred Shares or alter or amend the Series B Certificate of Designation, (b) increase the number of authorized shares of Series B Preferred Shares or (c) amend our Certificate of Incorporation or other charter documents in any manner that adversely affects any rights of holders of Series B Preferred Shares.

Each Series B Preferred Share is convertible at any time at the holder's option into a number of shares of common stock equal to \$1,000 divided by the Series B Conversion Price. The "Series B Conversion Price" was initially \$37.50 and is subject to adjustment for stock splits, stock dividends, distributions, subdivisions and combinations and, as discussed above, certain dilutive issuances of our common stock or securities convertible into or exercisable for shares of our common stock. In November 2017, at the time of our issuance of our Series C Preferred Stock, the conversion price of the Series B Preferred Stock was reduced from \$37.50 per share to \$21.00 per share. In February 2018, we entered into an equity purchase agreement and, as a result, the conversion price of the Series B Convertible Preferred Stock was automatically adjusted from the reduced \$21.00 per share price to \$15.60 per share. On March 21, 2018, the Series B Conversion Price was reduced from \$15.60 to \$11.25 as a result of our letter agreement with certain holders of shares of our Series B Preferred Stock and Series C Preferred Stock (the "Letter Agreement"). In April 2018, as a result of a securities purchase agreement pursuant to which we agreed to issue up to approximately \$3,296,703 in Senior Secured Convertible Promissory Notes, the Series B Conversion Pricewas automatically adjusted from \$11.25 per share to \$4.50 per share. On November 29, 2018, as a result of the Amendment Agreement, the Series B Conversion Price was automatically adjusted from \$4.50 per share to \$2.25 per share. On March 26, 2020 as a result of the Amendment No. 1 Agreement, the Series B Conversion Price was reduced from \$2.25 to \$0.40 and is subject to further adjustment as set forth in the Series B Certificate of Designation. Notwithstanding the foregoing, the Series B Certificate of Designation further provides that we may not effect any conversion of Series B Preferred Shares, with certain exceptions, to the extent that, after giving effect to an attempted conversion, the holder of Series B Preferred Shares (together with such holder's affiliates, and any persons acting as a group together with such holder or any of such holder's affiliates) would beneficially own a number of shares of our common stock in excess of 4.99% (or, at the election of the holder, 9.99%) of the shares of our common stock then outstanding after giving effect to such exercise (the "Preferred Stock Beneficial Ownership Limitation"); provided, however, that upon notice to us, the holder may increase or decrease the Preferred Stock Beneficial Ownership Limitation, provided that in no event may the Preferred Stock Beneficial Ownership Limitation exceed 9.99% and any increase in the Preferred Stock Beneficial Ownership Limitation will not be effective until 61 days following notice of such increase from the holder to us.

As of March 26, 2020, 47 shares of Series B Preferred Stock are outstanding.

Stock Options and Stock Awards

As of March 26, 2020, we had outstanding options to purchase an aggregate of 815,380 shares of our common stock with exercise prices ranging from \$2.14 to \$6,915.00 per share, with an approximate weighted average exercise price of \$5.84 per share.

Warrants

As of March 26, 2020, we had outstanding warrants to purchase an aggregate of 909,189 shares of our common stock with exercise prices ranging from \$0.40 to \$1,800.00 per share, with an approximate weighted average exercise price of \$19.35 per share.

Antitakeover Effects of Delaware Law and Provisions of our Amended and Restated Certificate of Incorporation and Amended and Restated By-laws

Certain provisions of the Delaware General Corporation Law and of our amended and restated certificate of incorporation and amended and restated by-laws could have the effect of delaying, deferring or discouraging another party from acquiring control of us. These provisions, which are summarized below, are expected to discourage certain types of coercive takeover practices and inadequate takeover bids and, as a consequence, they might also inhibit temporary fluctuations in the market price of our common stock that often result from actual or rumored hostile takeover attempts. These provisions are also designed in part to encourage anyone seeking to acquire control of us to first negotiate with our board of directors. These provisions might also have the effect of preventing changes in our management. It is possible that these provisions could make it more difficult to accomplish transactions that stockholders might otherwise deem to be in their best interests. However, we believe that the advantages gained by

protecting our ability to negotiate with any unsolicited and potentially unfriendly acquirer outweigh the disadvantages of discouraging such proposals, including those priced above the then-current market value of our common stock, because, among other reasons, the negotiation of such proposals could improve their terms.

Delaware Takeover Statute

We are subject to the provisions of Section 203 of the Delaware General Corporation Law. In general, Section 203 prohibits a publicly held Delaware corporation from engaging in a "business combination" with an "interested stockholder" for a three-year period following the time that this stockholder becomes an interested stockholder, unless the business combination is approved in a prescribed manner. Under Section 203, a business combination between a corporation and an interested stockholder is prohibited unless it satisfies one of the following conditions:

- before the stockholder became interested, our board of directors approved either the business combination or the transaction which resulted in the stockholder becoming an interested stockholder;
- upon consummation of the transaction which resulted in the stockholder becoming an interested stockholder, the interested stockholder owned at least 85% of the voting stock of the corporation outstanding at the time the transaction commenced, excluding for purposes of determining the voting stock outstanding, shares owned by persons who are directors and also officers, and employee stock plans, in some instances, but not the outstanding voting stock owned by the interested stockholder; or
- at or after the time the stockholder became interested, the business combination was approved by our board of directors and authorized at an annual or special meeting of the stockholders by the affirmative vote of at least two-thirds of the outstanding voting stock which is not owned by the interested stockholder.

Section 203 defines a business combination to include:

- any merger or consolidation involving the corporation and the interested stockholder;
- any sale, transfer, lease, pledge or other disposition involving the interested stockholder of 10% or more of the assets of the corporation;
- subject to exceptions, any transaction that results in the issuance or transfer by the corporation of any stock of the corporation to the interested stockholder;
- subject to exceptions, any transaction involving the corporation that has the effect of increasing the proportionate share of the stock of any class or series of the corporation beneficially owned by the interested stockholder; or
- the receipt by the interested stockholder of the benefit of any loans, advances, guarantees, pledges or other financial benefits provided by or through the corporation.

In general, Section 203 defines an interested stockholder as any entity or person beneficially owning 15% or more of the outstanding voting stock of the corporation and any entity or person affiliated with or controlling or controlled by the entity or person.

Provisions of our Amended and Restated Certificate of Incorporation and Amended and Restated By-laws. Our amended and restated certificate of incorporation and amended and restated by-laws include a number of provisions that may have the effect of delaying, deferring or discouraging another party from acquiring control of us and encouraging persons considering unsolicited tender offers or other unilateral takeover proposals to negotiate with our board of directors rather than pursue non-negotiated takeover attempts. These provisions include the items described below.

Board composition and filling vacancies. In accordance with our amended and restated certificate of incorporation, our board is divided into three classes serving staggered three-year terms, with one class being elected each year. Our amended and restated certificate of incorporation also provides that directors may be removed only for cause and then only by the affirmative vote of the holders the majority of the shares then entitled to vote at an election of directors. Furthermore, any vacancy on our board of directors, however occurring, including a vacancy resulting from an increase in the size of our board, may only be filled by the affirmative vote of a majority of our directors then in office even if less than a quorum.

No written consent of stockholders. Our amended and restated certificate of incorporation provides that all stockholder actions are required to be taken by a vote of the stockholders at an annual or special meeting, and that stockholders may not take any action by written consent in lieu of a meeting. This limit may lengthen the amount of time required to take stockholder actions and would prevent the amendment of our by-laws or removal of directors by our stockholder without holding a meeting of stockholders.

Meetings of stockholders. Our amended and restated by-laws provide that only a majority of the members of our board of directors then in office may call special meetings of stockholders and only those matters set forth in the notice of the special meeting may be considered or acted upon at a special meeting of stockholders. Our amended and restated by-laws limit the business that may be conducted at an annual meeting of stockholders to those matters properly brought before the meeting.

Advance notice requirements. Our amended and restated by-laws establish advance notice procedures with regard to stockholder proposals relating to the nomination of candidates for election as directors or new business to be brought before meetings of our stockholders. These procedures provide that notice of stockholder proposals must be timely given in writing to our corporate secretary prior to the meeting at which the action is to be taken. Generally, to be timely, notice must be received at our principal executive offices not less than 90 days or more than 120 days prior to

the first anniversary date of the annual meeting for the preceding year. The notice must contain certain information specified in our amended and restated by-laws.

Amendment to certificate of incorporation and by-laws. As required by the Delaware General Corporation Law, any amendment of our amended and restated certificate of incorporation must first be approved by a majority of our board of directors, and if required by law or our amended and restated certificate of incorporation, must thereafter be approved by a majority of the outstanding shares entitled to vote on the amendment, and a majority of the outstanding shares of each class entitled to vote thereon as a class, Our amended and restated by-laws may be amended by the affirmative vote of a majority vote of the directors then in office, subject to any limitations set forth in the amended and restated by-laws; and may also be amended by the affirmative vote of at least a majority of the outstanding shares entitled to vote on the amendment, or, if the board of directors recommends that the stockholders approve the amendment, by the affirmative vote of the majority of the outstanding shares entitled to vote on the amendment, in each case voting together as a single class.

Undesignated preferred stock. Our amended and restated certificate of incorporation provides for authorized shares of preferred stock. The existence of authorized but unissued shares of preferred stock may enable our board of directors to render more difficult or to discourage an attempt to obtain control of us by means of a merger, tender offer, proxy contest or otherwise. For example, if in the due exercise of its fiduciary obligations, our board of directors were to determine that a takeover proposal is not in the best interests of us or our stockholders, our board of directors could cause shares of preferred stock to be issued without stockholder approval in one or more private offerings or other transactions that might dilute the voting or other rights of the proposed acquirer or insurgent stockholder or stockholder group. In this regard, our amended and restated certificate of incorporation grants our board of director's broad power to establish the rights and preferences of authorized and unissued shares of preferred stock. The issuance of shares of preferred stock could decrease the amount of earnings and assets available for distribution to holders of shares of common stock. The issuance may also adversely affect the rights and powers, including voting rights, of these holders and may have the effect of delaying, deterring or preventing a change in control of us.

Choice of forum. Our amended and restated by-laws provide that the Court of Chancery of the State of Delaware is the sole and exclusive forum for any derivative action or proceeding brought on our behalf, any action asserting a breach of fiduciary duty, any action asserting a claim against us arising pursuant to the Delaware General Corporation Law, our certificate of incorporation or our by-laws, or any action asserting a claim against us that is governed by the internal affairs doctrine. Although our amended and restated by-laws contain the choice of forum provision described above, it is possible that a court could rule that such a provision is inapplicable for a particular claim or action or that such provision is unenforceable.

Transfer Agent and Registrar

The transfer agent and registrar for our common stock is EQ Shareowner Services, 1110 Centre Pointe Curve Suite 101, Mendota Heights, MN 55120, Tel: 855-217-6361. The transfer agent for any series of preferred stock that we may offer under this prospectus will be named and described in the prospectus supplement for that series.

Listing

Our common stock is listed on The NASDAQ Capital Market under the symbol "PRPO".

DESCRIPTION OF DEBT SECURITIES

We may issue debt securities from time to time, in one or more series, as either senior or subordinated debt or as senior or subordinated convertible debt. We will file as exhibits to the registration statement of which this prospectus is a part, or will incorporate by reference from reports that we file with the SEC, the form of debt securities and indentures that describes the terms of the particular series of debt we are offering. We urge you to read the applicable prospectus supplements related to the particular debt securities that we may offer under this prospectus, as well as any related free writing prospectuses, and the indentures that contain the terms of the debt securities.

We will describe in the applicable prospectus supplement the terms of the series of debt securities being offered, including:

- the title of the series of debt securities;
- any limit upon the aggregate principal amount that may be issued;
- the maturity date or dates;
- the form of the debt securities of the series;
- the applicability of any guarantees;
- whether or not the debt securities will be secured or unsecured, and the terms of any secured debt;
- whether the debt securities rank as senior debt, senior subordinated debt, subordinated debt or any combination thereof, and the terms of any subordination;

DESCRIPTION OF WARRANTS

We may issue warrants to purchase common stock, preferred stock or debt securities. We may offer warrants separately or together with one or more additional warrants, common stock, preferred stock, or debt securities, or any combination of those securities, as described in the applicable prospectus supplement. We will file as exhibits to the registration statement of which this prospectus is a part, or will incorporate by reference from reports that we file with the SEC, the form of warrant agreement, if any, including a form of warrant certificate, that describes the terms of the

particular series of warrants we are offering. The following summaries of material provisions of the warrants and the warrant agreements are subject to, and qualified in their entirety by reference to, all the provisions of the warrant agreement and warrant certificate applicable to the particular series of warrants that we may offer under this prospectus. We urge you to read the applicable prospectus supplements related to the particular series of warrants that we may offer under this prospectus, as well as any related free writing prospectuses, and the complete warrant agreements and warrant certificates that contain the terms of the warrants. The applicable prospectus supplement will describe the following terms of any warrants:

- the specific designation and aggregate number of, and the governing offering price at which we will issue, the warrants;
- the currency or currency units in which the offering price, if any, and the exercise price are payable;
- the date on which the right to exercise the warrants will begin and the date on which that right will expire or, if you may not continuously exercise the warrants throughout that period, the specific date or dates on which you may exercise the warrants;

- whether the warrants are to be sold separately or with other securities as parts of units;
- whether the warrants will be issued in definitive or global form or in any combination of these forms, although, in any case, the form of a warrant included in a unit will correspond to the form of the unit and of any security included in that unit;
- any applicable material U.S. federal income tax consequences;
- the identity of the warrant agent for the warrants and of any other depositaries, execution or paying agents, transfer agents, registrars or other agents;
- the proposed listing, if any, of the warrants or any securities purchasable upon exercise of the warrants on any securities exchange;
- the designation and terms of any equity securities purchasable upon exercise of the warrants;
- the designation, aggregate principal amount, currency and terms of any debt securities that may be purchased upon exercise of the warrants;
- if applicable, the designation and terms of the preferred stock with which the warrants are issued and the number of warrants issued with each security;
- if applicable, the date from and after which any warrants issued as part of a unit and the related debt securities, preferred stock, or common stock will be separately transferable;
- the number of shares of common stock, preferred stock purchasable upon exercise of a warrant and the price at which those shares may be purchased;
- if applicable, the minimum or maximum amount of the warrants that may be exercised at any one time;
- information with respect to book-entry procedures, if any;
- the anti-dilution provisions of, and other provisions for changes to or adjustment in the exercise price of, the warrants, if any;
- · any redemption or call provisions; and
- any additional terms of the warrants, including terms, procedures and limitations relating to the exchange or exercise of the warrants.

Exercise of Warrants

Each warrant will entitle the holder to purchase the securities that we specify in the applicable prospectus supplement at the exercise price that we describe in the applicable prospectus supplement. Unless we otherwise specify in the applicable prospectus supplement, holders of the warrants may exercise the warrants at any time up to the specified time on the expiration date that we set forth in the applicable prospectus supplement. After the close of business on the expiration date, unexercised warrants will become void.

Unless we otherwise specify in the applicable prospectus supplement, holders of the warrants may exercise the warrants by delivering the warrant certificate representing the warrants to be exercised together with specified information, and paying the required amount to the warrant agent in immediately available funds, as provided in the applicable prospectus supplement. We will set forth on the reverse side of the warrant certificate and in the

applicable prospectus supplement the information that the holder of the warrant will be required to deliver to the warrant agent in connection with the exercise of the warrant.

Upon receipt of the required payment and the warrant certificate properly completed and duly executed at the corporate trust office of the warrant agent or any other office indicated in the applicable prospectus supplement, we will issue and deliver the securities purchasable upon such exercise. If fewer than all of the warrants represented by the warrant certificate are exercised, then we will issue a new warrant certificate for the remaining amount of warrants. If we so indicate in the applicable prospectus supplement, holders of the warrants may surrender securities as all or part of the exercise price for warrants.

Governing Law

Unless we provide otherwise in the applicable prospectus supplement, the warrants and warrant agreements, and any claim, controversy or dispute arising under or related to the warrants or warrant agreements, will be governed by and construed in accordance with the laws of the State of New York.

Enforceability of Rights by Holders of Warrants

Each warrant agent will act solely as our agent under the applicable warrant agreement and will not assume any obligation or relationship of agency or trust with any holder of any warrant. A single bank or trust company may act as warrant agent for more than one issue of warrants. A warrant agent will have no duty or responsibility in case of any default by us under the applicable warrant agreement or warrant, including any duty or responsibility to initiate any proceedings at law or otherwise, or to make any demand upon us. Any holder of a warrant may, without the consent of the related warrant agent or the holder of any other warrant, enforce by appropriate legal action its right to exercise, and receive the securities purchasable upon exercise of, its warrants.

LEGAL OWNERSHIP OF SECURITIES

We can issue securities in registered form or in the form of one or more global securities. We describe global securities in greater detail below. We refer to those persons who have securities registered in their own names on the books that we or any applicable trustee or depositary maintain for this purpose as the "holders" of those securities. These persons are the legal holders of the securities. We refer to those persons who, indirectly through others, own beneficial interests in securities that are not registered in their own names, as "indirect holders" of those securities. As we discuss below, indirect holders are not legal holders, and investors in securities issued in bookentry form or in street name will be indirect holders.

Book-Entry Holders

We may issue securities in book-entry form only, as we will specify in the applicable prospectus supplement. This means securities may be represented by one or more global securities registered in the name of a financial institution that holds them as depositary on behalf of other financial institutions that participate in the depositary's book-entry system. These participating institutions, which are referred to as participants, in turn, hold beneficial interests in the securities on behalf of themselves or their customers.

Only the person in whose name a security is registered is recognized as the holder of that security. Global securities will be registered in the name of the depositary or its participants. Consequently, for global securities, we will recognize only the depositary as the holder of the securities, and we will make all payments on the securities to the depositary. The depositary passes along the payments it receives to its participants, which in turn pass the payments along to their customers who are the beneficial owners. The depositary and its participants do so under agreements they have made with one another or with their customers; they are not obligated to do so under the terms of the securities.

As a result, investors in a global security will not own securities directly. Instead, they will own beneficial interests in a global security, through a bank, broker or other financial institution that participates in the depositary's book-entry system or holds an interest through a participant. As long as the securities are issued in global form, investors will be indirect holders, and not legal holders, of the securities.

Street Name Holders

We may terminate a global security or issue securities that are not issued in global form. In these cases, investors may choose to hold their securities in their own names or in "street name." Securities held by an investor in street name would be registered in the name of a bank, broker or other financial institution that the investor chooses, and the investor would hold only a beneficial interest in those securities through an account he or she maintains at that institution.

For securities held in street name, we or any applicable trustee or depositary will recognize only the intermediary banks, brokers and other financial institutions in whose names the securities are registered as the holders of those securities, and we or any such trustee or depositary will make all payments on those securities to them. These institutions pass along the payments they receive to their customers who are the beneficial owners, but only because they agree to do so in their customer agreements or because they are legally required to do so. Investors who hold securities in street name will be indirect holders, not holders, of those securities.

Legal Holders

Our obligations, as well as the obligations of any applicable trustee or third party employed by us or a trustee, run only to the legal holders of the securities. We do not have obligations to investors who hold beneficial interests in global securities, in street name or by any other indirect means. This will be the case whether an investor chooses to be an indirect holder of a security or has no choice because we are issuing the securities only in global form.

For example, once we make a payment or give a notice to the holder, we have no further responsibility for the payment or notice even if that holder is required, under agreements with its participants or customers or by law, to pass it along to the indirect holders but does not do so. Similarly, we may want to obtain the approval of the holders to amend an indenture, to relieve us of the consequences of a default or of our obligation to comply with a particular provision of an indenture, or for other purposes. In such an event, we would seek approval only from the holders, and not the indirect holders, of the securities. Whether and how the legal holders contact the indirect holders is up to the legal holders.

Special Considerations for Indirect Holders

If you hold securities through a bank, broker or other financial institution, either in book-entry form because the securities are represented by one or more global securities or in street name, you should check with your own institution to find out:

- how it handles securities payments and notices;
- · whether it imposes fees or charges;
- how it would handle a request for the holders' consent, if ever required;
- whether and how you can instruct it to send you securities registered in your own name so you can be a holder, if that is permitted in the future;
- how it would exercise rights under the securities if there were a default or other event triggering the need for holders to act to protect their interests; and
- if the securities are in book-entry form, how the depositary's rules and procedures will affect these matters.

Global Securities

A global security is a security that represents one or any other number of individual securities held by a depositary. Generally, all securities represented by the same global securities will have the same terms.

Each security issued in book-entry form will be represented by a global security that we issue to, deposit with and register in the name of a financial institution or its nominee that we select. The financial institution that we select for this purpose is called the depositary. Unless we specify otherwise in the applicable prospectus supplement, the DTC, New York, New York, will be the depositary for all securities issued in book-entry form.

A global security may not be transferred to or registered in the name of anyone other than the depositary, its nominee or a successor depositary, unless special termination situations arise. We describe those situations below under "—Special Situations When a Global Security Will Be Terminated." As a result of these arrangements, the depositary, or its nominee, will be the sole registered owner and legal holder of all securities represented by a global security, and investors will be permitted to own only beneficial interests in a global security. Beneficial interests must be held by means of an account with a broker, bank or other financial institution that in turn has an account with the depositary or with another institution that does. Thus, an investor whose security is represented by a global security will not be a legal holder of the security, but only an indirect holder of a beneficial interest in the global security.

If the prospectus supplement for a particular security indicates that the security will be issued as a global security, then the security will be represented by a global security at all times unless and until the global security is terminated. If termination occurs, we may issue the securities through another book-entry clearing system or decide that the securities may no longer be held through any book-entry clearing system.

Special Considerations for Global Securities

As an indirect holder, an investor's rights relating to a global security will be governed by the account rules of the investor's financial institution and of the depositary, as well as general laws relating to securities transfers.

We do not recognize an indirect holder as a holder of securities and instead deal only with the depositary that holds the global security.

If securities are issued only as global securities, an investor should be aware of the following:

- an investor cannot cause the securities to be registered in his or her name, and cannot obtain nonglobal certificates for his or her interest in the securities, except in the special situations we describe below:
- an investor will be an indirect holder and must look to his or her own bank or broker for payments on the securities and protection of his or her legal rights relating to the securities, as we describe above;
- an investor may not be able to sell interests in the securities to some insurance companies and to other institutions that are required by law to own their securities in non-book-entry form;
- an investor may not be able to pledge his or her interest in the global security in circumstances where certificates representing the securities must be delivered to the lender or other beneficiary of the pledge in order for the pledge to be effective;
- the depositary's policies, which may change from time to time, will govern payments, transfers, exchanges and other matters relating to an investor's interest in the global security;

- we and any applicable trustee have no responsibility for any aspect of the depositary's actions or for its
 records of ownership interests in the global security, nor will we or any applicable trustee supervise the
 depositary in any way;
- the depositary may, and we understand that the DTC will, require that those who purchase and sell interests in the global security within its book-entry system use immediately available funds, and your broker or bank may require you to do so as well; and
- financial institutions that participate in the depositary's book-entry system, and through which an investor holds its interest in the global security, may also have their own policies affecting payments, notices and other matters relating to the securities.

There may be more than one financial intermediary in the chain of ownership for an investor. We do not monitor and are not responsible for the actions of any of those intermediaries.

Special Situations When a Global Security Will Be Terminated

In a few special situations described below, a global security will terminate and interests in it will be exchanged for physical certificates representing those interests. After that exchange, the choice of whether to hold securities directly or in street name will be up to the investor. Investors must consult their own banks or brokers to find out how to have their interests in securities transferred to their own names, so that they will be direct holders. We have described the rights of holders and street name investors above.

Unless we provide otherwise in the applicable prospectus supplement, the global security will terminate when the following special situations occur:

- if the depositary notifies us that it is unwilling, unable or no longer qualified to continue as depositary for that global security and we do not appoint another institution to act as depositary within 90 days;
- if we notify any applicable trustee that we wish to terminate that global security; or
- if an event of default has occurred with regard to securities represented by that global security and has not been cured or waived.

The applicable prospectus supplement may also list additional situations for terminating a global security that would apply only to the particular series of securities covered by the prospectus supplement. When a global security terminates, the depositary, and neither we nor any applicable trustee, is responsible for deciding the names of the institutions that will be the initial direct holders.

PLAN OF DISTRIBUTION

We may offer and sell the securities in any one or more of the following ways:

- to or through underwriters, brokers or dealers;
- directly to one or more other purchasers;
- through a block trade in which the broker or dealer engaged to handle the block trade will attempt to sell the securities as agent, but may position and resell a portion of the block as principal to facilitate the transaction;
- through agents on a best-efforts basis;
- in "at the market" offerings, as defined in Rule 415 under the Securities Act, at negotiated prices, at prices prevailing at the time of sale or at prices related to such prevailing market prices, including sales made directly on the Nasdaq Capital Market or sales made through a market maker other than on an exchange or other similar offerings through sales agents; or
- otherwise through any other method permitted by applicable law or a combination of any of the above methods of sale.

In addition, we may enter into option, share lending or other types of transactions that require us to deliver shares of Common Stock to an underwriter, broker or dealer, who will then resell or transfer the shares of Common Stock under this prospectus. We may also enter into hedging transactions with respect to our securities. For example, we may:

- enter into transactions involving short sales of the shares of Common Stock by underwriters, brokers or dealers:
- sell shares of Common Stock short and deliver the shares to close out short positions;
- enter into option or other types of transactions that require the delivery of shares of Common Stock to an underwriter, broker or dealer, who will then resell or transfer the shares of Common Stock under this prospectus; or
- loan or pledge the shares of Common Stock to an underwriter, broker or dealer, who may sell the loaned shares or, in the event of default, sell the pledged shares.

We may enter into derivative transactions with third parties, or sell securities not covered by this prospectus to third parties in privately negotiated transactions. If the applicable prospectus supplement indicates, in connection with those derivatives, the third parties may sell securities covered by this prospectus and the applicable prospectus supplement, including in short sale transactions. If so, the third party may use securities pledged by or borrowed from us or others to settle those sales or to close out any related open borrowings of stock, and may use securities received from us in settlement of those derivatives to close out any related open borrowings of stock. The third party in such sale transactions will be an underwriter and, if not identified in this prospectus, will be identified in the applicable prospectus supplement (or a post-effective amendment). In addition, we may otherwise loan or pledge securities to a financial institution or other third party that in turn may sell the securities short using this prospectus. Such financial institution or other third party may transfer its economic short position to investors in our securities or in connection with a concurrent offering of other securities.

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. Any prospectus supplement will also set forth the terms of the offering, including:

- the purchase price of the securities and the proceeds we will receive from the sale of the securities;
- any underwriting discounts and other items constituting underwriters' compensation;
- any public offering or purchase price and any discounts or commissions allowed or re-allowed or paid to dealers:
- any commissions allowed or paid to agents;

- any other offering expenses;
- any securities exchanges on which the securities may be listed;
- the method of distribution of the securities;
- the terms of any agreement, arrangement or understanding entered into with the underwriters, brokers or dealers; and
- any other information we think is important.

If underwriters or dealers are used in the sale, the securities will be acquired by the underwriters or dealers for their own account.

The securities may be sold from time to time by us in one or more transactions:

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

Such sales may be effected:

- in transactions on any national securities exchange or quotation service on which the securities may be listed or quoted at the time of sale;
- in transactions in the over-the-counter market;
- in block transactions in which the broker or dealer so engaged will attempt to sell the securities as agent but may position and resell a portion of the block as principal to facilitate the transaction, or in crosses, in which the same broker acts as an agent on both sides of the trade;
- through the writing of options; or
- through other types of transactions.

The securities may be offered to the public either through underwriting syndicates represented by one or more managing underwriters or directly by one or more of such firms. Unless otherwise set forth in the prospectus supplement, the obligations of underwriters or dealers to purchase the securities offered will be subject to certain conditions precedent and the underwriters or dealers will be obligated to purchase all the offered securities if any are purchased. Any public offering price and any discount or concession allowed or re-allowed or paid by underwriters or dealers to other dealers may be changed from time to time.

The securities may be sold directly by us or through agents designated by us from time to time. Any agent involved in the offer or sale of the securities in respect of which this prospectus is delivered will be named, and any commissions payable to such agent will be set forth in, the prospectus supplement. Unless otherwise indicated in the prospectus supplement, any such agent will be acting on a best efforts basis for the period of its appointment.

Offers to purchase the securities offered by this prospectus may be solicited, and sales of the securities may be made by us directly to institutional investors or others, who may be deemed to be underwriters within the meaning of the Securities Act with respect to any resale of the securities. The terms of any offer made in this manner will be included in the prospectus supplement relating to the offer.

Some of the underwriters, dealers or agents used by us in any offering of securities under this prospectus may be customers of, engage in transactions with, and perform services for us or affiliates of ours in the ordinary course of business. Underwriters, dealers, agents and other persons may be entitled to indemnification against and contribution toward certain civil liabilities, including liabilities under the Securities Act, and to be reimbursed for certain expenses.

Subject to any restrictions relating to debt securities in bearer form, any securities initially sold outside the United States may be resold in the United States through underwriters, dealers or otherwise.

Any underwriters to which offered securities are sold by us for public offering and sale may engage in transactions that stabilize, maintain or otherwise affect the price of the Common Stock during and after this offering, but those underwriters will not be obligated to do so and may discontinue any market making at any time. Specifically, the underwriters may over-allot or otherwise create a short position in the common stock for their own accounts by selling more common stock than have been sold to them by us. The underwriters may elect to cover any such short position by purchasing common stock in the open market or by exercising the over-allotment option granted to the underwriters. In addition, the underwriters may stabilize or maintain the price of the common stock by bidding for or purchasing common stock in the open market and may impose penalty bids. If penalty bids are imposed, selling concessions allowed to syndicate members or other broker-dealers participating in the offering are reclaimed if common stock previously distributed in the offering are repurchased, whether in connection with stabilization transactions or otherwise. The effect of these transactions may be to stabilize or maintain the market price of the common stock at a level above that which might otherwise prevail in the open market. The imposition of a penalty bid may also affect the price of the common stock to the extent that it discourages resales of the common stock. The magnitude or effect of any stabilization or other transactions is uncertain. These transactions may be effected on the Nasdaq Capital Market or otherwise and, if commenced, may be discontinued at any time.

In connection with this offering, the underwriters and selling group members may also engage in passive market making transactions in our common stock. Passive market making consists of displaying bids on the Nasdaq Capital Market limited by the prices of independent market makers and effecting purchases limited by those prices in response to order flow. Rule 103 of Regulation M promulgated by the SEC limits the amount of net purchases that each passive market maker may make and the displayed size of each bid. Passive market making may stabilize the market price of the common stock at a level above that which might otherwise prevail in the open market and, if commenced, may be discontinued at any time.

We are subject to the applicable provisions of the Exchange Act and the rules and regulations under the Exchange Act, including Regulation M. This regulation may limit the timing of purchases and sales of any of the shares of common stock offered in this prospectus by any person. The anti-manipulation rules under the Exchange Act may apply to sales of shares in the market and to the activities of us.

The anticipated date of delivery of the securities offered by this prospectus will be described in the applicable prospectus supplement relating to the offering.

Any broker-dealer participating in the distribution of the shares of common stock may be deemed to be an "underwriter" within the meaning of the Securities Act with respect to any securities such entity sells pursuant to this prospectus.

To comply with the securities laws of some states, if applicable, the securities may be sold in these jurisdictions only through registered or licensed brokers or dealers. In addition, in some states the securities may not be sold unless they have been registered or qualified for sale or an exemption from registration or qualification requirements is available and is complied with.

Fees and Commissions

In compliance with the guidelines of the Financial Industry Regulatory Authority, or FINRA, the aggregate maximum discount, commission or agency fees or other items constituting underwriting compensation to be received by any FINRA member or independent broker-dealer will not exceed 8% of any offering pursuant to this prospectus and any applicable prospectus supplement or other offering materials; however, it is anticipated that the maximum commission or discount to be received in any particular offering of securities will be less than this amount.

If 5% or more of the net proceeds of any offering of securities made under this prospectus will be received by a FINRA member participating in the offering or affiliates or associated persons of such FINRA member, the offering will be conducted in accordance with FINRA Rule 5121.

LEGAL MATTERS

The validity of the shares of common stock offered hereby will be passed upon for us by Sichenzia Ross Ference LLP, New York, New York.

EXPERTS

The consolidated financial statements of Precipio, Inc. as of and for the years ended December 31, 2019 and 2018 appearing in our Annual Report on Form 10-K filed for the year ended December 31, 2019, have been audited by Marcum LLP, independent registered public accounting firm, to the extent and for the periods as set forth in their report thereon, and incorporated herein by reference in reliance upon such report given on the authority of such firm as experts in accounting and auditing.

WHERE YOU CAN FIND MORE INFORMATION

We have filed with the SEC a registration statement on Form S-3 under the Securities Act that registers the shares of our common stock to be sold in this offering. This prospectus does not contain all of the information set forth in the registration statement and the exhibits and schedules filed as part of the registration statement. For further information with respect to us and our common stock, we refer you to the registration statement and the exhibits and schedules filed as a part of the registration statement. Statements contained in this prospectus concerning the contents of any contract or any other document, are not necessarily complete. If a contract or document has been filed as an exhibit to the registration statement, we refer you to the copy of the contract or document that has been filed. Each statement in this prospectus relating to a contract or document filed as an exhibit is qualified in all respects by the filed exhibit. The reports and other information we file with the SEC can be read and copied at the SEC's Public Reference Room at 100 F Street, NE, Washington D.C. 20549. Copies of these materials can be obtained at prescribed rates from the Public Reference Section of the SEC at the principal offices of the SEC, 100 F Street, NE, Washington D.C. 20549. You may obtain information regarding the operation of the public reference room by calling 1(800) SEC-0330. The SEC also maintains a website (http://www.sec.gov) that contains reports, proxy and information statements and other information regarding issuers like us that file electronically with the SEC.

We are required to file annual, quarterly and current reports and other information with the SEC under the Securities Exchange Act of 1934, as amended. These periodic reports, proxy statements and other information will be available for inspection and copying at the SEC's public reference room and the website of the SEC referred to above.

INCORPORATION OF CERTAIN INFORMATION BY REFERENCE

This prospectus omits some information contained in the registration statement in accordance with SEC rules and regulations. You should review the information and exhibits included in the registration statement of which this prospectus is a part for further information about us and the securities we are offering. Statements in this prospectus concerning any document we filed as an exhibit to the registration statement or that we otherwise filed with the SEC are not intended to be comprehensive and are qualified by reference to these filings. You should review the complete document to evaluate these statements.

The SEC allows us to "incorporate by reference" information we file with it, which means that we can disclose important information to you by referring you to other documents. The information incorporated by reference is considered to be a part of this prospectus. Information contained in this prospectus supersedes information incorporated by reference that we have filed with the SEC prior to the date of this prospectus.

We incorporate by reference the following documents listed below (excluding any document or portion thereof to the extent such disclosure is furnished and not filed):

- Our Annual Report on Form 10-K for the fiscal year ended December 31, 2019, filed with the SEC on March 27, 2020, as amended by Annual Report on Form 10-K/A for the fiscal year ended December 31, 2019, filed with the SEC on April 7, 2020;
- Our Current Reports on Form 8-K filed with the SEC on January 14, 2020, February 18, 2020, March 16, 2020, March 27, 2020 and April 7, 2020; and
- The portions of our definitive proxy statement on Schedule 14A relating to our 2019 Annual Meeting of Stockholders, as filed with the SEC on April 29, 2019 that are deemed "filed" with the SEC under the Exchange Act

In addition, we hereby incorporate by reference into this prospectus all documents that we file with the SEC under Sections 13(a), 13(c), 14, or 15(d) of the Exchange Act after the effective date of this Registration Statement and before we terminate the offering under this prospectus. These documents include periodic reports, such as annual reports on Form 10-K, quarterly reports on Form 10-Q and current reports on Form 8-K (other than current reports or portions thereof furnished under Items 2.02 or 7.01 of Form 8-K, unless specifically incorporated herein), as well as proxy statements.

We will provide without charge to each person, including any beneficial owner, to whom a copy of this prospectus is delivered, upon written or oral request, a copy of any or all of the foregoing documents which we incorporate by reference in this prospectus (not including exhibits to such documents unless such exhibits are specifically incorporated by reference to such documents). Requests should be directed to:

Precipio, Inc. 4 Science Park New Haven, CT 06511 (203) 787-7888

A copy of any or all of the foregoing documents which we incorporate by reference in this prospectus may be accessed on our corporate website at http://www.precipiodx.com (Click the "Investors" link and then the "SEC Filings" link).

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[] Shares of Common Stock

PROSPECTUS

[],2020

PART II

INFORMATION NOT REQUIRED IN PROSPECTUS

Item 14. Other Expenses of Issuance and Distribution

The following table sets forth all expenses, other than the underwriting discounts and commissions, payable by Precipio in connection with the sale of the common stock being registered. All of the amounts shown are estimates except for the SEC registration fee and the FINRA filing fee.

	Tot	tal
SEC registration fee	\$	*
Legal fees and expenses		*
Accounting fees and expenses		*
Transfer agent and registrar fees		*
Miscellaneous		*
Total	\$	*

^{*} To be provided by amendment

Item 15. Indemnification of Directors and Officers

Section 145(a) of the Delaware General Corporation Law (the "DGCL") provides, in general, that a corporation shall have the power to indemnify any person who was or is a party or is threatened to be made a party to any threatened, pending or completed action, suit or proceeding, whether civil, criminal, administrative or investigative (other than an action by or in the right of the corporation), by reason of the fact he or she is or was a director, officer, employee or agent of the corporation, or is or was serving at the request of the corporation as a director, officer, employee or agent of another corporation, partnership, joint venture, trust or other enterprise, against expenses (including attorneys' fees), judgments, fines and amounts paid in settlement actually and reasonably incurred by the person in connection with such action, suit or proceeding, if he or she acted in good faith and in a manner he or she reasonably believed to be in or not opposed to the best interests of the corporation and, with respect to any criminal action or proceeding, had no reasonable cause to believe his or her conduct was unlawful.

Section 145(b) of the DGCL provides, in general, that a corporation shall have the power to indemnify any person who was or is a party or is threatened to be made a party to any threatened, pending or completed action or suit by or in the right of the corporation to procure a judgment in its favor because the person is or was a director, officer, employee or agent of the corporation, or is or was serving at the request of the corporation as a director, officer, employee or agent of another corporation, partnership, joint venture, trust or other enterprise, against expenses (including attorneys' fees) actually and reasonably incurred by the person in connection with the defense or settlement of such action or suit if he or she acted in good faith and in a manner he or she reasonably believed to be in or not opposed to the best interests of the corporation, except that no indemnification shall be made with respect to any claim, issue or matter as to which he or she shall have been adjudged to be liable to the corporation unless and only to the extent that the Court of Chancery or other adjudicating court determines that, despite the adjudication of liability but in view of all of the circumstances of the case, he or she is fairly and reasonably entitled to indemnity for such expenses which the Court of Chancery or other adjudicating court shall deem proper.

Section 145(g) of the DGCL provides, in general, that a corporation shall have the power to purchase and maintain insurance on behalf of any person who is or was a director, officer, employee or agent of the corporation, or is or was serving at the request of the corporation as a director, officer, employee or agent of another corporation, partnership, joint venture, trust or other enterprise against any liability asserted against such person and incurred by

such person in any such capacity, or arising out of his or her status as such, whether or not the corporation would have the power to indemnify the person against such liability under Section 145 of the DGCL.

Section 9.1 of Article IX of the Registrant's Third Amended and Restated Certificate of Incorporation, as amended to date (the "Certificate of Incorporation"), and Section 1 of Article V of the Registrant's Amended and Restated Bylaws, as amended to date (the "Bylaws") provide that each person who was or is made a party or is threatened to be made a party to or is otherwise involved in any action, suit or proceeding, whether civil, criminal, administrative or investigative (hereinafter a "proceeding"), by reason of the fact that he or she is or was a director or officer of the Registrant or is or was serving at the request of the Registrant as a director or officer of another corporation or of a partnership, joint venture, trust or other enterprise, including service with respect to employee benefit plans (hereinafter an "indemnitee"), whether the basis of such proceeding is alleged action in an official capacity as a director or officer or in any other capacity while serving as a director or officer, shall be indemnified and held harmless by the Registrant to the fullest extent authorized by the General Corporation Law of the State of Delaware, as the same exists or may thereafter be amended (but, in the case of any such amendment, only to the extent that such amendment permits the Registrant to provide broader indemnification rights than such law permitted the Registrant to provide prior to such amendment), against all expense, liability and loss (including attorneys' fees, judgments, fines, excise taxes or penalties and amounts paid in settlement) reasonably incurred or suffered by such indemnitee in connection therewith and that such indemnification shall continue as to an indemnitee who has ceased to be a director or officer and shall inure to the benefit of the indemnitee's heirs, executors and administrators; provided, however, that, except as otherwise provided in the Certificate of Incorporate or Bylaws, as applicable, the Registrant will indemnify any such indemnitee in connection with a proceeding initiated by such indemnitee only if such proceeding was authorized by the Board of Directors of the Registrant. The right to indemnification conferred by the Certificate of Incorporation and Bylaws is a contract right and includes the right to be paid by the Registrant the expenses incurred in defending any such proceeding in advance of its final disposition (hereinafter an "advancement of expenses"); and provided, further, that, if the General Corporation Law of the State of Delaware requires it, an advancement of expenses incurred by an indemnitee shall be made only upon delivery to the Registrant of an undertaking, by or on behalf of such indemnitee, to repay all amounts so advanced if it shall ultimately be determined by final judicial decision from which there is no further right to appeal that such indemnitee is not entitled to be indemnified for such expenses under the Certificate of Incorporation or Bylaws, as applicable, or otherwise (hereinafter an "undertaking").

Section 9.2 of Article IX of the Certificate of Incorporation and Section 2 of Article V of the Bylaws provide that if a claim under Section 9.1 of Article IX of the Certificate of Incorporation or under Section 1 of Article V of the Bylaws, as applicable, is not paid in full by the Registrant within sixty (60) days after a written claim has been received by the Registrant, except in the case of a claim for an advancement of expenses, in which case the applicable period shall be twenty (20) days, the indemnitee may at any time thereafter bring suit against the Registrant to recover the unpaid amount of the claim. If successful in whole or part in any such suit, the indemnitee shall be entitled to be paid also the expense of prosecuting or defending such suit. In any suit brought by the indemnitee to enforce a right to indemnification hereunder (but not in a suit brought by the indemnitee to enforce a right to an advancement of expenses), it shall be a defense that the indemnitee has not met the applicable standard of conduct set forth in the General Corporation Law of the State of Delaware. Likewise, in any suit by the Registrant to recover an advancement of expenses pursuant to the terms of an undertaking, the Registrant shall be entitled to recover such expenses upon a final adjudication that the indemnitee has not met such standards. Neither the failure of the Registrant (including its Board of Directors, independent legal counsel or its stockholders) to have made a determination prior to the commencement of such suit that indemnification of the indemnitee is proper in the circumstances because the indemnitee has met the applicable standard of conduct set forth in the General Corporation Law of the State of Delaware, nor an actual determination by the Registrant (including its Board of Directors, independent legal counsel or its stockholders) that the indemnitee has not met such applicable standard of conduct, shall create a presumption that the indemnitee has not met the applicable standard of conduct or, in the case of such a suit brought by indemnitee, be a defense to such suit. In any suit brought by the indemnitee to enforce a right under such indemnification provisions of the Certificate of Incorporation or Bylaws, as applicable, or by the Registrant to recover an advancement of expenses pursuant to the terms of an undertaking, the burden of proving that the indemnitee is not entitled to be indemnified or to such advancement of expenses shall be on the Registrant.

The Registrant has entered into indemnification agreements with each of its directors and executive officers, in addition to the indemnification provisions provided for in its charter documents, and the Registrant intends to enter into indemnification agreements with any new directors and executive officers in the future.

The Registrant also maintains a directors' and officers' liability insurance policy that insures the Registrant's directors and officers against such liabilities as are customarily covered by such policies.

Item 16. Exhibits and Financial Statement Schedules

(a) Exhibits.

The exhibits to the registration statement are listed in the Exhibit Index to this registration statement and are incorporated herein by reference.

(b) Financial Statement Schedule.

None.

Item 17. Undertakings

The undersigned registrant hereby undertakes:

- (1) To file, during any period in which offers or sales are being made, a post-effective amendment to this registration statement:
- (i) To include any prospectus required by Section 10(a)(3) of the Securities Act;
- (ii) To reflect in the prospectus any facts or events arising after the effective date of the registration statement (or the most recent post-effective amendment thereof) which, individually or in the aggregate, represent a fundamental change in the information set forth in the registration statement.

Notwithstanding the foregoing, any increase or decrease in volume of securities offered (if the total dollar value of securities offered would not exceed that which was registered) and any deviation from the low or high end of the estimated maximum offering range may be reflected in the form of prospectus filed with the Securities and Exchange Commission, or the Commission, pursuant to Rule 424(b) if, in the aggregate, the changes in volume and price represent no more than 20 percent change in the maximum aggregate offering price set forth in the "Calculation of Registration Fee" table in the effective registration statement; and

(iii) To include any material information with respect to the plan of distribution not previously disclosed in the registration statement or any material change to such information in the registration statement;

provided, however, that the undertakings set forth in paragraphs (1)(i), (1)(ii) and (1)(iii) above do not apply if the information required to be included in a post-effective amendment by those paragraphs is contained in reports filed with or furnished to the Commission by the registrant pursuant to Section 13 or Section 15(d) of the Securities Exchange Act of 1934, as amended, or the Exchange Act, that are incorporated by reference into this registration statement or are contained in a form of prospectus filed pursuant to Rule 424(b) that is part of this registration statement.

- (2) That, for the purpose of determining any liability under the Securities Act, each such post-effective amendment shall be deemed to be a new registration statement relating to the securities offered therein, and the offering of such securities at that time shall be deemed to be the initial *bona fide* offering thereof.
- (3) To remove from registration by means of a post-effective amendment any of the securities being registered which remain unsold at the termination of the offering.
- (4) That, for the purpose of determining liability under the Securities Act to any purchaser:
- (i) Each prospectus filed by the registrant pursuant to Rule 424(b)(3) shall be deemed to be part of the registration statement as of the date the filed prospectus was deemed part of and included in the registration statement; and
- (ii) Each prospectus required to be filed pursuant to Rule 424(b)(2), (b)(5), or (b)(7) as part of a registration statement in reliance on Rule 430B relating to an offering made pursuant to Rule 415(a)(1)(i), (vii), or (x) for the purpose of providing the information required by Section 10(a) of the Securities Act shall be deemed to be part of and included in the registration statement as of the earlier of the date such form of prospectus is first used after effectiveness or the date of the first contract of sale of securities in the offering described in the prospectus. As provided in Rule 430B, for liability purposes of the issuer and any person that is at that date an underwriter, such date shall be deemed to be a new effective date of the registration statement relating to the securities in the registration statement to which that prospectus relates, and the offering of such securities at that time shall be deemed to be the initial *bona fide* offering thereof. *Provided, however*, that no statement made in a registration statement or prospectus that is part of the registration statement or made in a document incorporated or deemed incorporated by reference into the registration statement or prospectus that is part of the registration statement will, as to a purchaser with a time of contract of sale prior to such effective date, supersede or modify any statement that was made in the registration statement or prospectus that was part of the registration statement or made in any such document immediately prior to such effective date.
- (5) That, for the purpose of determining liability of the registrant under the Securities Act to any purchaser in the initial distribution of the securities, the undersigned registrant undertakes that in a primary offering of securities of the undersigned registrant pursuant to this registration statement, regardless of the underwriting method used to sell the securities to the purchaser, if the securities are offered or sold to such purchaser by means of any of the following communications, the undersigned registrant will be a seller to the purchaser and will be considered to offer or sell such securities to such purchaser: (i) any preliminary prospectus or prospectus of the undersigned registrant relating to the offering required to be filed pursuant to Rule 424; (ii) any free writing prospectus relating to the offering prepared by or on behalf of the undersigned registrant or used or referred to by the undersigned registrant; (iii) the portion of any other free writing prospectus relating to the offering containing material information about the

undersigned registrant or its securities provided by or on behalf of the undersigned registrant; and (iv) any other communication that is an offer in the offering made by the undersigned registrant to the purchaser.

- (6) That, for purposes of determining any liability under the Securities Act, each filing of the registrant's annual report pursuant to Section 13(a) or 15(d) of the Exchange Act (and, where applicable, each filing of an employee benefit plan's annual report pursuant to Section 15(d) of the Exchange Act) that is incorporated by reference into the registration statement shall be deemed to be a new registration statement relating to the securities offered therein, and the offering of such securities at that time shall be deemed to be the initial *bona fide* offering thereof.
- (7) That for purposes of determining any liability under the Securities Act, (i) the information omitted from the form of prospectus filed as part of the registration statement in reliance upon Rule 430A and contained in the form of prospectus filed by the registrant pursuant to Rule 424(b)(l) or (4) or 497(h) under the Securities Act shall be deemed to be a part of the registration statement as of the time it was declared effective; and (ii) each post-effective amendment that contains a form of prospectus shall be deemed to be a new registration statement relating to the securities offered therein, and the offering of such securities at that time shall be deemed to be the initial *bona fide* offering thereof.
- (8) To file an application for the purpose of determining the eligibility of the trustee to act under subsection (a) of Section 310 of the Trust Indenture Act in accordance with the rules and regulations prescribed by the Commission under Section 305(b)(2) of the Trust Indenture Act.

Insofar as indemnification for liabilities arising under the Securities Act may be permitted to directors, officers and controlling persons of the registrant pursuant to the foregoing provisions, or otherwise, the registrant has been advised that in the opinion of the Commission such indemnification is against public policy as expressed in the Securities Act and is, therefore, unenforceable. In the event that a claim for indemnification against such liabilities (other than the payment by the registrant of expenses incurred or paid by a director, officer or controlling person of the registrant in the successful defense of any action, suit or proceeding) is asserted by such director, officer or controlling person in connection with the securities being registered, the registrant will, unless in the opinion of its counsel the matter has been settled by controlling precedent, submit to a court of appropriate jurisdiction the question whether such indemnification by it is against public policy as expressed in the Securities Act and will be governed by the final adjudication of such issue

SIGNATURES

Pursuant to the requirements of the Securities Act of 1933, as amended, the Registrant has duly caused this Registration Statement on Form S-3 to be signed on its behalf by the undersigned, thereunto duly authorized, on April 9, 2020.

PRECIPIO, INC.

By: /s/ Ilan Danieli

Ilan Danieli Chief Executive Officer

POWER OF ATTORNEY

Each person whose individual signature appears below hereby authorizes and appoints Ilan Danieli and Carl Iberger, and each of them, with full power of substitution and resubstitution and full power to act without the other, as his or her true and lawful attorney in fact and agent to act in his or her name, place and stead and to execute in the name and on behalf of each person, individually and in each capacity stated below, and to file any and all amendments to this Registration Statement, including any and all post effective amendments and amendments thereto, and any registration statement relating to the same offering as this Registration Statement that is to be effective upon filing pursuant to Rule 462(b) under the Securities Act of 1933, as amended, and to file the same, with all exhibits thereto, and other documents in connection therewith, with the Securities and Exchange Commission, granting unto said attorneys in fact and agents, and each of them, full power and authority to do and perform each and every act and thing, ratifying and confirming all that said attorneys in fact and agents or any of them or their or his substitute or substitutes may lawfully do or cause to be done by virtue thereof.

Pursuant to the requirements of the Securities Act of 1933, as amended, this Registration Statement has been signed by the following persons in the capacities indicated below on April 9, 2020.

Signature	Title	Date	
/s/ Ilan Danieli	Chief Executive Officer and Director (Principal Executive Officer)	April 9, 2020	
Ilan Danieli			
/s/ Carl Iberger	Chief Financial Officer (Principal Financial Officer and Principal Accounting Officer)	April 9, 2020	
Carl Iberger			
/s/ Douglas Fisher, M.D.	Chairman of the Board of Directors	April 9, 2020	
Douglas Fisher, M.D.			
/s/ Kathleen LaPorte	Director	April 9, 2020	
Kathleen LaPorte			
/s/ Mark Rimer	Director	April 9, 2020	
Mark Rimer			

/s/ Richard Sandberg	Director	April 9, 2020
Richard Sandberg		
/s/ Jeffrey Cossman, M.D.	Director	April 9, 2020
Jeffrey Cossman, M.D.		
/s/ David Cohen	Director	April 9, 2020
David Cohen		

EXHIBIT INDEX

Exhibit No.	Exhibit Title		
2.1	Agreement and Plan of Merger, dated October 12, 2016 by and among Transgenomic, Inc., New Haven Labs Inc. and Precipio Diagnostics, LLC (incorporated by reference to Exhibit 2.1 of the Company's Form 8-K filed on October 13, 2016).		
2.2	First Amendment to Agreement and Plan of Merger, dated as of February 3, 2017 by and among Transgenomic, Inc., New Haven Labs Inc. and Precipio Diagnostics, LLC (incorporated by reference to Exhibit 2.1 of the Company's Form 8-K filed on February 3, 2017).		
2.3	Second Amendment to Agreement and Plan of Merger, dated as of June 27, 2017 by and among Transgenomic, Inc., New Haven Labs Inc. and Precipio Diagnostics, LLC (incorporated by reference to Exhibit 2.1 of the Company's Form 8-K filed on June 30, 2017).		
3.1	Third Amended and Restated Certificate of Incorporation, as amended (incorporated by reference to Exhibit 3.1 of the Company's 8-K filed on June 30, 2017).		
3.2	Amended and Restated Bylaws (incorporated by reference to Exhibit 3.2 of the Company's Form 8-K filed on June 30, 2017).		
3.3	Certificate of Elimination (incorporated by reference to Exhibit 3.3 of the Company's Form 8-K filed on June 30, 2017).		
3.4	Certificate of Designation for Series B Preferred Stock (incorporated by reference to Exhibit 3.1 of the Company's Form 8-K filed on August 31, 2017).		
3.5	Certificate of Designation for Series C Preferred Stock (incorporated by reference to Exhibit 3.1 of the Company's Form 8-K filed on November 3, 2017).		
3.6	Certificate of Amendment to the Third Amended and Restated Certificate of Incorporation, dated April 25, 2019 (incorporated by reference to Exhibit 3.1 of the Company's Form 8-K filed on April 26, 2019).		
4.1	Form of Certificate of the Company's Common Stock (incorporated by reference to Exhibit 4 of the Company's Registration Statement on Form S-1 (Registration No. 333-32174) filed on March 10, 2000).		
4.2	Form of Indenture		
5.1**	Opinion Sichenzia Ross Ference LLP		
23.1	Consent of Marcum LLP.		
23.2**	Consent of Sichenzia Ross Ference LLP (included in Exhibit 5.1)		
24.1**	Powers of Attorney (included on signature page)		
25.1*	Statement of Eligibility of Trustee under the Indenture.		

^{*} To be filed, if applicable, by amendment or by a report filed under the Exchange Act and incorporated herein by reference.

^{**} Previously filed with the Registration Statement on Form S-3 filed with the SEC on March 27, 2020 (File No. 333-237445).