Precipio, Inc.
Form S-1/A
June 14, 2018

As filed with the Securities and Exchange Commission on 14 June, 2018

Registration No. 333-224297

UNITED STATES

SECURITIES AND EXCHANGE COMMISSION

Washington, D.C. 20549

AMENDMENT NO. 1

TO

FORM S-1

REGISTRATION STATEMENT

UNDER

THE SECURITIES ACT OF 1933

PRECIPIO, INC.

(Exact name of Registrant as specified in its charter)

Delaware	**3826**	**91-1789357**
(State or other jurisdiction of	**(Primary Standard Industrial**	**(I.R.S. Employer**

incorporation or organization)	**Classification Code Number)**	**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:

Stephen M. Davis, Esq.	**Ilan Danieli**
Daniel A. Lang, Esq.	**Chief Executive Officer**
Goodwin Procter LLP	**Precipio, Inc.**
620 Eighth Avenue	**4 Science Park**
New York, New York 10018	**New Haven, Connecticut 06511**

(212) 813-8800 **(203) 787-7888**

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

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

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

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: ¨

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

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

Large Accelerated Filer	¨	Accelerated Filer	¨
Non-Accelerated Filer	¨ (Do not check if a smaller reporting company)	Smaller Reporting Company	x
Emerging Growth Company	¨		

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

CALCULATION OF REGISTRATION FEE

Title of Each Class of Securities to be Registered	Proposed Maximum Aggregate Offering Price(1)	Amount of Registration Fee(2)
Common Stock, $0.01 par value per share	$ 3,290,000	$ 409.60

(1) Estimated solely for the purpose of calculating the registration fee pursuant to Rule 457(o) under the Securities Act of 1933, as amended.

(2) Calculated pursuant to Rule 457(o) based on an estimate of the proposed maximum aggregate offering price.

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.

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.

Subject to Completion

Preliminary Prospectus dated [____], 2018

PROSPECTUS

Shares

Common Stock

Our common stock is listed on The NASDAQ Capital Market under the symbol "PRPO." The last reported sale price of our common stock on , 2018 was $ per share.

This prospectus relates to shares of common stock of Precipio Inc. that may be sold by the selling stockholder identified in this prospectus. The shares of common stock offered under this prospectus by the selling stockholder are issuable to Leviston Resources LLC ("Leviston") or the Investor pursuant to a certain Equity Purchase Agreement dated February 8, 2018 with Leviston and ourselves (the "Equity agreement") in accordance with which we may offer and sell shares of our common stock having an aggregate offering price of up to $8,000,000 from time to time to the Investor.

We will not receive any of the proceeds from the sale of shares by the selling stockholder. This registration statement covers only approximately 41% of the $8,000,000 of shares of our common stock issuable pursuant to the Equity Agreement. We will file subsequent registration statements covering the resale of additional shares of our common

stock issuable pursuant to the Equity Agreement with the Investor beginning approximately 30 days after we have substantially completed the sale to the Investor under the Equity Agreement of the shares subject to this registration statement.

Sales of our common stock, if any, under this prospectus may be made in sales deemed to be "at-the-market" equity offerings as defined in Rule 415 promulgated under the Securities Act of 1933, as amended, or the Securities Act, at a purchase price equal to 97.25% of the volume weighted average sales price of the common stock reported on the date that the Investor receives a capital call from us.

The selling stockholder may sell the shares of common stock described in this prospectus in a number of different ways and at varying prices. We provide more information about how the selling stockholder may sell its shares of common stock in the section titled "Plan of Distribution." Leviston is an "underwriter" within the meaning of the Securities Act of 1933, as amended, in connection with sales of shares offered pursuant to this prospectus. We will pay the expenses incurred in registering the shares, including legal and accounting fees.

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

We may amend or supplement this prospectus from time to time by filing amendments or supplements as required. You should read the entire prospectus and any amendments or supplements carefully before you make your investment decision.

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

The date of this prospectus is June 14, 2018

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You should rely only on the information contained in this prospectus or in any free writing prospectus we file with the Securities and Exchange Commission. We have not authorized anyone to provide you with information different from that contained in this prospectus or any free writing prospectus. We take no responsibility for, and can provide no assurance, as to the reliability of any other information that others may give you. We are offering to sell and seeking offers to buy, shares of our common stock only in jurisdictions where offers and sales are permitted. The information contained in this prospectus is accurate only as of the date on the front cover of this prospectus, or other earlier date stated in this prospectus, regardless of the time of delivery of this prospectus or of any sale of our common stock. Our business, financial condition, results of operations and prospects may have changed since such date.

For investors outside of the United States: we have not done anything that would permit this offering outside the United States or to permit the possession or distribution of this prospectus outside the United States. Persons outside the United States who come into possession of this prospectus must inform themselves about and observe any restrictions relating to, the offering of the shares of common stock and the distribution of this prospectus outside of the United States.

PROSPECTUS SUMMARY

This summary does not contain all of the information you should consider before buying shares of our common stock. You should read the entire prospectus carefully, especially the "Risk Factors" and on our Quarterly report on form 10-Q for the first quarter ended March 31, 2018, filed with the SEC on May 21, 2018 and our financial statements and the related notes our Annual Report on Form 10-K for the fiscal year ended December 31, 2017, filed with the SEC on April 13, 2018, before deciding to invest in shares of our common stock.

Overview

We are 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 technology 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 the Yale School of Medicine to capture the expertise, experience and technologies developed within academia so that we can provide a better standard of cancer diagnostics and solve the growing problem of cancer misdiagnosis. We also operate a research and development facility in Omaha, Nebraska which will focus on further development of ICE-COLD-PCR, or ICP, the patented technology described further below, which was exclusively licensed by us from Dana-Farber Cancer Institute, Inc., or Dana-Farber, at Harvard University. The research and development center will focus on the development of this technology, which we believe will enable us to commercialize other technologies developed by our current and future academic partners. Our platform connects patients, physicians and diagnostic experts residing within academic institutions. Launched in 2017, the platform facilitates the following relationships:

- Patients: patients may search for physicians in their area and consult directly with academic experts that are on the platform. Patients may also have access to new academic discoveries as they become commercially available.

- Physicians: physicians can connect with academic experts to seek consultations on behalf of their patients and may also provide consultations for patients in their area seeking medical expertise in that physician's relevant specialty. Physicians will also have access to new diagnostic solutions to help improve diagnostic accuracy.

- Academic Experts: academic experts on the platform can make themselves available for patients or physicians seeking access to their expertise. Additionally, these experts have a platform available to commercialize their research discoveries.

We intend to continue updating our platform to allow for patient-to-patient communications and allow individuals to share stories and provide support for one another, to allow physicians to consult with their peers to discuss and share challenges and solutions, and to allow academic experts to interact with others in academia on the platform to discuss

their research and cross-collaborate.

ICP was developed at Harvard and is licensed exclusively by us from Dana-Farber. The technology enables the detection of genetic mutations in liquid biopsies, such as blood samples. The field of liquid biopsies is a rapidly growing market, aimed at solving the challenge of obtaining genetic information on disease progression and changes from sources other than a tumor biopsy.

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. For example, according to a recent study the mean cost of lung biopsies is greater than $14,000; surgery also involves hospitalization and recovery time.
- 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.
- 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.

The advent of technologies enabling liquid biopsies as an alternative to tumor biopsy and analysis is based on the fact that tumors (both primary and metastatic) shed cells and fragments of DNA into the blood stream. These blood samples are called “liquid biopsies” that contain circulating tumor DNA, or ctDNA, which hold the same genetic information found in the tumor(s). That tumor DNA is the target of genetic analysis. However, since the quantity of tumor DNA is very small in proportion to the “normal” (or “healthy”) DNA within the blood stream, there is a need to identify and separate the tumor DNA from the normal DNA.

ICP is an enrichment technology that enables the laboratory to focus its analysis on the tumor DNA by enriching, and thereby “multiplying” the presence of, tumor DNA, while maintaining the normal DNA at its same level. Once the enrichment process has been completed, the laboratory genetic testing equipment is able to identify genetic abnormalities presented in the ctDNA, and an analysis can be conducted at a higher level of sensitivity, to enable the detection of such genetic abnormalities. The technology is encapsulated into a chemical that is provided in the form of a kit and sold to other laboratories who wish to conduct these tests in-house. The chemical within the kit is added to the specimen preparation process, enriching the sample for the tumor DNA so that the analysis will detect those genetic abnormalities.

Risks Associated with Our Business

Our ability to implement our business strategy is subject to numerous risks that you should be aware of before making an investment decision. These risks are described more fully in the section entitled “Risk Factors” immediately following this prospectus summary. These risks include, among others:

- We will require additional capital in order to continue our operations, and may have difficulty raising additional capital;
- We have a history of recurring losses, and we can provide no assurance as to our future operating results;
- We have a history of recurring losses and an accumulated deficit, which, among other factors, raise doubt about our ability to continue as a going concern, which in turn may hinder our ability to obtain future financing;
- Our stock price has experienced price fluctuations and may continue to do so, thereby adversely affecting our business;
- Our common stock could be further diluted as the result of the issuance of additional shares of common stock, convertible securities, warrants or options.

Recent Developments

On April 20, 2018, the Company entered into a securities purchase agreement ("Debt Financing Agreement") with certain investors , pursuant to which the Company will issue up to approximately $3.3M in 8% Senior Secured Convertible Promissory Notes with 100% common stock warrant coverage. The initial closing provided the Company with $1,660,000 of gross proceeds for the issuance of Notes with an aggregate principal of $1,824,176. The Note is payable by the Company on the earlier of (i) the one year anniversary after the initial closing date or (ii) upon the closing of a qualified offering, namely the Company raising gross proceeds of at least $7,000,000. The obligations under the Notes are secured, subject to certain exceptions and other permitted payments by a perfected security interest on the assets of the Company.

During May 2018, holders of Series B and Series C warrants exercised 2,398,143 warrants for 2,398,143 shares of the Company's common stock as a result of the provisions contained in the Debt Financing Agreement. The Company received approximately $720,000 from the warrant exercises.

Merger Transaction

On June 29, 2017, the Company (then known as Transgenomic, Inc., or Transgenomic), completed its merger, or the Merger, with Precipio Diagnostics, LLC (Precipio), a privately held Delaware limited liability company, in accordance with the terms of the Agreement and Plan of Merger (Merger Agreement), dated October 12, 2016, as amended on February 2, 2017 and June 29, 2017. Pursuant to the Merger Agreement, a newly formed subsidiary of Transgenomic merged with and into Precipio, with Precipio surviving the Merger as a wholly-owned subsidiary of the combined company. In connection with the Merger, the Company changed its name from Transgenomic, Inc. to Precipio, Inc. and effected a 1-for-30 reverse stock split of its common stock.

Corporate Information

We were incorporated under the laws of the State of Delaware in March 1997. Our principal executive office is located at 4 Science Park, New Haven, Connecticut, 06511, and our telephone number is (203) 787-7888. 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.”

RISK FACTORS

Investing in our common stock involves a high degree of risk. You should carefully consider the risks and uncertainties described below together with all of the other information contained in this prospectus, including our financial statements and the related notes on our Quarterly report on form 10Q for the first quarter ended March 31, 2018, filed with the SEC on May 21, 2018 and our Annual Report on Form 10-K for the fiscal year ended December 31, 2017, filed with the SEC on April 13, 2018, before deciding to invest in our common stock. If any of the following risks actually occur, our business, prospects, operating results and financial condition could suffer materially, the trading price of our common stock could decline and you could lose all or part of your investment. Additional risks and uncertainties not presently known to us or that we currently believe to be immaterial may also adversely affect our business.

Risks Related to Our Business and Strategy

There is substantial doubt about our ability to continue as a going concern.

Our Independent Registered Public Accounting Firm has issued an opinion on our Consolidated Financial Statements included in our Annual Report on Form 10-K for the fiscal year ended December 31, 2017, filed with the SEC on April 13, 2018, that states that the Consolidated Financial Statements were prepared assuming we will continue as a going concern. Our consolidated financial statements have been prepared using accounting principles generally accepted in the United States of America applicable for a going concern, which assume that we will realize our assets and discharge our liabilities in the ordinary course of business. We have incurred substantial operating losses and have used cash in our operating activities for the past few years. For the year ended December 31, 2017, we had a net loss of $20.7 million, negative working capital of $8.3 million and net cash used in operating activities of $6.7 million. We are not current in making payments to all lenders and vendors. Our consolidated financial statements do not include any adjustments to the amounts and classification of assets and liabilities that may be necessary should we be unable to continue as a going concern. We also cannot be certain that additional financing, if needed, will be available on acceptable terms, or at all, and our failure to raise capital when needed could limit our ability to continue our operations.

To date, we have experienced negative cash flow from development of our diagnostic technology, as well as from the costs associated with establishing a laboratory and building a sales force to market our products and services. We expect to incur substantial net losses for the foreseeable future to further develop and commercialize our diagnostic technology. We also expect that our selling, general and administrative expenses will continue to increase due to the additional costs associated with market development activities and expanding our staff to sell and support our products. Our ability to achieve or, if achieved, sustain profitability is based on numerous factors, many of which are beyond our control, including the market acceptance of our products, competitive product development and our

market penetration and margins. We may never be able to generate sufficient revenue to achieve or, if achieved, sustain profitability.

Because of the numerous risks and uncertainties associated with further development and commercialization of our diagnostic technology and any future tests, we are unable to predict the extent of any future losses or when we will become profitable, if ever. We may never become profitable and you may never receive a return on an investment in our securities. An investor in our securities must carefully consider the substantial challenges, risks and uncertainties inherent in the development and commercialization of tests in the medical diagnostic industry. We may never successfully commercialize our diagnostic technology or any future tests, and our business may fail.

We will need to raise substantial additional capital to commercialize our diagnostic technology, and our failure to obtain funding when needed may force us to delay, reduce or eliminate our product development programs or collaboration efforts or force us to restrict or cease operations.

As of March 31, 2018, we had cash of $0.3 million and our working capital was approximately negative $7.5 million. Due to our recurring losses from operations and the expectation that we will continue to incur losses in the future, we will be required to raise additional capital to complete the development and commercialization of our current product candidates and to pay off our obligations. To date, to fund our operations and develop and commercialize our products, we have relied primarily on equity and debt financings. When we seek additional capital, we may seek to sell additional equity and/or debt securities or to obtain a credit facility, which we may not be able to do on favorable terms, or at all. Our ability to obtain additional financing will be subject to a number of factors, including market conditions, our operating performance and investor sentiment. If we are unable to raise additional capital when required or on acceptable terms, we may have to significantly delay, scale back or discontinue the development and/or commercialization of one or more of our product candidates, restrict or cease our operations or obtain funds by entering into agreements on unattractive terms. Due to the timing of the filing of our Quarterly Report on Form 10-Q for the quarter ended June 30, 2017, we will not be eligible to file a new Form S-3 registration statement until September 1, 2018. Our existing Form S-3 registration statement expired in February 2018. This may have an adverse impact on our ability to raise additional capital.

We have incurred losses since our inception and expect to incur losses for the foreseeable future. We cannot be certain that we will achieve or sustain profitability.

We have incurred losses since our inception and expect to incur losses in the future. As of March 31, 2018, we had a net loss of $2.4 million, negative working capital of $7.5 million and net cash used in operating activities of $1.1 million. To date, we have experienced negative cash flow from development of our diagnostic technology, as well as from the costs associated with establishing a laboratory and building a sales force to market our products and services. We expect to incur substantial net losses for the foreseeable future to further develop and commercialize our diagnostic technology. We also expect that our selling, general and administrative expenses will continue to increase due to the additional costs associated with market development activities and expanding our staff to sell and support our products. Our ability to achieve or, if achieved, sustain profitability is based on numerous factors, many of which are beyond our control, including the market acceptance of our products, competitive product development and our market penetration and margins. We may never be able to generate sufficient revenue to achieve or, if achieved, sustain profitability.

Because of the numerous risks and uncertainties associated with further development and commercialization of our diagnostic technology and any future tests, we are unable to predict the extent of any future losses or when we will become profitable, if ever. We may never become profitable and you may never receive a return on an investment in our securities. An investor in our securities must carefully consider the substantial challenges, risks and uncertainties inherent in the development and commercialization of tests in the medical diagnostic industry. We may never successfully commercialize our diagnostic technology or any future tests, and our business may fail.

We are continuing to integrate legacy internal controls over financial reporting into our financial reporting framework.

Such changes have resulted, and may continue to result in changes in our internal control over financial reporting results that materially affect our internal control over financial reporting. We continue to integrate the business processes and information systems in effect prior to the reverse merger, including internal controls. If we cannot provide reliable financial reports or detect and prevent fraud, our business and operating results could be harmed, investors could lose confidence in our reporting financial information, and the trading price of our common stock could drop significantly.

We have been, and may continue to be, subject to costly litigation.

We have been, and may continue to be, subject to legal proceedings. Due to the nature of our business and our lack of sufficient capital resources to pay our obligations on a timely basis, we may be subject to a variety of regulatory investigations, claims, lawsuits and other proceedings in the ordinary course of our business. The results of these legal proceedings cannot be predicted with certainty due to the uncertainty inherent in litigation, including the effects of discovery of new evidence or advancement of new legal theories, the difficulty of predicting decisions of judges and juries and the possibility that decisions may be reversed on appeal. Such litigation has been, and in the future, could be, costly, time-consuming and distracting to management, result in a diversion of resources and could materially adversely affect our business, financial condition and operating results.

The commercial success of our product candidates will depend upon the degree of market acceptance of these products among physicians, patients, health care payors and the medical community and on our ability to successfully market our product candidates.

Our products may never gain significant acceptance in the marketplace and, therefore, may never generate substantial revenue or profits for us. Our ability to achieve commercial market acceptance for our existing and future products will depend on several factors, including:

- our ability to convince the medical community of the clinical utility of our products and their potential advantages over existing diagnostics technology;
- the willingness of physicians and patients to utilize our products; and
- the agreement by commercial third-party payors and government payors to reimburse our products, the scope and amount of which will affect patients' willingness or ability to pay for our products and will likely heavily influence physicians' decisions to recommend our products.

In addition, physicians may rely on guidelines issued by industry groups, such as the National Comprehensive Cancer Network, medical societies, such as the College of American Pathologists, or CAP, or other key oncology-related organizations before utilizing any diagnostic test. Although we have a study underway to demonstrate the clinical utility of our existing products, none of our products are, and may never be, listed in any such guidelines.

We believe that publications of scientific and medical results in peer-reviewed journals and presentations at leading conferences are critical to the broad adoption of our products. Publication in leading medical journals is subject to a peer-review process, and peer reviewers may not consider the results of studies involving our products sufficiently novel or worthy of publication. The failure to be listed in physician guidelines or to be published in peer-reviewed journals could limit the adoption of our products. Failure to achieve widespread market acceptance of our products would materially harm our business, financial condition, and results of operations.

If we cannot compete successfully with our competitors, including new entrants in the market, we may be unable to increase or sustain our revenue or achieve and sustain profitability.

The medical diagnostic industry is intensely competitive and characterized by rapid technological progress. We face significant competition from competitors ranging in size from diversified global companies with significant research and development resources to small, specialized firms whose narrower product lines may allow them to be more effective in deploying related PCR technology in the genetic diagnostic industry. Our closest competitors fall largely into two groups, consisting of companies that specialize in oncology and offer directly competing services to our diagnostic services, offering their services to oncologists and pathology departments within hospitals, as well as large commercial companies that offer a wide variety of laboratory tests that range from simple chemistry tests to complex genetic testing. The technologies associated with the molecular diagnostics industry are evolving rapidly and there is intense competition within such industry. Certain molecular diagnostics companies have established technologies that may be competitive to our product candidates and any future tests that we develop. Some of these tests may use different approaches or means to obtain diagnostic results, which could be more effective or less expensive than our tests for similar indications. Moreover, these and other future competitors have or may have considerably greater resources than we do in terms of technology, sales, marketing, commercialization and capital resources. These competitors may have substantial advantages over us in terms of research and development expertise, experience in clinical studies, experience in regulatory issues, brand name exposure and expertise in sales and marketing as well as in operating central laboratory services. Many of these organizations have financial, marketing and human resources greater than ours; therefore, there can be no assurance that we can successfully compete with present or potential competitors or that such competition will not have a materially adverse effect on our business, financial position or results of operations.

In July 2017, we commenced a study to demonstrate the impact of academic pathology expertise on diagnostic accuracy. There is no assurance that this study, or other studies or trials we may conduct, will demonstrate favorable results. If the results of this study, or other studies or trials we may conduct, demonstrate unfavorable or inconclusive results, customers may choose our competitors' products over our products and our commercial opportunities may be reduced or eliminated.

We believe that many of our competitors spend significantly more on research and development-related activities than we do. Our competitors may discover new diagnostic tools or develop existing technologies to compete with our diagnostic technology. Our commercial opportunities will be reduced or eliminated if these competing products are more effective, are more convenient or are less expensive than our product candidates.

We may not be able to develop new products or enhance the capabilities of our systems to keep pace with rapidly changing technology and customer requirements, which could have a material adverse effect on our business and operating results.

Our success depends on our ability to develop new products and applications for our diagnostic technology in existing and new markets, while improving the performance and cost-effectiveness of our systems. New technologies, techniques or products could emerge that might offer better combinations of price and performance than our current or future products and systems. Existing or future markets for our products, as well as potential markets for our diagnostic product candidates, are characterized by rapid technological change and innovation. It is critical to our success that we anticipate changes in technology and customer requirements and successfully introduce new, enhanced and competitive technologies to meet our customers' and prospective customers' needs on a timely and cost-effective basis. At the same time, however, we must carefully manage the introduction of new products. If customers believe that such products will offer enhanced features or be sold for a more attractive price, they may delay purchases until such products are available. We may also have excess or obsolete inventory of older products as we transition to new products and our experience in managing product transitions is very limited. If we do not successfully innovate and introduce new technology into our product lines or effectively manage the transitions to new product offerings, our revenues and results of operations will be adversely impacted.

Competitors may respond more quickly and effectively than we do to new or changing opportunities, technologies, standards or customer requirements. We anticipate that we will face increased competition in the future as existing companies and competitors develop new or improved products and as new companies enter the market with new technologies.

We currently depend on the services of pathologists at a single academic partner and the loss of the services of these pathologists would adversely impact our ability to develop, commercialize and deliver our products.

We currently depend on the services of pathologists at a single academic partner to review and render their diagnostic interpretation of our test results and to prepare the final diagnostic results that we integrate into our final report for our customers. Although we are in the process of adding new academic partners, it would be difficult to replace the services provided by the pathologists at our current partner if their services became unavailable to us for any reason prior to adding other academic partners. If this academic partner does not successfully carry out its contractual duties or obligations and meet expected deadlines; if this partner needs to be replaced, or if the quality or accuracy of the services provided by the pathologists at this partner were compromised for any reason, we would likely not be able to provide our services in a manner expected by our customers, and our financial results and the commercial prospects for our products could be harmed. The loss of the services of these pathologists would severely harm our ability to develop, commercialize and deliver our products, and our business, financial condition and operating results would be materially adversely affected.

We may experience temporary disruptions and delays in processing biological samples at our facilities.

We may experience delays in processing biological samples caused by software and other errors. Any delay in processing samples could have an adverse effect on our business, financial condition and results of operations.

We depend upon a limited number of key personnel, and if we are not able to retain them or recruit additional qualified personnel, the commercialization of our product candidates and any future tests that we develop could be delayed or negatively impacted.

Our success is largely dependent upon the continued contributions of our officers and employees. Our success also depends in part on our ability to attract and retain highly qualified scientific, commercial and administrative personnel. In order to pursue our test development and commercialization strategies, we will need to attract and hire additional personnel with specialized experience in a number of disciplines, including assay development, laboratory and clinical operations, sales and marketing, billing and reimbursement. There is intense competition for personnel in the fields in which we operate. If we are unable to attract new employees and retain existing employees, the development and commercialization of our product candidates and any future tests could be delayed or negatively impacted. If any of them becomes unable or unwilling to continue in their respective positions, and we are unable to find suitable replacements, our business and financial results could be materially negatively affected.

We will need to increase the size of our organization, and we may experience difficulties in managing growth.

We are a small company with 31 full-time employees as of December 31, 2017. Future growth will impose significant added responsibilities on members of management, including the need to identify, attract, retain, motivate and integrate highly skilled personnel. We may increase the number of employees in the future depending on the progress of our development of diagnostic technology. Our future financial performance and our ability to commercialize our product candidates and to compete effectively will depend, in part, on our ability to manage any future growth effectively. To that end, we must be able to:

- integrate additional management, administrative, manufacturing and regulatory personnel;
- maintain sufficient administrative, accounting and management information systems and controls; and
- hire and train additional qualified personnel.

We may not be able to accomplish these tasks, and our failure to accomplish any of them could harm our financial results.

We currently have limited experience in marketing products. If we are unable to establish marketing and sales capabilities and retain the proper talent to execute on our sales and marketing strategy, we may not be able to generate product revenue.

We have developed limited experience in marketing our products and services. We intend to continue to develop our in-house marketing organization and sales force, which will require significant capital expenditures, management resources and time. We will have to compete with other diagnostic companies to recruit, hire, train and retain marketing and sales personnel.

If we are unable to further grow our internal sales, marketing and distribution capabilities, we may pursue collaborative arrangements regarding the sales and marketing of our product candidates or future products, however, we may not be able to establish or maintain such collaborative arrangements, or if we are able to do so, they may not have effective sales forces. Any revenue we receive will depend upon the efforts of such third parties, which may not be successful. We may have little or no control over the marketing and sales efforts of such third parties and our revenue from product sales may be lower than if we had commercialized our product candidates ourselves. We also face competition in our search for third parties to assist us with the sales and marketing efforts of our product candidates.

We may not realize the anticipated benefits of our merger with Transgenomic, Inc.

In June 2017, we completed our merger with Transgenomic, Inc, or Transgenomic. Integrating the operations of the businesses of Precipio Diagnostics successfully or otherwise realizing any of the anticipated benefits of the merger with Precipio, including anticipated cost savings and additional revenue opportunities, involves a number of potential challenges. The failure to meet these integration challenges could seriously harm our results of operations and the market price of our common stock may decline as a result.

Realizing the benefits of the merger will depend in part on the integration of information technology, operations and personnel. These integration activities are complex and time-consuming and we may encounter unexpected difficulties or incur unexpected costs, including:

- our inability to achieve the cost savings and operating synergies anticipated in the merger, including synergies relating to increased purchasing efficiencies and a reduction in costs associated with the merger;
- diversion of management attention from ongoing business concerns to integration matters;
- difficulties in consolidating and rationalizing information technology platforms and administrative infrastructures;
- complexities associated with managing the geographic separation of the combined businesses and consolidating multiple physical locations where management may determine consolidation is desirable;
- difficulties in integrating personnel from different corporate cultures while maintaining focus on providing consistent, high quality customer service;
- challenges in demonstrating to our customers that the merger will not result in adverse changes in customer service standards or business focus; and
- possible cash flow interruption or loss of revenue as a result of change of ownership transitional matters.

We may not successfully integrate the operations of the businesses in a timely manner and may not realize the anticipated net reductions in costs and expenses and other benefits and synergies of the merger with Transgenomic to the extent, or in the timeframe, anticipated. In addition to the integration risks discussed above, our ability to realize these net reductions in costs and expenses and other benefits and synergies could be adversely impacted by practical or legal constraints on our ability to combine operations.

Cybersecurity risks could compromise our information and expose us to liability, which may harm our ability to operate effectively and may cause our business and reputation to suffer.

Cybersecurity refers to the combination of technologies, processes and procedures established to protect information technology systems and data from unauthorized access, attack, or damage. We rely on our information systems to provide security for processing, transmission and storage of confidential information about our patients, customers and personnel, such as names, addresses and other individually identifiable information protected by HIPAA and other privacy laws. Cyber-attacks are increasingly more common, including in the health care industry. The regulatory environment surrounding information security and privacy is increasingly demanding, with the frequent imposition of new and changing requirements. Compliance with changes in privacy and information security laws and with rapidly evolving industry standards may result in our incurring significant expense due to increased investment in technology and the development of new operational processes.

We have not experienced any known attacks on our information technology systems that compromised any confidential information. We maintain our information technology systems with safeguard protection against cyber-attacks including passive intrusion protection, firewalls and virus detection software. However, these safeguards

do not ensure that a significant cyber-attack could not occur. Although we have taken steps to protect the security of our information systems and the data maintained in those systems, it is possible that our safety and security measures will not prevent the systems' improper functioning or damage or the improper access or disclosure of personally identifiable information such as in the event of cyber-attacks.

Security breaches, including physical or electronic break-ins, computer viruses, attacks by hackers and similar breaches can create system disruptions or shutdowns or the unauthorized disclosure of confidential information. If personal information or protected health information is improperly accessed, tampered with or disclosed as a result of a security breach, we may incur significant costs to notify and mitigate potential harm to the affected individuals, and we may be subject to sanctions and civil or criminal penalties if we are found to be in violation of the privacy or security rules under HIPAA or other similar federal or state laws protecting confidential personal information. In addition, a security breach of our information systems could damage our reputation, subject us to liability claims or regulatory penalties for compromised personal information and could have a material adverse effect on our business, financial condition and results of operations.

Our ability to use net operating loss carryforwards to offset future taxable income for U.S. federal tax purposes is subject to limitation and risk that could further limit our ability to utilize our net operating losses.

Under U.S. federal income tax law, a corporation's ability to utilize its net operating losses, or NOLs, to offset future taxable income may be significantly limited if it experiences an "ownership change" as defined in Section 382 of the Internal Revenue Code, as amended. In general, an ownership change will occur if there is a cumulative change in a corporation's ownership by "5-percent shareholders" that exceeds 50 percentage points over a rolling three-year period. A corporation that experiences an ownership change will generally be subject to an annual limitation on the use of its pre-ownership change NOLs equal to the value of the corporation immediately before the ownership change, multiplied by the long-term tax-exempt rate (subject to certain adjustments). The annual limitation for a taxable year generally is increased by the amount of any "recognized built-in gains" for such year and the amount of any unused annual limitation in a prior year. On December 22, 2017, a law commonly known as the Tax Cuts and Jobs Act, or the TCJ Act, was enacted in the United States. Certain provisions of the TCJ Act impact the ability to utilize NOLs generated in 2018 and forward; any limitation to our annual use of NOLs could require us to pay a greater amount of U.S. federal (and in some cases, state) income taxes, which could reduce our after-tax income from operations for future taxable years and adversely impact our financial condition.

Reimbursement and Regulatory Risks Relating to Our Business

Governmental payers and health care plans have taken steps to control costs.

Medicare, Medicaid and private insurers have increased their efforts to control the costs of health care services, including clinical testing services. They may reduce fee schedules or limit/exclude coverage for certain types of tests that we perform. Medicaid reimbursement varies by state and is subject to administrative and billing requirements and budget pressures. We expect efforts to reduce reimbursements, impose more stringent cost controls and reduce utilization of testing services will continue. These efforts, including changes in laws or regulations, may have a material adverse impact on our business.

Changes in payer mix could have a material adverse impact on our net sales and profitability.

Testing services are billed to physicians, patients, government payers such as Medicare, and insurance companies. Tests may be billed to different payers depending on a particular patient's medical insurance coverage. Government payers have increased their efforts to control the cost, utilization and delivery of health care services as well as reimbursement for laboratory testing services. Further reductions of reimbursement for Medicare and Medicaid services or changes in policy regarding coverage of tests or other requirements for payment, such as prior authorization or a physician or qualified practitioner's signature on test requisitions, may be implemented from time to time. Reimbursement for the laboratory services component of our business is also subject to statutory and regulatory reduction. Reductions in the reimbursement rates and changes in payment policies of other third party payers may occur as well. Such changes in the past have resulted in reduced payments as well as added costs and have decreased test utilization for the clinical laboratory industry by adding more complex new regulatory and administrative requirements. As a result, increases in the percentage of services billed to government payers could have an adverse impact on our net sales.

Our laboratories require ongoing CLIA certification.

The Clinical Laboratory Improvement Amendments of 1988, or CLIA, extended federal oversight to virtually all clinical laboratories by requiring that they be certified by the federal government or by a federally-approved accreditation agency. The CLIA requires that all clinical laboratories meet quality assurance, quality control and personnel standards. Laboratories must also undergo proficiency testing and are subject to inspections.

The sanctions for failure to comply with the CLIA requirements include suspension, revocation or limitation of a laboratory's CLIA certificate, which is necessary to conduct business, cancellation or suspension of the laboratory's approval to receive Medicare and/or Medicaid reimbursement, as well as significant fines and/or criminal penalties. The loss or suspension of a CLIA certification, imposition of a fine or other penalties, or future changes in the CLIA law or regulations (or interpretation of the law or regulations) could have a material adverse effect on us.

We believe that we are in compliance with all applicable laboratory requirements, but no assurances can be given that our laboratories will pass all future certification inspections.

Failure to comply with HIPAA could be costly.

The Health Insurance Portability and Accountability Act, or HIPAA, and associated regulations protect the privacy and security of certain patient health information and establish standards for electronic health care transactions in the United States. These privacy regulations establish federal standards regarding the uses and disclosures of protected health information. Our laboratories are subject to HIPAA and its associated regulations. If we fail to comply with these laws and regulations we could suffer civil and criminal penalties, fines, exclusion from participation in governmental health care programs and the loss of various licenses, certificates and authorizations necessary to operate our patient testing business. We could also incur liabilities from third party claims.

Our failure to comply with any applicable government laws and regulations or otherwise respond to claims relating to improper handling, storage or disposal of hazardous chemicals that we use may adversely affect our results of operations.

Our research and development and commercial activities involve the controlled use of hazardous materials and chemicals. We are subject to federal, state, local and international laws and regulations governing the use, storage, handling and disposal of hazardous materials and waste products. If we fail to comply with applicable laws or regulations, we could be required to pay penalties or be held liable for any damages that result and this liability could exceed our financial resources. We cannot be certain that accidental contamination or injury will not occur. Any such accident could damage our research and manufacturing facilities and operations, resulting in delays and increased costs.

We may become subject to the Anti-Kickback Statute, Stark Law, False Claims Act, Civil Monetary Penalties Law and may be subject to analogous provisions of applicable state laws and could face substantial penalties if we fail to comply with such laws.

There are several federal laws addressing fraud and abuse that apply to businesses that receive reimbursement from a federal health care program. There are also a number of similar state laws covering fraud and abuse with respect to, for example, private payors, self-pay and insurance. Currently, we receive a substantial percentage of our revenue from private payors and from Medicare. Accordingly, our business is subject to federal fraud and abuse laws, such as the Anti-Kickback Statute, the Stark Law, the False Claims Act, the Civil Monetary Penalties Law and other similar laws. Moreover, we are already subject to similar state laws. We believe we have operated, and intend to continue to operate, our business in compliance with these laws. However, these laws are subject to modification and changes in interpretation, and are enforced by authorities vested with broad discretion. Federal and state enforcement entities have significantly increased their scrutiny of healthcare companies and providers which has led to investigations, prosecutions, convictions and large settlements. We continually monitor developments in this area. If these laws are interpreted in a manner contrary to our interpretation or are reinterpreted or amended, or if new legislation is enacted with respect to healthcare fraud and abuse, illegal remuneration, or similar issues, we may be required to restructure our affected operations to maintain compliance with applicable law. There can be no assurances that any such restructuring will be possible or, if possible, would not have a material adverse effect on our results of operations, financial position, or cash flows.

Anti-Kickback Statute

A federal law commonly referred to as the “Anti-Kickback Statute” prohibits the knowing and willful offer, payment, solicitation or receipt of remuneration, directly or indirectly, in return for the referral of patients or arranging for the referral of patients, or in return for the recommendation, arrangement, purchase, lease or order of items or services that

are covered, in whole or in part, by a federal healthcare program such as Medicare or Medicaid. The term "remuneration" has been broadly interpreted to include anything of value such as gifts, discounts, rebates, waiver of payments or providing anything at less than its fair market value. The Patient Protection and Affordable Care Act, as amended by the Health Care and Education Reconciliation Act, or the PPACA, amended the intent requirement of the Anti-Kickback Statute such that a person or entity can be found guilty of violating the statute without actual knowledge of the statute or specific intent to violate the statute. Further, the PPACA now provides that claims submitted in violation of the Anti-Kickback Statute constitute false or fraudulent claims for purposes of the federal False Claims Act, or FCA, including the failure to timely return an overpayment. Many states have adopted similar prohibitions against kickbacks and other practices that are intended to influence the purchase, lease or ordering of healthcare items and services reimbursed by a governmental health program or state Medicaid program. Some of these state prohibitions apply to remuneration for referrals of healthcare items or services reimbursed by any third-party payor, including commercial payors and self-pay patients.

Stark Law

Section 1877 of the Social Security Act, or the Stark Law, prohibits a physician from referring a patient to an entity for certain "designated health services" reimbursable by Medicare if the physician (or close family members) has a financial relationship with that entity, including an ownership or investment interest, a loan or debt relationship or a compensation relationship, unless an exception to the Stark Law is fully satisfied. The designated health services covered by the law include, among others, laboratory and imaging services. Some states have self-referral laws similar to the Stark Law for Medicaid claims and commercial claims.

Violation of the Stark Law may result in prohibition of payment for services rendered, a refund of any Medicare payments for services that resulted from an unlawful referral, $15,000 civil monetary penalties for specified infractions, criminal penalties, and potential exclusion from participation in government healthcare programs, and potential false claims liability. The repayment provisions in the Stark Law are not dependent on the parties having an improper intent; rather, the Stark Law is a strict liability statute and any violation is subject to repayment of all amounts arising out of tainted referrals. If physician self-referral laws are interpreted differently or if other legislative restrictions are issued, we could incur significant sanctions and loss of revenues, or we could have to change our arrangements and operations in a way that could have a material adverse effect on our business, prospects, damage to our reputation, results of operations and financial condition.

False Claims Act

The FCA prohibits providers from, among other things, (1) knowingly presenting or causing to be presented, claims for payments from the Medicare, Medicaid or other federal healthcare programs that are false or fraudulent; (2) knowingly making, using or causing to be made or used, a false record or statement to get a false or fraudulent claim paid or approved by the federal government; or (3) knowingly making, using or causing to be made or used, a false record or statement to avoid, decrease or conceal an obligation to pay money to the federal government. The "qui tam" or "whistleblower" provisions of the FCA allow private individuals to bring actions under the FCA on behalf of the government. These private parties are entitled to share in any amounts recovered by the government, and, as a result, the number of "whistleblower" lawsuits that have been filed against providers has increased significantly in recent years. Defendants found to be liable under the FCA may be required to pay three times the actual damages sustained by the government, plus civil penalties ranging between $5,500 and $11,000 for each separate false claim.

There are many potential bases for liability under the FCA. The government has used the FCA to prosecute Medicare and other government healthcare program fraud such as coding errors, billing for services not provided, and providing care that is not medically necessary or that is substandard in quality. The PPACA also provides that claims submitted in connection with patient referrals that result from violations of the Anti-Kickback Statute constitute false claims for the purpose of the FCA, and some courts have held that a violation of the Stark law can result in FCA liability, as well. In addition, a number of states have adopted their own false claims and whistleblower provisions whereby a private party may file a civil lawsuit in state court. We are required to provide information to our employees and certain contractors about state and federal false claims laws and whistleblower provisions and protections.

Civil Monetary Penalties Law

The Civil Monetary Penalties Law prohibits, among other things, the offering or giving of remuneration to a Medicare or Medicaid beneficiary that the person or entity knows or should know is likely to influence the beneficiary's selection of a particular provider or supplier of items or services reimbursable by a federal or state healthcare program. This broad provision applies to many kinds of inducements or benefits provided to patients, including complimentary items, services or transportation that are of more than a nominal value. This law could affect how we have to structure our operations and activities.

Intellectual Property Risks Related to Our Business

We cannot be certain that measures taken to protect our intellectual property will be effective.

We rely upon trade secrets, copyright and trademark laws, non-disclosure agreements and other contractual confidentiality provisions to protect our confidential and proprietary information that we are not seeking patent protection for various reasons. Such measures, however, may not provide adequate protection for our trade secrets or other proprietary information. If such measures do not protect our rights, third parties could use our technology and our ability to compete in the market would be reduced.

We depend on certain technologies that are licensed to us. We do not control these technologies and any loss of our rights to them could prevent us from selling some of our products.

We have entered into license agreements with third parties for certain licensed technologies that are, or may become, relevant to the products we market, or plan to market, including our license agreement with Dana-Farber Cancer Institute, Inc., pursuant to which we license our ICE-COLD-PCR technology. In addition, we may in the future elect to license third party intellectual property to further our business objectives and/or as needed for freedom to operate for our products. We do not and will not own the patents, patent applications or other intellectual property rights that are the subject of these licenses. Our rights to use these technologies and employ the inventions claimed in the licensed patents, patent applications and other intellectual property rights are or will be subject to the continuation of and compliance with the terms of those licenses.

We might not be able to obtain licenses to technology or other intellectual property rights that we require. Even if such licenses are obtainable, they may not be available at a reasonable cost or multiple licenses may be needed for the same product (e.g., stacked royalties). We could therefore incur substantial costs related to royalty payments for licenses obtained from third parties, which could negatively affect our gross margins. Further, we could encounter delays in product introductions, or interruptions in product sales, as we develop alternative methods or products.

In some cases, we do not or may not control the prosecution, maintenance, or filing of the patents or patent applications to which we hold licenses, or the enforcement of these patents against third parties. As a result, we cannot be certain that drafting or prosecution of the licensed patents and patent applications by the licensors have been or will be conducted in compliance with applicable laws and regulations or will result in valid and enforceable patents and other intellectual property rights.

Third parties may assert ownership or commercial rights to inventions we develop.

Third parties may in the future make claims challenging the inventorship or ownership of our intellectual property. For example, third parties that have been introduced to or have benefited from our inventions may attempt to replicate or reverse engineer our products and circumvent ownership of our inventions. In addition, we may face claims that our agreements with employees, contractors, or consultants obligating them to assign intellectual property to us are ineffective, or in conflict with prior or competing contractual obligations of assignment, which could result in ownership disputes regarding intellectual property we have developed or will develop and interfere with our ability to capture the commercial value of such inventions. Litigation may be necessary to resolve an ownership dispute, and if we are not successful, we may be precluded from using certain intellectual property, or may lose our exclusive rights in that intellectual property. Either outcome could have an adverse impact on our business.

Third parties may assert that our employees or consultants have wrongfully used or disclosed confidential information or misappropriated trade secrets.

Although we try to ensure that our employees and consultants do not use the proprietary information or know-how of others in their work for us, we may be subject to claims that we or our employees, consultants or independent contractors have inadvertently or otherwise used or disclosed intellectual property, including trade secrets or other proprietary information, of a former employer or other third parties. Litigation may be necessary to defend against these claims. If we fail in defending any such claims, in addition to paying monetary damages, we may lose valuable intellectual property rights or personnel. Even if we are successful in defending against such claims, litigation could result in substantial costs and be a distraction to management and other employees.

The testing, manufacturing and marketing of medical diagnostic devices entails an inherent risk of product liability and personal injury claims.

To date, we have experienced no product liability or personal injury claims, but any such claims arising in the future could have a material adverse effect on our business, financial condition and results of operations. Potential product liability or personal injury claims may exceed the amount of our insurance coverage or may be excluded from coverage under the terms of our policy or limited by other claims under our umbrella insurance policy. Additionally, our existing insurance may not be renewed by us at a cost and level of coverage comparable to that presently in effect, if at all. In the event that we are held liable for a claim against which we are not insured or for damages exceeding the limits of our insurance coverage, such claim could have a material adverse effect on our cash flow and thus potentially a materially adverse effect on our business, financial condition and results of operations.

All of our diagnostic technology development and our clinical services are performed at two laboratories, and in the event either or both of these facilities were to be affected by a termination of the lease or a man-made or natural disaster, our operations could be severely impaired.

We are performing all of our diagnostic services in our CLIA laboratory located in New Haven, Connecticut and our research and development operations are based in our facility in Omaha, Nebraska. Despite precautions taken by us, any future natural or man-made disaster at these laboratories, such as a fire, earthquake or terrorist activity, could cause substantial delays in our operations, damage or destroy our equipment and testing samples or cause us to incur additional expenses.

In addition, we are leasing the facilities where our laboratories operate. We are currently in compliance with all and any lease obligations, but should the leases terminate for any reason, or if at any time either of the laboratories is moved due to conditions outside our control, it could cause substantial delay in our diagnostics operations, damage or destroy our equipment and biological samples or cause us to incur additional expenses. In the event of an extended shutdown of either laboratory, we may be unable to perform our services in a timely manner or at all and therefore would be unable to operate in a commercially competitive manner. This could harm our operating results and financial condition.

Further, if we have to use a substitute laboratory while our facilities were shut down, we could only use another facility with established state licensure and accreditation under CLIA. We may not be able to find another CLIA-certified facility and comply with applicable procedures, or find any such laboratory that would be willing to perform the tests for us on commercially reasonable terms. Additionally, any new laboratory opened by us would be subject to certification under CLIA and licensure by various states, which would take a significant amount of time and result in delays in our ability to continue our operations.

Risks Related to Our Common Stock

The price of our common stock may fluctuate significantly, which could negatively affect us and holders of our common stock.

There has been, and continues to be, a limited public market for our common stock, and an active trading market for our common stock has not and may never develop or, if developed, be sustained. The trading price of our common stock may be highly volatile and could be subject to wide fluctuations in response to various factors, some of which are beyond our control. These factors include:

These factors include:

- actual or anticipated fluctuations in our financial condition and operating results:
- actual or anticipated changes in our growth rate relative to our competitors;
- competition from existing products or new products that may emerge;
- announcements by us, our academic institution partners, or our competitors of significant acquisitions, strategic partnerships, joint ventures, collaborations, or capital commitments;
- failure to meet or exceed financial estimates and projections of the investment community or that we provide to the public and the revision of any financial estimates and projections that we provide to the public;
- issuance of new or updated research or reports by securities analysts;
- fluctuations in the valuation of companies perceived by investors to be comparable to us;
- share price and volume fluctuations attributable to inconsistent trading volume levels of our shares;
- additions, transitions or departures of key management or scientific personnel;
- disputes or other developments related to proprietary rights, including patents, litigation matters, and our ability to obtain patent protection for our technologies;
- changes to reimbursement levels by commercial third-party payors and government payors, including Medicare, and any announcements relating to reimbursement levels;
- announcement or expectation of additional debt or equity financing efforts;
- sales of our common stock by us, our insiders, or our other stockholders; and
- general economic and market conditions

These and other market and industry factors may cause the market price and demand for our common stock to fluctuate substantially, regardless of our actual operating performance, which may limit or prevent investors from readily selling their shares of our common stock and may otherwise negatively affect the liquidity of our common stock. In addition, the stock market in general has experienced price and volume fluctuations that have often been unrelated or disproportionate to the operating performance of these companies. In the past, when the market price of a stock has been volatile, holders of that stock have instituted securities class action litigation against the company that issued the stock. If any of our stockholders brought a lawsuit against us, we could incur substantial costs defending the

lawsuit. Such a lawsuit could also divert the time and attention of our management.

The price of our stock may be vulnerable to manipulation.

We believe our common stock has been the subject of significant short selling by certain market participants. Short sales are transactions in which a market participant sells a security that it does not own. To complete the transaction, the market participant must borrow the security to make delivery to the buyer. The market participant is then obligated to replace the security borrowed by purchasing the security at the market price at the time of required replacement. If the price at the time of replacement is lower than the price at which the security was originally sold by the market participant, then the market participant will realize a gain on the transaction. Thus, it is in the market participant's interest for the market price of the underlying security to decline as much as possible during the period prior to the time of replacement.

Because our unrestricted public float has been small relative to other issuers, previous short selling efforts have impacted, and may in the future continue to impact, the value of our stock in an extreme and volatile manner to our detriment and the detriment of our shareholders. Efforts by certain market participants to manipulate the price of our common stock for their personal financial gain may cause our stockholders to lose a portion of their investment, may make it more difficult for us to raise equity capital when needed without significantly diluting existing stockholders, and may reduce demand from new investors to purchase shares of our stock.

If we cannot continue to satisfy NASDAQ listing maintenance requirements and other rules, our securities may be delisted, which could negatively impact the price of our securities.

Although our common stock is listed on the NASDAQ Capital Market, we may be unable to continue to satisfy the listing maintenance requirements and rules. If we are unable to satisfy The NASDAQ Stock Market, or NASDAQ, criteria for maintaining our listing, our securities could be subject to delisting.

On March 26, 2018, we received a letter from NASDAQ notifying us that for the past 30 consecutive business days, the closing bid price per share of our common stock was below the $1.00 minimum bid price requirement for continued listing on the NASDAQ Capital Market, as required by NASDAQ Listing Rule 5550(a)(2), or the Bid Price Rule. As a result, we were notified by NASDAQ that we are not in compliance with the Bid Price Rule. NASDAQ has provided u with 180 calendar days, or until September 24, 2018, to regain compliance with the Bid Price Rule.

To regain compliance with the Bid Price Rule, the closing bid price of our common stock must meet or exceed $1.00 per share for a minimum of ten consecutive business days during the 180 day grace period. If our common stock does not regain compliance with the Bid Price Rule during this grace period, we will be eligible for an additional grace period of 180 calendar days provided that we satisfy NASDAQ's continued listing requirement for market value of publicly held shares and all other initial listing standards for listing on The NASDAQ Capital Market, other than the minimum bid price requirement, and provide written notice to NASDAQ of our intention to cure the delinquency during the second grace period. If we meet these requirements, NASDAQ will inform us that we have been granted an additional 180 calendar days. However, if it appears to NASDAQ that we will not be able to cure the deficiency, or if we are otherwise not eligible, NASDAQ will provide notice that our securities will be subject to delisting.

We are presently evaluating various courses of action to regain compliance with the Bid Price Rule. However, there can be no assurance that we will be able to regain compliance.

If NASDAQ delists our securities, we could face significant consequences, including:

- a limited availability for market quotations for our securities;
- reduced liquidity with respect to our securities;
- a determination that our common stock is a "penny stock," which will require brokers trading in our common stock to adhere to more stringent rules and possibly result in reduced trading;
- activity in the secondary trading market for our common stock;
- limited amount of news and analyst coverage; and
- a decreased ability to issue additional securities or obtain additional financing in the future.

In addition, we would no longer be subject to NASDAQ rules, including rules requiring us to have a certain number of independent directors and to meet other corporate governance standards.

Increased costs associated with corporate governance compliance may significantly impact our results of operations.

As a public company, we incur significant legal, accounting, and other expenses due to our compliance with regulations and disclosure obligations applicable to us, including compliance with the Sarbanes-Oxley Act of 2002, or the Sarbanes-Oxley Act, as well as rules implemented by the SEC, and NASDAQ. The SEC and other regulators have continued to adopt new rules and regulations and make additional changes to existing regulations that require our compliance. In July 2010, the Dodd-Frank Wall Street Reform and Consumer Protection Act, or the Dodd-Frank Act, was enacted. There are significant corporate governance and executive compensation related provisions in the Dodd-Frank Act that have required the SEC to adopt additional rules and regulations in these areas. Stockholder activism, the current political environment, and the current high level of government intervention and regulatory reform may lead to substantial new regulations and disclosure obligations, which may lead to additional compliance costs and impact, in ways we cannot currently anticipate, the manner in which we operate our business. Our management and other personnel devote a substantial amount of time to these compliance programs and monitoring of public company reporting obligations, and as a result of the new corporate governance and executive compensation related rules, regulations, and guidelines prompted by the Dodd-Frank Act, and further regulations and disclosure obligations expected in the future, we will likely need to devote additional time and costs to comply with such compliance programs and rules. These rules and regulations will cause us to incur significant legal and financial compliance costs and will make some activities more time-consuming and costly.

The Sarbanes-Oxley Act requires that we maintain effective disclosure controls and procedures and internal control over financial reporting. We are continuing to develop and refine our disclosure controls and other procedures that are designed to ensure that information required to be disclosed by us in the reports that we file with the SEC is recorded, processed, summarized, and reported within the time periods specified in SEC rules and forms, and that information required to be disclosed in reports under the Exchange Act is accumulated and communicated to our principal executive and financial officers. Our current controls and any new controls that we develop may become inadequate, and weaknesses in our internal control over financial reporting may be discovered in the future. Any failure to develop or maintain effective controls could adversely affect the results of periodic management evaluations and annual independent registered public accounting firm attestation reports regarding the effectiveness of our internal control over financial reporting, which we may be required to include in our periodic reports that we file with the SEC under Section 404 of the Sarbanes-Oxley Act, and could harm our operating results, cause us to fail to meet our reporting obligations, or result in a restatement of our prior period financial statements. If we are not able to demonstrate compliance with the Sarbanes-Oxley Act, that our internal control over financial reporting is perceived as inadequate, or that we are unable to produce timely or accurate financial statements, investors may lose confidence in our operating results, and the price of our common stock could decline.

We are required to comply with certain of the SEC rules that implement Section 404 of the Sarbanes-Oxley Act, which requires management to certify financial and other information in our quarterly and annual reports and provide an annual management report on the effectiveness of our internal control over financial reporting. This assessment needs to include the disclosure of any material weaknesses in our internal control over financial reporting identified by our management or our independent registered public accounting firm. During the evaluation and testing process, if we identify one or more material weaknesses in our internal control over financial reporting or if we are unable to complete our evaluation, testing, and any required remediation in a timely fashion, we will be unable to assert that our internal control over financial reporting is effective.

These developments could make it more difficult for us to retain qualified members of our Board of Directors, or qualified executive officers. We are presently evaluating and monitoring regulatory developments and cannot estimate the timing or magnitude of additional costs we may incur as a result. To the extent these costs are significant, our general and administrative expenses are likely to increase.

We have not paid dividends on our common stock in the past and do not expect to pay dividends on our common stock for the foreseeable future. Any return on investment may be limited to the value of our common stock.

No cash dividends have been paid on our common stock. We expect that any income received from operations will be devoted to our future operations and growth. We do not expect to pay cash dividends on our common stock in the near future. Payment of dividends would depend upon our profitability at the time, cash available for those dividends, and other factors as our board of directors may consider relevant. If we do not pay dividends, our common stock may be less valuable because a return on an investor's investment will only occur if our stock price appreciates. Investors in our common stock should not rely on an investment in our company if they require dividend income.

If securities or industry analysts do not publish research or reports about our business, or if they change their recommendations regarding our stock adversely, our stock price and trading volume could decline.

The trading market for our common stock relies in part on the research and reports that equity research analysts publish about us and our business. We do not control these analysts. The price of our common stock could decline if one or more equity research analysts downgrade our common stock or if they issue other unfavorable commentary or cease publishing reports about us or our business:

CAUTIONARY NOTE REGARDING FORWARD-LOOKING STATEMENTS

This prospectus, including the sections entitled “Prospectus Summary,” “Risk Factors,” “Management’s Discussion and Analysis of Financial Condition and Results of Operations” and “Business,” contains forward-looking statements that 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 expressed or implied by these forward-looking statements. Forward-looking statements in this prospectus include, but are not limited to, statements about:

- our use of the net proceeds from this offering;
- 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 to protect our intellectual property and operate our business without infringing upon the intellectual property rights of others;
- 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 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 o 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.

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USE OF PROCEEDS

We will not receive any of the proceeds from the sale of shares of our common stock in this offering. The selling stockholder will receive all of the proceeds from this offering.

SELLING STOCKHOLDER

This prospectus relates to the possible resale by the selling stockholder, Leviston Resources LLC, of shares of common stock that we may issue pursuant to the Equity Purchase Agreement in accordance with which we may offer and sell shares of our common stock having an aggregate offering price of up to $8,000,000 from time to time to the Investor. The selling stockholder may from time to time offer and sell pursuant to this prospectus any or all of the shares that it acquires under the Equity Purchase Agreement.

The following table presents information regarding Leviston Resources LLC and the shares that it may offer and sell at an assumed offering price of $0.47 per share (the last reported sale price of our common stock on June 12, 2018). This represents 7,000,000 shares of our common stock that may be issued under this Registration Statement from time to time, or 32% of the Company's outstanding stock as of May 31, 2018. This table is prepared based on information supplied to us by the selling stockholder. As used in this prospectus, the term "selling stockholder" includes Leviston Resources LLC and any donees, pledgees, transferees or other successors in interest selling shares received after the date of this prospectus from a selling stockholder as a gift, pledge or other non-sale related transfer. The number of shares in the column "Number of Shares Being Offered" represents all of the shares that the selling stockholder may offer under this prospectus. The selling stockholder may sell some, all or none of its shares. We do not know how long the selling stockholder will hold the shares before selling them, and we currently have no agreements, arrangements or understandings with the selling stockholder regarding the sale of any of the shares.

Beneficial ownership is based upon both 22,066,715 shares of our common stock actually outstanding as of May 31, 2018 and on the assumption that all shares of common stock issuable under this Registration Statement are issued upon a price of $0.47 per share and are outstanding.

	Shares Beneficially Owned Prior to the Offering (1)			Number of	Shares Beneficially Owned After the Offering		
Name of Beneficial Owner	**Number**	**Percent**		Shares Offered	**Number**	**Percent**	
Leviston Resources LLC	7,549,764	26.0	%	7,000,000	549,764	1.9	%

(1) Based partially on information provided to the Company by the stockholder and disclosed in a Schedule 13G/A filed on February 27, 2018. The business address for Leviston Resources LLC is 708 Third Avenue, 6th Floor, New York, NY 10017.

PRICE RANGE OF COMMON STOCK

Since June 30, 2017, the trading date following the consummation of the Merger, our common stock has traded on the NASDAQ Capital Market under the symbol “PRPO.”

Prior to the Merger, our common stock was traded on the NASDAQ Capital Market under the symbol “TBIO.” Our common stock was suspended from trading on the NASDAQ Capital Market on February 17, 2017 and on February 22, 2017, our shares began trading on the OTCQB exchange under the ticker “TBIO” and remained on the OTCQB exchange until the date of the Merger. In connection with the merger, our common stock commenced trading on the NASDAQ Capital Market under the symbol “PRPO.”

The following table sets forth, for the periods indicated, the closing prices of our common stock as reported on the market exchanges noted above. The over-the-counter market quotations reflect inter-dealer prices, without retail mark-up, mark-down or commission and may not necessarily represent actual transactions. The per share prices reflect a 1-for-30 reverse stock split effected on June 13, 2017:

	Fiscal Year 2018	
	High	Low
First Quarter	$ 1.30	$ 0.48
Second Quarter (through June 12, 2018)	$ 0.55	$ 0.38

	Fiscal Year 2017	
	High	Low
First Quarter	$ 33.60	$ 7.80
Second Quarter	$ 16.86	$ 4.90
Third Quarter	$ 20.10	$ 1.80
Fourth Quarter	$ 2.23	$ 1.08

	Fiscal Year 2016	
	High	Low
First Quarter	$ 32.41	$ 16.20
Second Quarter	$ 21.92	$ 15.00
Third Quarter	$ 17.36	$ 8.37
Fourth Quarter	$ 11.04	$ 4.75

On June 12, 2018, the closing price of our common stock as reported on The NASDAQ Capital Market was $0.47 per share. As of May 31, 2018, there were 22,066,715 shares of our common stock outstanding and approximately 78 holders of record.

CAPITALIZATION

The following table sets forth our cash and cash equivalents and capitalization as of March 31, 2018:

- on an actual basis
- on a pro forma basis to give effect to:
  - the issuance of 2,398,143 shares of our common stock, subsequent to March 31, 2018, as a result of the exercise of 2,398,143 warrants to purchase shares of the Company's common stock; and
  - the receipt of $1,660,000, in April 2018, pursuant to a securities purchase agreement with certain investors, pursuant to which the Company will issue up to approximately $3.3M in 8% Senior Secured Convertible Promissory Notes with 100% common stock warrant coverage. The initial closing provided the Company with $1,660,000 of gross proceeds for the issuance of Notes with an aggregate principal of $1,824,176.
- on a pro forma as adjusted basis to give further effect to (i) the registering of 7,000,000 shares of common stock in this offering and potential receipt of the net proceeds therefrom at an assumed public offering price of $0.47 per share ,after deducting estimated discounts and commissions and estimated offering expenses payable by us.

The following information is illustrative only of our cash and capitalization following the completion of this offering and will change based on the actual public offering price and other terms of this offering determined at pricing. You should read this table in conjunction with "Management's Discussion and Analysis of Financial Condition and Results of Operations" and our condensed consolidated financial statements and related notes in our Quarterly Report on Form 10-Q for the quarter ended March 31, 2018, filed with the SEC on May 21, 2018.

	As of March 31, 2018		
	Actual	Pro Forma	Pro Forma As Adjusted
	(in thousands)		
Cash	$ 286	$ 2,665	$ 5,476
Current maturities of long-term debt	(676)	(2,336)	(2,336)
Long-term debt	(2,894)	(2,894)	(2,894)

Common stock warrant liability	(124)	(124)	(124)
Capital leases (Current & Long term)	(151)	(151)	(151)
Stockholders' (deficit) equity:			
Preferred stock, $0.01 par value per share; 15,000,000 shares authorized, actual, pro forma and pro forma as adjusted, 47 shares of Series B Preferred Stock issued and outstanding as of March 31, 2018, actual, pro forma and pro forma as adjusted	—	—	—
Common stock, $0.001 par value per share; 150,000,000 shares authorized, actual, pro forma and pro forma as adjusted; 19,668,572 shares issued and outstanding at March 31, 2018, actual; 22,066,715 shares issued and outstanding, pro forma; 29,066,715 shares issued and outstanding, pro forma as adjusted;	197	221	291
Additional paid-in capital	47,192	49,547	52,288
Accumulated deficit	(33,981)	(33,981)	(33,981)
Total stockholders' (deficit) equity	13,408	15,787	18,598
Total capitalization	$ 9,563	$ 10,282	$ 13,093

The preceding data is based on 22,066,715 shares outstanding as of May 31, 2018. This number excludes:

- 3,420,059 common shares issuable upon the exercise of stock options outstanding as of May 31, 2018, at a weighted average exercise price of $1.07 per share;

- 7,405,998 shares of common stock issuable upon exercise of warrants that were outstanding as of May 31, 2018 at a weighted-average exercise price of $2.37 per share;

- 2,644,306 shares of common stock reserved for future issuance under our 2017 Stock Option and Incentive Plan, as well as any automatic increases in the number of common shares reserved for issuance under the 2017 Stock Option and Incentive Plan after the date of this prospectus; and

- 156,667 shares of our common stock issuable upon conversion of 47 shares of our Series B Preferred Stock.

- 3,648,352 shares of common stock issuable upon conversion of convertible promissory notes outstanding as of May 31, 2018.

DILUTION

If you invest in our common stock, your interest will be diluted to the extent of the difference between your purchase price per share of our common stock and the pro forma as adjusted net tangible book value per share of our common stock after this offering. As of March 31, 2018, our historical net tangible book value was $(11.1) million, or $(0.57) per share of common stock, based on 19,668,572 shares of our common stock outstanding at March 31, 2018. Our historical net tangible book value per share represents the amount of our total tangible assets reduced by the amount of our total liabilities, divided by the total number of shares of our common stock outstanding as of March 31, 2018.

Our pro forma net tangible book value as of March 31, 2018 was $(10.4) million, or $(0.47) per share of common stock. Pro forma net tangible book value per share represents total tangible assets less total liabilities, divided by the number of shares of common stock outstanding, assuming (i) the issuance of 2,398,143 shares of our common stock, subsequent to March 31, 2018, as a result of the exercise of 2,398,143 warrants to purchase shares of the Company's common stock; and (ii) the receipt of $1,660,000, in April 2018, pursuant to a securities purchase agreement with certain investors, pursuant to which the Company will issue up to approximately $3.3M in 8% Senior Secured Convertible Promissory Notes with 100% common stock warrant coverage. The initial closing provided the Company with $1,660,000 of gross proceeds for the issuance of Notes with an aggregate principal of $1,824,176.

After giving effect to the registration by us of 7,000,000 shares of our common stock in this offering at the assumed public offering price of $0.47 per share, after deducting estimated discounts and estimated offering expenses payable by us, our pro forma as adjusted net tangible book value as of March 31, 2018 would have been $(7.6) million, or $(0.26) per share. This represents an immediate increase in pro forma net tangible book value of $0.21 per share to our existing stockholders and an immediate dilution of $0.73 per share to our new investors purchasing shares of common stock in this offering. The following table illustrates this dilution on a per share basis:

Assumed public offering price per share		$ 0.47
Historical net tangible book value per share as of March 31, 2018	$ (0.57)	
Increase in net tangible book value per share attributable to the pro forma adjustments described above	$ 0.10	
Pro forma net tangible book value per share as of March 31, 2018	$ (0.47)	
Increase in pro forma net tangible book value per share attributable to this offering	$ 0.21	
Pro forma as adjusted net tangible book value per share after this offering		(0.26)
Dilution per share to new investors in this offering		$ 0.73

The preceding data is based on 22,066,715 shares outstanding as of May 31, 2018. This number excludes:

- 3,420,059 common shares issuable upon the exercise of stock options outstanding as of May 31, 2018, at a weighted average exercise price of $1.07 per share;
- 7,405,998 shares of common stock issuable upon exercise of warrants that were outstanding as of May 31, 2018 at a weighted-average exercise price of $2.37 per share;
- 2,644,306 shares of common stock reserved for future issuance under our 2017 Stock Option and Incentive Plan, as well as any automatic increases in the number of common shares reserved for issuance under the 2017 Stock Option and Incentive Plan after the date of this prospectus; and
- 156,667 shares of our common stock issuable upon conversion of 47 shares of our Series B Preferred Stock.
- 3,648,352 shares of common stock issuable upon conversion of convertible promissory notes outstanding as of May 31, 2018.

To the extent that stock options are exercised or new stock options are issued under our equity incentive plans, there will be further dilution to investors purchasing common stock in this offering. In addition, we need to raise additional capital because of market conditions and strategic considerations. If we raise additional capital through the sale of equity or convertible debt securities, the issuance of these securities could result in further dilution to our stockholders.

DIVIDEND POLICY

We have never declared or paid dividends on our capital stock. We do not anticipate paying any dividends on our capital 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, and as of December 31, 2017 there are 10,196,620 shares of common stock outstanding and 4,935 shares of preferred stock outstanding. As of the date of May 31, 2018, there were 22,066,715 shares of our common stock outstanding and approximately 78 holders of record. In addition, as of May 31, 2018, options to purchase 3,420,059 shares of our common stock are outstanding, 2,644,306 shares of our common stock are reserved for future grants under our stock option plans and warrants to purchase 7,405,998 shares of our common stock are outstanding.

The following description of our capital stock and provisions of our amended and restated certificate of incorporation, amended and restated by-laws, certificate of designations and outstanding warrants 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, certificate of designations and outstanding warrants, 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 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.

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, or 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, or 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 conversion price, then the conversion price will be reduced to equal the higher of (A) such lower price or (B) $0.05, 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 equityholders 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 assets of the Company 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 $2.50 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. The Series B Conversion Price was reduced to $0.30 as a result of our Debt Financing Agreement on April 20, 2018, 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 the Company, 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.

Series C Preferred Stock

On November 6, 2017, we filed a Certificate of Designation of Preferences, Rights and Limitations of Series C Convertible Preferred Stock, or the Series C Certificate of Designation, with the State of Delaware which designates 2,748 shares of our preferred stock as Series C Convertible Preferred Stock, or the Series C Preferred Stock. The Series C 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 C 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 conversion price, then the conversion price will be reduced to equal the higher of (A) such lower price or (B) $0.05, 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 our November 2017 Offering or convertible into shares of common stock issued and outstanding on the date of the placement agency agreement entered into in connection with our November 2017 Offering, provided that such securities have not been amended since the date of the placement agency 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 C Preferred Stock, and provided that any such issuance is to a person or its equityholders 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 shares of Series C Preferred Stock, or Series C Preferred Shares, are entitled to an amount equal to the par value of the Series C Preferred Stock and thereafter to participate on an as-converted-to-common stock basis with holders of the common stock in any distribution of assets of the Company to the holders of the common stock. The Series C 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 C Preferred Share on an as-converted basis. Other than as set forth in the previous sentence, the Series C Certificate of Designation provides that no other dividends will be paid on Series C 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 C Certificate of Designation does not provide for any restriction on the repurchase of Series C Preferred Shares by us while there is any arrearage in the payment of dividends on the Series C Preferred Shares. There are no sinking fund provisions applicable to the Series C 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 C Preferred Shares will be entitled to receive upon conversion of the Series C Preferred Shares the same kind and amount of securities, cash or property which the holders would have received had they converted the Series C Preferred immediately prior to such fundamental transaction. Any successor to us or surviving entity is required to assume the obligations under the Series C 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 C 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 C 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 C Certificate of Designation, the Series C Preferred Shares have no voting rights. However, as long as any shares of Series C Preferred Shares remain outstanding, the Series C Certificate of Designation provides that we may not, without the affirmative vote of holders of a majority of the then-outstanding Series C Preferred Shares, (a) alter or change adversely the powers, preferences or rights given to the Series C Preferred Shares or alter or amend the Series C Certificate of Designation, (b) increase the number of authorized shares of Series C 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 C Preferred Shares.

Each Series C 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 C Conversion Price. The "Series C Conversion Price" is initially $1.40 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. The Series C Conversion Price was reduced to $0.30 as a result of our Debt Financing Agreement on April 20, 2018. Notwithstanding the foregoing, the Series C Certificate of Designation further provides that we may not effect any conversion of Series C Preferred Shares, with certain exceptions, to the extent that, after giving effect to an attempted conversion, the holder of Series C 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 the Company, 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.

The Series C Certificate of Designation provides that we will not be obligated to issue any shares of common stock, and a holder will not have the right to convert any portion of the Series C Preferred Stock, if such issuance (taken together with any prior issuance of shares of common stock upon conversion of the Series C Preferred Stock) would exceed 1,961,914 shares of common stock, which is the aggregate number of shares of common stock which we may issue upon conversion of the Series C Preferred Stock without breaching our obligations under the rules or regulations of the NASDAQ Capital Market, except that such limitation will not apply in the event that we (A) obtain the approval of our stockholders as required by the applicable rules of the NASDAQ Capital Market for issuances of common stock in excess of such number of shares of common stock or (B) obtain a written opinion from our outside counsel that such approval is not required, which opinion will be reasonably satisfactory to the holder. Because we obtained the approval of our stockholders on January 30, 2018, the foregoing limitation is no longer operative.

The Series C Certificate of Designation also prohibits us from issuing any shares of common stock or securities convertible or exercisable into common stock at a price per share below the then effective conversion price of the Series C Preferred Stock, subject to certain exceptions, or entering into any agreement or making any public announcement with respect to such a dilutive issuance, until we have filed a proxy statement under Section 14(a) of the Exchange Act or information statement pursuant to Section 14(c) of the Exchange Act with the SEC and obtained approval of the November 2017 Offering from our stockholders, including approval of issuances in excess of the

maximum number of shares issuable under the rules and regulations of the NASDAQ Capital Market. Because we filed a proxy statement and obtained stockholder approval of the November 2017 Offering on January 30, 2018, the foregoing restriction is no longer operative.

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 of 75% or more 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, except that the amendment of the provisions relating to stockholder action, directors, limitation of liability and the amendment of our amended and restated certificate of incorporation must be approved by not less than 75% of the outstanding shares entitled to vote on the amendment, and not less than 75% 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 75% 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.

Listing

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

EQUITY PURCHASE AGREEMENT

We have entered into an Equity Purchase Agreement with Leviston Resources LLC, or the Investor, relating to shares of our common stock offered by us. In accordance with the terms of such agreement, we may offer and sell shares of our common stock having an aggregate offering price of up to $8,000,000, or the Aggregate Amount, from time to time to the Investor.

Sales of our common stock, if any, in this offering may be made in sales deemed to be "at-the-market" equity offerings as defined in Rule 415 promulgated under the Securities Act of 1933, as amended, or the Securities Act, at a purchase price equal to 97.25% of the volume weighted average sales price, or VWAP, of the common stock reported on the date that the Investor receives a capital call from us. On any business day, we have the right to direct the Investor to purchase up to $25,000 shares of our common stock or 30% of the 30-day average share volume of our common stock, up to a maximum of $150,000 per business day unless otherwise agreed by the Investor. The Investor will be not be required to purchase shares in excess of 19.99% of our issued and outstanding shares as of the date of the equity purchase agreement, subject to certain limited exceptions. If the market price of our common stock is below $0.25, the Investor's obligation to purchase shares will automatically be suspended unless waived by the Investor.

In addition to the regular purchases described above, if we have delivered a purchase notice by 9 am on the date of purchase, we may direct the Investor to make additional purchases on the same date as set forth below:

(a)

we can require the Investor to purchase up to 1.5 times the amount of the shares traded between 7 am and 9:15 am, provided that the amount of such additional purchases will not exceed $2,250,000, unless waived by the Investor, subject to a 9.99% affiliate blocker. The price of such additional purchases will be equal to the lesser of: (i) 95% of the VWAP on the day of the additional purchase and (ii) the closing price of our common stock on the day of the additional purchase. We may increase the number of the additional shares to be purchased if agreed by the Investor; or

(b)

we can direct the Investor to accept an additional purchase on the purchase date calculated by reference to the anticipated daily volume, or ADV, of our common stock on the purchase date. If by 10 am on the purchase date the ADV* is greater than two times the 30-day average volume, we can direct the Investor to purchase additional shares in

the following breakdown, provided that the amount of additional purchases will not exceed $2,250,000, unless waived by the Investor:

ADV	**Additional Shares**
>3.00x and <6x	20% of ADV
>6.01x	25% of ADV

The purchase price of the additional purchases will be equal to the lesser of: (i) 95% of the VWAP on the purchase date and (ii) the closing price of our common stock on the additional purchase date.

**ADV will be calculated by comparing minute-by-minute volume between 9:30am and 10:00am on the Purchase Date to the average minute-by-minute volume for the previous 30 days and using that difference as a coefficient for an ADV amount.*

Example: 30-day average daily volume is 1,000 shares. Average 30-day volume between 9:30am and 10:00am is 100 shares. Assuming that on the purchase date, the 9:30am-10:00am volume is 700 shares. ADV = 7x. Additional purchases can be in the amount of 1,000 x 7 x 25% = 1,750 shares.

We estimate that the total gross proceeds from this offering will be approximately $8.0 million. We estimate the total expenses of this offering, excluding the discount to the Investor, will be approximately $0.6 million of which $0.4 million will be paid in stock. As consideration for the Investor entering into the Equity Purchase Agreement, we have agreed to pay to the Investor a commitment fee in shares of our common stock, or the Commitment Shares, equal in value to 5.25% of the total Aggregate Amount, payable as follows: 1.75% before February 12, 2018; 1.75% on the third calendar day after the date on which this registration statement is declared effective by the SEC; and 1.75% on the thirtieth calendar day after the date on which this registration statement is declared effective by the SEC. If we fail to deliver the Commitment Shares within one business day of the date on which they are due under the Equity Purchase Agreement, we will be required to pay the Investor liquidated damages in an amount equal to $10,000 plus an additional $1,000 per day until the Commitment Shares are delivered. We also agreed to provide “most favored nation” status to the Investor with respect to other equity offerings until the date on which this registration statement is declared effective by the SEC.

We have agreed to pay to the Investor, on each day the Investor receives a capital call from us, all expenses associated with depositing, clearing, selling and mailing of the stock certificates, a fee of 0.75% of any amount purchased by the Investor. In addition, we have agreed to reimburse $35,000 to the Investor for a documentation fee for preparing the equity purchase agreement, of which $15,000 was refunded by the Investor 60 days after the signing of the equity purchase agreement. We are also required to pay liquidated damages of $100,000 on each event of default under the Equity Purchase Agreement.

PLAN OF DISTRIBUTION

Leviston Resources LLC as the selling stockholder may decide not to sell any shares. The selling stockholder may from time to time offer some or all of the shares of common stock through brokers, dealers or agents who may receive compensation in the form of discounts, concessions or commissions from the selling stockholder and/or the purchasers of the shares of common stock for whom they may act as agent. In effecting sales, broker-dealers that are engaged by the selling stockholder may arrange for other broker-dealers to participate. Leviston Resources LLC is an "underwriter" within the meaning of the Securities Act. Any brokers, dealers or agents who participate in the distribution of the shares of common stock may also be deemed to be "underwriters," and any profits on the sale of the shares of common stock by them and any discounts, commissions or concessions received by any such brokers, dealers or agents may be deemed to be underwriting discounts and commissions under the Securities Act. Leviston Resources LLC has advised us that it may effect resales of our common stock through any one or more registered broker-dealers. Because the selling stockholder is deemed to be an underwriter, the selling stockholder will be subject to the prospectus delivery requirements of the Securities Act and may be subject to certain statutory liabilities of, including but not limited to, Sections 11, 12 and 17 of the Securities Act and Rule 10b-5 under the Securities Exchange Act of 1934, as amended, or the Exchange Act.

The selling stockholder will act independently of us in making decisions with respect to the timing, manner and size of each sale. Such sales may be made over the Nasdaq Capital Market, on the over-the-counter market, otherwise or in a combination of such methods of sale, at then prevailing market prices, at prices related to prevailing market prices or at negotiated prices. The shares of common stock may be sold according to one or more of the following methods:

- a block trade in which the broker or dealer so engaged will attempt to sell the shares of common stock as agent but may position and resell a portion of the block as principal to facilitate the transaction;
- purchases by a broker or dealer as principal and resale by such broker or dealer for its account pursuant to this prospectus;
- an over-the-counter distribution in accordance with the Nasdaq rules;
- ordinary brokerage transactions and transactions in which the broker solicits purchasers;
- privately negotiated transactions;
- a combination of such methods of sale; and

- any other method permitted pursuant to applicable law.

Under applicable rules and regulations under the Exchange Act, any person engaged in the distribution of the resale securities may not simultaneously engage in market making activities with respect to the common stock for the applicable restricted period, as defined in Regulation M, prior to the commencement of the distribution. In addition, the Investor will be subject to applicable provisions of the Exchange Act and the rules and regulations thereunder, including Regulation M, which may limit the timing of purchases and sales of securities of the common stock by the Investor.

Any shares covered by this prospectus which qualify for sale pursuant to Rule 144 of the Securities Act may be sold under Rule 144 rather than pursuant to this prospectus. In addition, the selling stockholder may transfer the shares by other means not described in this prospectus.

Any broker-dealer participating in such transactions as agent may receive commissions from Leviston Resources LLC (and, if they act as agent for the purchaser of such shares, from such purchaser). Broker-dealers may agree with Leviston Resources LLC to sell a specified number of shares at a stipulated price per share, and, to the extent such a broker-dealer is unable to do so acting as agent for Leviston Resources LLC, to purchase as principal any unsold shares at the price required to fulfill the broker-dealer commitment to Leviston Resources LLC. Broker-dealers who acquire shares as principal may thereafter resell such shares from time to time in transactions (which may involve crosses and block transactions and which may involve sales to and through other broker-dealers, including transactions of the nature described above) on the Nasdaq Capital Market, on the over-the-counter market, in privately-negotiated transactions or otherwise at market prices prevailing at the time of sale or at negotiated prices, and in connection with such resales may pay to or receive from the purchasers of such shares commissions computed as described above. To the extent required under the Securities Act, an amendment to this prospectus, or a supplemental prospectus will be filed, disclosing:

- the name of any such broker-dealers;
- the number of shares involved;
- the price at which such shares are to be sold;
- the commission paid or discounts or concessions allowed to such broker-dealers, where applicable;
- that such broker-dealers did not conduct any investigation to verify the information set out or incorporated by reference in this prospectus, as supplemented; and
- other facts material to the transaction.

Underwriters and purchasers that are deemed underwriters under the Securities Act may engage in transactions that stabilize, maintain or otherwise affect the price of the securities, including the entry of stabilizing bids or syndicate covering transactions or the imposition of penalty bids. Leviston Resources LLC and any other persons participating in the sale or distribution of the shares will be subject to the applicable provisions of the Exchange Act and the rules and regulations thereunder including, without limitation, Regulation M. These provisions may restrict certain activities of, and limit the timing of, purchases by the selling stockholder or other persons or entities. Furthermore, under Regulation M, persons engaged in a distribution of securities are prohibited from simultaneously engaging in market making and certain other activities with respect to such securities for a specified period of time prior to the commencement of such distributions, subject to special exceptions or exemptions. Regulation M may restrict the ability of any person engaged in the distribution of the securities to engage in market-making and certain other activities with respect to those securities. In addition, the anti-manipulation rules under the Exchange Act may apply to sales of the securities in the market. All of these limitations may affect the marketability of the shares and the ability of any person to engage in market-making activities with respect to the securities.

LEGAL MATTERS

The validity of the common stock offered hereby will be passed upon for us by Goodwin Procter LLP, New York, New York.

EXPERTS

The consolidated financial statements of Precipio, Inc. (formerly Transgenomic, Inc.) as of and for the years ended December 31, 2017 and 2016 appearing in our Annual Report on Form 10-K filed for the year ended December 31, 2017, have been audited by Marcum LLP, independent registered public accounting firm, to the extent and period 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-1 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 web site (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 web site of the SEC referred to above.

MARKET AND INDUSTRY DATA AND FORECASTS

Market data and certain industry data and forecasts included in this prospectus were obtained from internal company surveys, market research, publicly available information, reports of governmental agencies and industry publications and surveys. We have relied upon industry publications as our primary sources for third-party industry data and forecasts. Industry surveys, publications and forecasts generally state that the information contained therein has been obtained from sources believed to be reliable, but that the accuracy and completeness of such information is not guaranteed. We have not independently verified any of the data from third-party sources, nor have we ascertained the underlying economic assumptions relied upon therein. Similarly, internal surveys, industry forecasts and market research, which we believe to be reliable based upon our management's knowledge of the industry, have not been independently verified. Forecasts are particularly likely to be inaccurate, especially over long periods of time. In addition, we do not know what assumptions regarding general economic growth were used in preparing the forecasts we cite. Statements as to our market position are based on recently available data. While we are not aware of any misstatements regarding our industry data presented herein, our estimates involve risks and uncertainties and are subject to change based on various factors, including those discussed under "Risk Factors" in this prospectus. While we believe our internal business research is reliable and market definitions are appropriate, neither such research nor definitions have been verified by any independent source. This prospectus may only be used for the purpose for which it has been published.

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, 2017, filed with the SEC on April 13, 2018;

- Our Quarterly Report on Form 10-Q for the quarter ended March 31 2018, filed with the SEC on May 21, 2018;

- Reports on Form 8-K filed with the SEC on June 4, 2018, May 14, 2018, April 26, 2018, April 23, 2018, March 30, 2018, March 21, 2018, March 14, 2018, February 26, 2018, February 13, 2018, February 9, 2018, January 31, 2018, and June 30, 2017;

- The portions of our definitive proxy statement on Schedule 14A relating to our 2018 Annual Meeting of Stockholders, as filed with the SEC on May 29, 2018 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 web site at http://www.precipiodx.com (Click the “Investors” link and then the “SEC Filings” link).

Until , 2018 (25 days after commencement of this offering), all dealers that buy, sell, or trade shares of our common stock, whether or not participating in this offering, may be required to deliver a prospectus. This delivery requirement is in addition to the obligation of dealers to deliver a prospectus when acting as underwriters and with respect to their unsold allotments or subscriptions.

Shares

Common Stock

PROSPECTUS

, 2018

PART II

INFORMATION NOT REQUIRED IN PROSPECTUS

Item 13. ***Other Expenses of Issuance and Distribution***

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

	Total
SEC registration fee	$[____]
FINRA filing fee	*
NASDAQ listing fee	*
Printing and engraving expenses	*
Legal fees and expenses	*
Accounting fees and expenses	*
Transfer agent and registrar fees	*
Miscellaneous	*
Total	$*

* To be provided by amendment

Item 14. ***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 15. ***Recent Sales of Unregistered Securities***

During the past three years, we have sold and issued the following unregistered securities

On June 30, 2015 the Company has entered into a securities purchase agreement to raise gross proceeds of approximately $3.0 million in a private placement financing. Crede Capital Group, LLC, subscribed for all but 28,000 shares in the financing. Pursuant to the purchase agreement, The Company has agreed to sell an aggregate of approximately 1.5 million shares of its restricted common stock and fully paid prefunded warrants to purchase up to approximately 0.7 million shares of its common stock, in each case at a purchase price of $1.42 per share. Additionally, for each share of common stock issued and issuable upon exercise of the fully paid prefunded warrants, the investor will receive a warrant to purchase 0.55 of a share of common stock, for warrants to purchase an aggregate of approximately 1.2 million additional shares. The warrants to purchase additional shares was exercisable at a price of $1.66 per share beginning six months after the date of issuance and will expire five years from the date on which the warrants are initially exercisable. The proceeds from the offering were used for general corporate and working capital purposes. The closing of the offering took place on July 7, 2015. Craig-Hallum Capital Group LLC acted as the sole placement agent for the offering and in connection with this role, the Company issued to the Placement Agent a five-year warrant to purchase up to 107,033 shares of common stock with an exercise price of $1.66 per share. The securities offered in this private placement transaction have not been registered under the Securities Act of 1933, as amended (the "Securities Act"), or applicable state securities laws. Accordingly, the securities may not be offered or sold in the United States except pursuant to an effective registration statement or an applicable exemption from the registration requirements of the Securities Act and such applicable state securities laws. Pursuant to the terms of a registration rights agreement entered into with the investors on the same date of the agreement, the Company has filed a registration statement with the Securities and Exchange Commission registering the resale of the shares of common stock sold in the offering and issuable upon exercise of the warrants. Any offering of the Company's securities under the resale registration statement referred to above will be made only by means of a prospectus. The transaction was disclosed on form 8-K filed on June 30, 2015 and form 8-KA filed on July 7 2018.

On January 6, 2016 the Company entered into a conversion agreement with the holders of its outstanding Series A and Series B convertible preferred stock which are affiliates of Third Security LLC. The outstanding shares of Series A Preferred were convertible into shares of Common Stock at a rate of 1-for-3, and the outstanding shares of Series B Preferred were convertible into shares of Common Stock at a rate of 1-for-1. In connection with the full conversion of the Series A Preferred and Series B Preferred, plus the conversion of all accrued and unpaid dividends thereon, the Company issued an aggregate of 6,780,179 shares of Common Stock to the Preferred Holders on that date. The Company issued the conversion shares to the preferred holders in reliance on the exemptions from registration afforded by Sections 3(a)(9) and 4(a)(2) of the Securities Act of 1933, as amended. The transaction was disclosed on form 8-K filed on January 11, 2016.

On January 6, 2016 the Company entered into a securities purchase agreement the Company pursuant to which it has raised gross proceeds of approximately $2.2 million in a preferred stock and warrant private placement financing with existing investors Crede Capital Group, LLC and Third Security, LLC. The Company sold approximately $2.2 million of units consisting of an aggregate of 2,365,243 shares of Series A-1 convertible preferred stock and warrants to purchase up to an aggregate of 1,773,929 shares of common stock. The units were sold to the investors at a purchase price of $0.93 per unit. The Series A-1 preferred shares were convertible into shares of common stock at an initial rate of 1-for-1, with the conversion rate subject to further adjustment. The warrants were immediately exercisable, have a term of five years and have an exercise price of $1.21 per share of common stock. Each warrant includes cash and cashless exercise features, as well as an exchange feature. Further details regarding the purchase agreement, Series A-1 preferred shares and warrants are outlined in the Company’s report on Form 8-K filed on January 11, 2016 with the Securities and Exchange Commission. Craig-Hallum Capital Group LLC acted as the sole placement agent for the offering. The securities offered in this private placement transaction have not been registered under the Securities Act of 1933, as amended (the “Securities Act”), or applicable state securities laws. Accordingly, the securities may not be offered or sold in the United States except pursuant to an effective registration statement or an applicable exemption from the registration requirements of the Securities Act and such applicable state securities laws. Pursuant to the terms of a registration rights agreement entered into with the investors, on January 8, 2016 the Company has filed a registration statement with the Securities and Exchange Commission registering the resale of the shares of common stock issuable upon conversion of the Series A-1 preferred shares and the shares of common stock issuable upon exercise of the warrants. Any offering of the Company’s securities under the resale registration statement referred to above will be made only by means of a prospectus.

As previously reported on Form 8-K filed with the Securities and Exchange Commission on October 13, 2016, Transgenomic, Inc. (“Transgenomic”), New Haven Labs Inc., a wholly-owned subsidiary of Transgenomic, and Precipio Diagnostics, LLC (“Precipio”) entered into an Agreement and Plan of Merger (the “Merger Agreement”) pursuant to\ which Precipio will become a wholly-owned subsidiary of Transgenomic (the “Merger”), on the terms and subject to the conditions set forth in the Merger Agreement. The Merger Agreement was amended on February 2, 2017 and June 29, 2017, by and among Transgenomic, Precipio Diagnostics and New Haven Labs Inc. (“Merger Sub”) a wholly-owned subsidiary of Transgenomic. In accordance with the terms of the Merger Agreement, each outstanding unit of Precipio Diagnostics was exchanged for 10.2502 pre-reverse stock split shares of Company Common Stock. The issuance of the Company Common Stock in connection with the Merger will be made in reliance upon the exemption from registration requirements in Rule 506 of Regulation D under the Securities Act of 1933, as amended (the “Securities Act”). In addition, and as reported on the same 8-K aforementioned, Transgenomic received a non-binding term sheet providing for the issuance of up to $7 million in Series “A” Redeemable Senior Convertible Preferred Shares. The

issuance of the Series “A” Redeemable Senior Convertible Preferred Shares was made in reliance upon the exemption from registration requirements in Rule 506 of Regulation D under the Securities Act. On the closing date of the Merger, June 29, 2017, the Company completed and the outstanding common and preferred units of Precipio Diagnostics and certain debt of Precipio Diagnostics were converted into (i) 5,352,847 shares of Precipio common stock, together with cash in lieu of fractional units, and (ii) 802,920 shares of Precipio preferred stock with an aggregate face amount equal to $3 million.

In connection with the Merger, on the Closing Date, June 29, 2017, Precipio also issued promissory notes and shares of Precipio preferred and common stock in a number of transactions, whereby:

- holders of certain secured indebtedness of Transgenomic received in exchange for such indebtedness 802,925 shares of Precipio preferred stock in an amount equal to $3.0 million stated value, and 352,630 shares of Precipio common stock;

- Holders of Transgenomic preferred stock converted it into 7,155 shares of Precipio common stock; and

- Precipio issued 107,056 shares of Precipio preferred stock to certain investors in exchange for $400,000 in a private placement. Precipio also completed the sale of an aggregate of $800,000 of promissory notes pursuant to a securities purchase agreement

As previously reported on Form 8-K on April 13, 2017, prior to the Merger, the Company (then Transgenomic) completed the sale of an aggregate of $1.2 million of non-convertible promissory notes in a bridge financing pursuant to a securities purchase agreement for which $561,500 was then given to Precipio Diagnostics through the issuance of a promissory note and is eliminated in consolidation. The financing was intended to help facilitate the completion of the Merger. Aegis Capital Corp. acted as placement agent for the bridge financing and received a placement agent fee of $84,000 and warrants to acquire 5,600 shares of the Company's common stock at an exercise price of $15.00 per share. The issuance of the notes, the warrants, the Aegis warrants, and the subsequent issuance of Transgenomic common stock upon exercise of the bridge warrants or Aegis warrants thereafter, were exempt from registration under the Securities Act of 1933, as amended, in reliance on Section 4(a)(2) thereof and Rule 506 of Regulation D promulgated thereunder. At the time of the Merger, the bridge notes were extinguished and replaced with convertible promissory notes with an original principal amount of $1.2 million in the aggregate pursuant to an Exchange Agreement (the “Exchange Agreement”) entered into on the Closing Date.

In connection with the bridge financing and the assumption of certain obligations by an entity controlled by Mark Rimer (a director of the Company), the Company issued to that entity Side Warrants to purchase an aggregate of 91,429 shares of the Company's common stock at an exercise price of $7.00 per share (subject to adjustment), with a fair value of $487,000 at the date of issuance.

On October 31, 2017, the Company entered into a Debt Settlement Agreement with certain of its accounts payable creditors and In connection with the settlement, the Company agreed to issue to certain of the Creditors, namely Paul Hasting LLP, Mount Sinai, Montefiore Medical Center, Allergan Sales LLC, warrants to purchase approximately 86,000 shares of the Company’s common stock at an exercise price of $7.50 per share. The Warrants have a per share exercise price of $7.50, are exercisable on the date of issuance and will expire five years from the date of issuance. The Company does not plan to apply to list the warrants on the NASDAQ Capital Market, any other national securities exchange or any other nationally recognized trading system. The issuance of the Warrants is exempt from registration under the Securities Act of 1933, as amended, in reliance on Section 4(a)(2) thereof and Rule 506 of Regulation D promulgated thereunder

On April 20, 2018, Precipio Inc. entered into a securities purchase agreement with Osher Capital Partners LLC, M2B Funding Corp and Alpha Capital Anstalt pursuant to which the Company issued up to approximately $3,296,703.30 in 8% Senior Secured Convertible Promissory Notes with 100% common stock warrant coverage, The Transaction consists of unregistered 8% Senior Secured Convertible Notes bearing interest at a rate of 8.00% annually and an original issue discount of 9%. The initial Senior Secured Convertible Notes shall be convertible at a price of $0.50 per share, provided that if the Note is not repaid within 180 days, the conversion price shall be adjusted to 80% of the lowest volume weighted average price during the prior 10 days, subject to a minimum conversion price of $.30 per share. The Transaction consists of a number of drawdowns. The initial closing provided the Company with $1,660,000 of gross proceeds for the issuance of Notes with an aggregate principal of $1,809,400. Subject to prior stockholder approval, the Investors will fund an additional $440,000 for Notes with an aggregate principal of $479,600 and the Company shall have the option to draw down two additional tranches of $500,000 each ($545,000 principal amount of Notes), 120 days following the initial closing and 150 days following the initial closing. The Notes are payable by the Company on the earlier of (i) the one year anniversary after the initial closing date or (ii)

upon the closing of a qualified offering, namely the Company raising gross proceeds of at least $7,000,000. Upon written demand by a noteholder after August 22, 2018, the Company shall file a registration statement within thirty (30) days after written demand covering the resale of all or such portion of the conversion shares for an offering to be made on a continuous basis pursuant to Rule 415. The sale and issuance of the Notes and the Warrants and the issuance of shares of our common stock upon the exercise or conversion thereof have been determined to be exempt from registration under the Securities Act, in reliance on Section 4(a)(2) thereof and Rule 506 of Regulation D promulgated thereunder as a transaction by an issuer not involving a public offering, in which the investors are accredited and have acquired the securities for investment purposes only and not with a view to or for sale in connection with any distribution thereof. Such shares may not be offered or sold in the United States absent registration or an applicable exemption from registration requirements.

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 SEC 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;

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

Provided, however, that paragraphs (a)(1)(i), (a)(1)(ii) and (a)(1)(iii) 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 SEC by the registrant pursuant to Section 13 or 15(d) of the Exchange Act that are incorporated by reference in the registration statement.

(2) That, for the purpose of determining any liability under the Securities Act, each such post-effective amendment shall be deemed to be a new registration statement relating to the securities offered therein, and the offering of such securities at that time shall be deemed to be the initial *bona fide* offering thereof.

(3) To remove from registration by means of a post-effective amendment any of the securities being registered which remain unsold at the termination of the offering.

The undersigned registrant hereby undertakes 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 Section 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 in 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.

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 SEC 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.

The Registrant hereby undertakes that:

(a) The Registrant will provide to the underwriter at the closing as specified in the underwriting agreement, certificates in such denominations and registered in such names as required by the underwriter to permit prompt delivery to each purchaser.

(b) For purposes of determining any liability under the Securities Act, the information omitted from the form of prospectus filed as part of this registration statement in reliance upon Rule 430A and contained in a form of prospectus filed by the Registrant pursuant to Rule 424(b)(1) or (4) or 497(h) under the Securities Act shall be deemed to be part of this registration statement as of the time it was declared effective.

(c) For the purpose of determining any liability under the Securities Act 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.

SIGNATURES

Pursuant to the requirements of the Securities Act of 1933, as amended, the Registrant has duly caused this Registration Statement on Form S-1 to be signed on its behalf by the undersigned, thereunto duly authorized, on the 14th day of June, 2018.

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 the 14th day of June, 2018.

Signature	**Title**	**Date**
/s/ Ilan Danieli Ilan Danieli	Chief Executive Officer and Director (Principal Executive Officer)	June 14, 2018

/s/ Carl Iberger Carl Iberger	Chief Financial Officer (Principal Financial Officer and Principal Accounting Officer)	June 14, 2018
/s/ Samuel Riccitelli Samuel Riccitelli	Chairman of the Board of Directors	June 14, 2018
/s/ Michael A. Luther Michael A. Luther	Director	June 14, 2018
/s/ Mark Rimer Mark Rimer	Director	June 14, 2018
/s/ Douglas Fisher, M.D. Douglas Fisher, M.D.	Director	June 14, 2018
/s/ Jeffrey Cossman, M.D. Jeffrey Cossman, M.D.	Director	June 14, 2018
/s/ David Cohen David Cohen	Director	June 14, 2018

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 2, 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 6, 2017).
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 Offering Warrant (incorporated by reference to Exhibit 4.1 of the Company's Form 8-K filed on August 23, 2017).
4.3	Form of Underwriter Warrant (incorporated by reference to Exhibit 4.2 of the Company's Form 8-K filed on August 23, 2017).
4.4	Form of Conversion Warrant (incorporated by reference to Exhibit 4.3 of the Company's Form 8-K filed on August 23, 2017).
4.5	Form of Warrant (incorporated by reference to Exhibit 4.1 of the Company's Form 8-K filed on November 6, 2017).
4.6	Form of Warrant (incorporated by reference to Exhibit 4.1 of the Company's Form 8-K filed on November 13, 2017).
5.1***	Opinion of Goodwin Procter LLP
10.1	License Agreement between the Company and Dana-Farber Cancer Institute dated October 8, 2009 (incorporated by reference to Exhibit 10.1 of the Company's Form 10-Q filed on November 5, 2009).
10.2	Waiver Letter Agreement by and among the Company, Potomac Capital Partners, L.P., MAZ Partners, LP, David Wambeke and Craig-Hallum Capital Group, LLC dated as of January 10, 2017 (incorporated by reference to Exhibit 10.1 of the Company's Form 8-K filed on January 17, 2017).
10.3	First Amendment to Unsecured Convertible Promissory Note by and among the Company and MAZ Partners LP, dated as of January 17, 2017 (incorporated by reference to Exhibit 10.1 of the Company's Form 8-K filed on January 20, 2017).
10.4	

	Termination and Tenth Amendment to Loan and Security Agreement, dated as of February 3, 2017, by and among Third Security Senior Staff 2008 LLC, as administrative agent and a lender, the other lenders party thereto and the Company (incorporated by reference to Exhibit 10.1 of the Company's Form 8-K filed on February 2, 2017).
10.5	Promissory Note, dated February 2, 2017 between the Company and Precipio Diagnostics, LLC (incorporated by reference to Exhibit 10.2 of the Company's Form 8-K filed on February 3, 2017).
10.6	Securities Purchase Agreement, dated as of April 13, 2017 by and between the Company and the investors set forth on Schedule A attached thereto (incorporated by reference to Exhibit 10.1 of the Company's Form 8-K filed on April 17, 2017).
10.7	Form of Promissory Note, issued by the Company to certain investors, dated as of April 13, 2017 (incorporated by reference to Exhibit 10.2 to the Company's Form 8-K filed on April 17, 2017).
10.8	Form of Warrant to Purchase Common Stock, issued by the Company to certain investors, dated as of April 13, 2017 (incorporated by reference to Exhibit 10.3 of the Company's Form 8-K filed on April 17, 2017).
10.9	Precipio Diagnostics, LLC Subordinated Promissory Note, issued by Precipio to the Company, dated as of April 13, 2017 (incorporated by reference to Exhibit 10.4 of the Company's Form 8-K filed on April 17, 2017).
10.10	Subordination Agreement, dated as of April 13, 2017, by and between the Company and Webster Bank, National Association (incorporated by reference to Exhibit 10.5 of the Company's Form 8-K filed on April 17, 2017).

10.11	Side Letter to extend Maturity Date of Unsecured Convertible Promissory Note by and between the Company and MAZ Partners LP, dated as of June 21, 2017 (incorporated by reference to Exhibit 10.1 of the Company's Form 8-K filed on June 27, 2017).
10.12†	Amended and Restated 2017 Stock Option and Incentive Plan (incorporated by reference to Annex D of the Company's Definitive Proxy Statement on Schedule 14A filed on December 29, 2017).
10.13†	Form of Non-Qualified Stock Option Agreement for Non-Employee Directors (incorporated by reference to Exhibit 10.2 of the Company's Form 8-K filed on June 28, 2017).
10.14†	Form of Non-Qualified Stock Option Agreement for Company Employees (incorporated by reference to Exhibit 10.3 of the Company's Form 8-K filed on June 28, 2017).
10.15†	Form of Incentive Stock Option Agreement (incorporated by reference to Exhibit 10.4 of the Company's Form 8-K filed on June 28, 2017).
10.16	Securities Purchase Agreement with the Private Placement Purchasers (incorporated by reference to Exhibit 10.1 of the Company's Form 8-K filed on June 30, 2017).
10.17	Investors' Rights Agreement (incorporated by reference to Exhibit 10.2 of the Company's Form 8-K filed on June 30, 2017).
10.18	Exchange Agreement (incorporated by reference to Exhibit 10.3 of the Company's Form 8-K filed on June 30, 2017).
10.19	New Bridge Securities Purchase Agreement (incorporated by reference to Exhibit 10.4 of the Company's Form 8-K filed on June 30, 2017).
10.20	Form of New Bridge Promissory Note (incorporated by reference to Exhibit 10.5 of the Company's Form 8-K filed on June 30, 2017).
10.21	Form of New Bridge Warrant (incorporated by reference to Exhibit 10.6 of the Company's Form 8-K filed on June 30, 2017).
10.22	Form of Side Warrant (incorporated by reference to Exhibit 10.7 of the Company's Form 8-K filed on June 30, 2017).
10.23#	Amended and Restated Pathology Services Agreement, dated March 21, 2017, by and between the Company and Yale University (incorporated by reference to Exhibit 10.1 of the Company's Form 8-K/A filed on July 31, 2017).
10.24	Lease, dated July 11, 2017, by and between the Company and Science Park Development Corporation (incorporated by reference to Exhibit 10.2 of the Company's Form 8K/A filed on July 31, 2017).
10.25	Underwriting Agreement, dated August 22, 2017, by and among the Company and the underwriters party thereto (incorporated by reference to Exhibit 1.1 of the Company's Form 8-K filed on August 23, 2017).
10.26	Placement Agency Agreement, dated as of November 2, 2017, by and between Precipio, Inc. and Aegis Capital Corp. (incorporated by reference to Exhibit 10.1 of the Company's Form 8-K filed on November 3, 2017). '
10.27	Debt Settlement Agreement, dated October 31, 2017, by and among Precipio, Inc., the Creditors and Collateral Services, LLC (incorporated by reference to Exhibit 10.1 of the Company's Form 8-K filed on November 6, 2017).
10.28	Security Agreement, dated October 31, 2017, by and between Precipio, Inc. and Collateral Services LLC, in its capacity as collateral agent for the Vendors (as defined therein) (incorporated by reference to Exhibit 10.2 of the Company's Form 8-K filed on November 6, 2017).
10.29	Amendment, dated November 9, 2017, to Placement Agency Agreement, dated November 2, 2017, by and between Precipio, Inc. and Aegis Capital Corp. (incorporated by reference to

	Exhibit 10.1 of the Company's Form 8-K filed on November 13, 2017).
21.1*	Subsidiaries of the Company.
23.1**	Consent of Marcum LLP.

*	Furnished herewith.
**	Filed herewith.
***	To be filed by amendment.

† Confidential treatment has been granted for portions of this Exhibit pursuant to Rule 24b-2 promulgated under the Securities Exchange Act of 1934, as amended.

#Represents management contract or compensation plan, contract, or agreement.