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The information in this preliminary prospectus supplement is not complete and may be changed. This preliminary prospectus supplement and the accompanying prospectus are part of an effective registration statement filed with the Securities and Exchange Commission under the Securities Act of 1933. This preliminary prospectus supplement and the accompanying prospectus are not an offer to sell these securities, nor are they soliciting offers to buy these securities in any jurisdiction where the offer or sale is not permitted.

Filed pursuant to Rule 424(b)(5) Registration No. 333-207263

Subject to completion, dated February 2, 2017

PRELIMINARY PROSPECTUS SUPPLEMENT (To Prospectus dated October 9, 2015)



### **Shares of Common Stock**

We are offering shares of our common stock at a price of \$ per share in a firm commitment underwritten public offering.

The aggregate market value of our outstanding shares of common stock held by non-affiliates was \$42,589,233 based on 3,661,252 shares of common stock outstanding as of February 2, 2017, of which 3,154,758 shares are held by non-affiliates, and a per share price of \$13.50 based on the closing sale price of our common stock on December 9, 2016. During the prior 12 calendar month period that ends on, and includes, the date of this prospectus supplement, and including this offering, we have offered securities with an aggregate market value of approximately \$ pursuant to General Instruction I.B.6 of Form S-3. Pursuant to General Instruction I.B.6 of Form S-3, in no event will we sell securities registered on this registration statement in a public primary offering with a value exceeding more than one-third of our public float in any 12-month period so long as our public float remains below \$75.0 million.

Our common stock is listed on The Nasdaq Capital Market under the symbol "IDXG." On February 2, 2017, the last reported sale price of our common stock on The Nasdaq Capital Market was \$4.32 per share.

On December 28, 2016, we effected a one-for-ten reverse split of our issued and outstanding shares of common stock. All warrant, option, share and per share information in this prospectus supplement gives retroactive effect to the one-for-ten reverse split.

Investing in our securities involves a high degree of risk. You should review carefully the risks and uncertainties described under the heading "Risk Factors" on page S-9 of this prospectus supplement, page 2 of the accompanying prospectus and under similar headings in the other documents that are incorporated by reference in this prospectus supplement and the accompanying prospectus.

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.

	Per Share	Total
Public Offering Price	\$	\$
Underwriting discounts and commissions <sup>(1)</sup>	\$	\$
Proceeds to us before expenses	\$	\$

(1) We have agreed to pay the underwriters a cash fee equal to 8% of the gross proceeds in this offering and to reimburse the underwriters for certain expenses incurred by them in an amount not to exceed \$45,000. For additional information on the underwriters' fees and expense reimbursement, see *"Underwriting"* in this prospectus supplement.

The underwriters expect to deliver the shares of common stock against payment on , 2017. We have granted the underwriters the option for a period of 45 days to sell up to an additional shares of common stock at the public offering price, less underwriting discounts and commissions, to cover overallotments, if any; provided, that in no event may the aggregate market value of securities sold in the offering, including from the over-allotment option, exceed the limitations set forth in General Instruction I.B.6. of Form S-3.

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

**Maxim Group LLC** 

Prospectus Supplement dated February , 2017.

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# PROSPECTUS

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## ABOUT THIS PROSPECTUS SUPPLEMENT

This prospectus supplement and the accompanying prospectus are part of a "shelf" registration statement on Form S-3 (File No. 333-207263) that we initially filed with the Securities and Exchange Commission, or the SEC, on October 2, 2015, and that was declared effective by the SEC on October 9, 2015. This document consists of two parts. The first part is this prospectus supplement, which describes the terms of this offering of our securities and adds to and updates the information contained in the accompanying prospectus. The second part, the accompanying prospectus, provides more general information, some of which may not apply to this offering. Generally, when we refer to this prospectus, we are referring to both parts of this document combined. To the extent there is a conflict between the information contained in this prospectus supplement and the information contained in the accompanying prospectus, you should rely on the information in this prospectus supplement.

This prospectus supplement and the accompanying prospectus relate to the offering of our securities. Before buying any of our securities offered hereby, we urge you to read carefully this prospectus supplement and the accompanying prospectus, together with the information incorporated herein by reference as described below under the heading "*Incorporation of Certain Information by Reference*." This prospectus supplement contains information about our securities offered hereby and may add to, update or change information in the accompanying prospectus.

You should rely only on the information contained in, or incorporated by reference into, this prospectus supplement and the accompanying prospectus. We have not authorized anyone to provide you with different or additional information.

We are not making offers to sell or solicitations to buy our securities in any jurisdiction in which an offer or solicitation is not authorized or in which the person making that offer or solicitation is not qualified to do so or to anyone to whom it is unlawful to make an offer or solicitation. You should assume that the information in this prospectus supplement and the accompanying prospectus is accurate only as of the date on the front of the respective document and that any information that we have incorporated by reference is accurate only as of the date of the document incorporated by reference, regardless of the time of delivery of this prospectus supplement or the accompanying prospectus or the time of any sale of a security.

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

We further note that the representations, warranties and covenants made by us in any agreement that is filed as an exhibit to any document that is incorporated by reference herein were made solely for the benefit of the parties to such agreement, including, in some cases, for the purpose of allocating risk among the parties to such agreements, and should not be deemed to be a representation, warranty or covenant to you. Moreover, such representations, warranties or covenants were accurate only as of the date when made. Accordingly, such representations, warranties and covenants should not be relied on as accurately representing the current state of our affairs.

Except as otherwise indicated herein or as the context otherwise requires, references in this prospectus to "Interpace Diagnostics Group, Inc.," "the Company," "we," "us," "our" and similar references refer to Interpace Diagnostics Group, Inc. and our subsidiaries.

### INDUSTRY DATA

This prospectus supplement and the accompanying prospectus contain and incorporate by reference market data and industry statistics and forecasts that are based on our own internal estimates as well as independent industry publications and other publicly-available information. Although we believe these sources are reliable, we do not guarantee the accuracy or completeness of this information and we have not independently verified this information. Although we are not aware of any misstatements regarding the market and industry data presented in this prospectus supplement, accompanying prospectus or the documents incorporated herein by reference, these estimates involve risks and uncertainties and are subject to change based on various factors, including those discussed under the headings "*Risk Factors*" in this prospectus supplement and the accompanying prospectus, and under similar headings in the other documents that are incorporated herein by reference. Accordingly, investors should not place undue reliance on this information.

### TRADEMARKS

We have secured trademark registrations for the marks ThyGenX®, ThyraMIR®, PancraGEN® PATHFINDERTG® and Mirinform® in the United States, and Mirinform® with the World Intellectual Property Organization. This prospectus contains references to our trademarks. Solely for convenience, trademarks and trade names referred to in this prospectus, including logos, artwork and other visual displays, may appear without the ® or ™ symbols, but such references, or the lack thereof, are not intended to indicate, in any way, that we will not assert, to the fullest extent under applicable law, our rights or the rights of the applicable licensor to these trademarks and trade names. We do not intend our use or display of other companies' trade names or trademarks to imply a relationship with, or endorsement or sponsorship of us by, any other companies.

### SUMMARY OF PROSPECTUS SUPPLEMENT

This summary highlights selected information about us and this offering and does not contain all of the information that you should consider in making your investment decision. You should carefully read this entire prospectus supplement and the accompanying prospectus, including the risks and uncertainties discussed under the heading "Risk Factors" beginning on page S-9 of this prospectus supplement, page 2 of the accompanying prospectus and the information incorporated by reference herein and therein, including our financial statements, before making an investment decision. If you invest in our securities, you are assuming a high degree of risk.

All warrant, option, share and per share information in this prospectus supplement gives retroactive effect to a one-for-ten reverse stock split that we effected on December 28, 2016.

#### **Company Overview**

We are focused on developing and commercializing molecular diagnostic tests principally focused on early detection of high potential progressors to cancer and leveraging the latest technology and personalized medicine for patient diagnosis and management. We currently have three commercialized molecular diagnostic tests: PancraGEN<sup>®</sup>, a pancreatic cyst molecular test that can aid in pancreatic cyst diagnosis and pancreatic cancer risk assessment utilizing our proprietary PathFinder platform; ThyGenX<sup>®</sup>, which assesses thyroid nodules for risk of malignancy; and ThyraMIR<sup>®</sup>, which assesses thyroid nodules for risk of malignancy; and ThyraMIR<sup>®</sup>, which assesses thyroid nodules for risk of malignancy utilizing a proprietary gene expression assay. We also have on the market, in a limited manner, an assay utilizing our PathFinder platform, for Barrett's Esophagus, an esophageal cancer risk classifier. Additionally, we have in development and are launching an assay for biliary cancer.

Our mission is to provide personalized medicine through molecular diagnostics and innovation to advance patient care based on rigorous science. We are leveraging our Clinical Laboratory Improvement Amendments, or CLIA, certified laboratories to develop and commercialize our assays and products. We aim to provide physicians and patients with diagnostic options for detecting genetic and other molecular mutations that are associated with gastrointestinal and endocrine cancers. Our customers consist primarily of physicians, hospitals and clinics.

With the completion of the sale of substantially all of our Commercial Services, or CSO, business in December 2015 and wind down of related activities through September 2016, we are now concentrating our efforts principally on our molecular diagnostics business by offering solutions for determining the presence of certain cancers to clinicians and their patients as well as providing prognostic pre-cancerous information, which we believe to be an expanding market opportunity. The global molecular diagnostics market is estimated to be \$6.45 billion and is a segment within the approximately \$60.22 billion in vitro diagnostics market. We believe that the molecular diagnostics market offers significant growth and strong patient value given the substantial opportunity it affords to lower healthcare costs by helping to reduce unnecessary surgeries and avoiding too frequent monitoring. We are keenly focused on growing our test volumes, securing additional reimbursement, supporting our current reimbursement and supporting revenue growth for our three commercialized innovative tests as well as expanding our business by developing and promoting synergistic products in our market.

In March 2016, we announced that we implemented a broad-based program to maximize efficiencies and cut costs as we focus on improving cash flows and profitability while completing our transition to a standalone molecular diagnostics business. In addition to reducing headcount, we have realigned our compensation structure, consolidated positions, eliminated programs and development plans that did not have near term benefits, and streamlined and right-sized operating systems while reducing overhead. This was done while supporting the transition of our CSO business to the buyer of that business and continuing to shut down less profitable CSO contracts that were not part of the sale of that business.

In August 2016, we announced that the New York State Department of Health has reviewed and approved ThyraMIR<sup>®</sup>, the Company's micro RNA gene-expression based test, for marketing in New York State. New York State accounts for approximately 5% of the 600,000 Thyroid Fine Needle Aspirate, or FNA, biopsies performed in the U.S. annually according to Thyroid Disease Manager. New York was the final state for which we had been awaiting approval.

In October 2016, we announced that the New York State Department of Health has reviewed and approved for marketing ThyGenX<sup>®</sup>, the Company's NextGen Sequencing oncogene panel for indeterminate thyroid nodules. The New York State approval of ThyGenX<sup>®</sup>, which determines whether or not specific biomarkers are present, enables us to market both ThyGenX<sup>®</sup> and ThyraMIR<sup>®</sup> together in the state. ThyGenX<sup>®</sup> typically precedes the running of ThyraMIR<sup>®</sup>, and they typically go hand in hand with 82% of ThyGenX<sup>®</sup> cases warranting reflex to a more sophisticated, micro RNA assessment via ThyraMIR<sup>®</sup>. Of the several states that require special licensure to provide testing to patients who reside in their jurisdiction, New York was the final state to issue approval.

Also, in October 2016, we announced completion and the validation and launch of two new thyroid services, further expanding our comprehensive support of physicians and health care institutions servicing thyroid patients. Our new cytopathology service is designed to assist physicians and clinics that prefer to have the initial FNA biopsy assessed by an independent third party versus having it performed on site.

We have been successfully expanding the reimbursement of our products in 2016:

- In December 2016, we announced that Aetna, the third largest health plan in the United States, agreed to cover our ThyraMIR® test, the first micro RNA classifier made available for improving the diagnosis of indeterminate thyroid nodules, for all of Aetna's approximately 46 million members nationwide, with coverage effective immediately. Our ThyGenX® and ThyraMIR® thyroid assays are now covered for approximately 200 million patients nationwide, including through medicare, national and regional health plans.
- In April 2016, we announced reimbursement approval by a major national managed care organization to cover ThyraMIR®,. Coverage by this national plan was previously approved for ThyGenX®, our Next Gen oncogene panel used to assist physicians in distinguishing between benign and malignant thyroid nodules.
- In April 2016, we also announced that we received coverage for all of our products by Galaxy Health Network, a national managed care provider with over 3.5 million covered lives. Galaxy Health Network's Preferred Provider Organization includes a network of over 400,000 contracted physicians, 2,700 hospitals and 47,000 ancillary providers.
- In April 2016, we announced new coding by Novitas Solutions, Inc., or Novitas Solutions, for PancraGEN®. Novitas Solutions has assigned a new molecular CPT code (Current Procedural Terminology) to its PancraGEN® test for pancreatic cysts. Prior to this coding change, the test was covered under a miscellaneous chemistry code, which is used for billing a wide range of tests across the laboratory industry and does not effectively differentiate between technologies that have significantly different features and offer unique benefits to patients with specific diseases.
- In February 2016, we announced that we received Medicare approval for coverage of ThyraMIR®. As a result, the ThyraMIR® test is now accessible to more than 50 million Medicare covered patients nationwide effective December 14, 2015. ThyGenX® is already covered by Medicare. Therefore, the addition of coverage for ThyraMIR® provides Medicare covered patients the benefits of the ThyGenX®/ThyraMIR® combination test.
- In January 2016, we announced that our Medicare administrative carrier, Novitas Solutions, issued a new local coverage determination (LCD) for PancraGEN®. The LCD provides the specific circumstances under which PancraGEN® is covered. The new policy is non-conditional and may improve the efficiency of the testing process for doctors and patients. The LCD covers approximately 55 million patients, bringing the total patients covered for PancraGEN® to nearly 68 million.

You can get more information regarding our business and industry by reading our most recent Annual Report on Form 10-K and the other reports we file with the SEC. See "Where You Can Find More Information" and "Incorporation of Certain Information by Reference."

### **Recent Developments**

### Agreement with Best Med Opinion Ltd

On January 20, 2017, we announced that we had entered into an agreement with Best Med Opinion Ltd, or Best Med, of Tel Aviv, Israel, a provider of second opinion and clinical services for physicians and patients in Israel and several other countries. As part of the agreement, which is to be effective February 1, 2017, Best Med will provide physicians and patients with information regarding our ThyGenX®, ThyraMIR®, and PancraGEN® tests, and when these tests are selected to support and inform treatment decisions, Best Med will manage the logistics associated with collecting and shipping samples to our CLIA certified laboratories and report results back to the ordering physician. The agreement designates Best Med as the exclusive provider of our products for the country of Israel, and under the agreement, providers in Israel will be able to order all of our marketed molecular diagnostic products. The agreement is part of our international expansion efforts to leverage the opportunities for our products outside the U.S. market.

### Settlement Agreement with Former Senior Executives

Effective January 17, 2017, Frank Arena, Jennifer Leonard, Nancy Lurker, Graham G. Miao and Gerald R. Melillo, Jr., all former senior executives of ours, each agreed to accept a payment of 35% of the total severance obligations due to each of them pursuant to their respective separation agreements with us, or an aggregate of approximately \$1.028 million, in satisfaction in full and settlement of an aggregate of approximately \$2.9 million in severance payments. Their agreement is conditioned upon their receipt from us of such payments by March 1, 2017. Our obligation to make such payments is conditioned upon us consummating a sufficiently large financing (with gross proceeds of approximately \$4.0 million) and the prior agreement of our investment banker and investors in such financing for the use of a portion of such proceeds for such payments. Our registered direct offering completed on January 25, 2017 satisfied such conditions. Each of the former senior executives agreed to enter into releases with us at the time of receipt of such payments, and in consideration therefor, releasing us and our directors, officers and agents from any and all claims, losses and damages they have or ever had against us and our directors, officers and agents. We are using approximately \$1.028 million of the net proceeds from such registered direct offering to satisfy the obligations due to the five former senior executives once releases of the Company and our directors, officers and agents are executed by all five former senior executives, which we expect to be completed shortly. See "*Registered Direct Public Offerings*" for additional information.

### Blue Cross Blue Shield Agreement

On January 3, 2017, we announced that we had entered into an agreement with the Blue Cross Blue Shield (BCBS) Association's Center for Clinical Effectiveness "Evidence Street", a program that provides us with the opportunity to provide available evidence for our molecular Thyroid and Pancreas tests, to support further coverage determinations among Blue Cross Blue Shield and other health plans.

### Registered Direct Public Offerings

On December 22, 2016, we completed a registered direct public offering with a single institutional investor, or the Registered Direct Offering, to sell 200,000 shares of our common stock at a price of \$5.30 per share and prefunded warrants to purchase 160,000 shares of our common stock at a price of \$5.20 per warrant, with each warrant having an exercise price of \$0.10 per share. The warrants were immediately exercised. The Registered Direct Offering resulted in gross proceeds to us of approximately \$1.9 million. We used approximately \$1.3 million to make the first quarterly payment of principal under that certain Non-Negotiable Subordinated Secured Promissory Note, dated as of October 31, 2014, as amended, or the Note, by us and our subsidiary, Interpace Diagnostics, LLC, or Interpace LLC, in favor of RedPath Equityholder Representative, LLC, or the RedPath Equityholder Representative, on behalf of the former equityholders of RedPath Integrated Pathology, Inc, or RedPath. See "*Fifth Amendment to RedPath Note*" for a more detailed description of the Note.

On January 6, 2017, we completed a registered direct public offering, or the Second Registered Direct Offering, to sell 630,000 shares of our common stock at a price of \$6.81 per share to certain institutional investors. The Second Registered Direct Offering resulted in gross proceeds to us of approximately \$4.2 million. We are using the net proceeds from the Second Registered Direct Offering for working capital, repayment of indebtedness and general corporate purposes. In addition, we granted each institutional investor who participated in the Second Registered Direct Offering by us of equity securities, subject to certain exceptions, up to such investor's pro rata portion of 50% of the securities being offered, or the Participation Right. Some or all of the investors who participate in this offering may participate in this offering, although it is possible that none of them will participate in this offering.

On January 25, 2017, we completed a registered direct public offering, or the Third Registered Direct Offering, to sell 855,000 shares of our common stock and a concurrent private placement, or the Private Placement, to sell warrants to purchase 855,000 shares of our common stock, or the Warrants, to the same investors participating in the Third Registered Direct Offering. The Warrants and the shares of our common stock issuable upon the exercise of the Warrants were not registered under the Securities Act of 1933, as amended, or the Securities Act, and were sold pursuant to the exemption provided in Section 4(a)(2) under the Securities Act and Rule 506(b) promulgated thereunder. The shares of common stock sold in the Third Registered Direct Offering and the Warrants issued in the concurrent Private Placement were issued separately but sold together at a combined purchase price of \$4.69 per share of common stock and accompanying Warrant. The Third Registered Direct Offering for working capital, repayment of indebtedness and general corporate purposes, including approximately \$1.028 million to satisfy the obligations due to the five former senior executives once releases of the Company and our directors, officers and agents are executed by all five former senior executives, which we expect to be completed shortly. See "*Settlement Agreement with Former Senior Executives*" for additional information.

## Fifth Amendment to RedPath Note

On November 16, 2016, we, Interpace LLC, and the RedPath Equityholder Representative entered into a Fifth Amendment To Non-Negotiable Subordinated Secured Promissory Note, or the Fifth Amendment, to extend until December 31, 2016, subject to the terms of the Fifth Amendment, the due date for the first quarterly payment of principal under the Note. As described below, we made the first quarterly payment of principal under the Note on December 29, 2016.

The Note, which was entered into in connection with our acquisition of RedPath on October 31, 2014, is for the principal amount of \$10.67 million, is interest-free and, prior to the Fifth Amendment, was to be paid in eight equal consecutive quarterly installments beginning November 1, 2016. Effective October 31, 2016, the due date for the first quarterly installment was extended to November 20, 2016 pursuant to a Fourth Amendment To Non-Negotiable Subordinated Secured Promissory Note. The interest rate will be 5.0% in the event of a default under the Note, which include the failure to make any payment of principal due under the Note within ten business days after the date such payment is due (subject to certain exceptions), the making of an assignment for the benefit of creditors generally and suffering proceedings under any law related to bankruptcy, insolvency, liquidation and such proceeding is not dismissed or stayed within 60 days. Our obligations under the Note are guaranteed by the Company and our subsidiaries pursuant to a Guarantee and Collateral Agreement pursuant to which the Company and our subsidiaries also granted a security interest in substantially all of our respective assets, including intellectual property, to secure our obligations to the RedPath Equityholder Representative.

Pursuant to the Fifth Amendment, we are required to make eight installment payments of principal, with each payment equal to \$1,333,750, together with accrued and unpaid interest, if any. The first payment was due on December 31, 2016 and was paid on December 29, 2016 using a portion of the proceeds received from the Registered Direct Offering. Subsequent payments are to be made on the first day of each fiscal quarter, beginning on April 1, 2017. If not paid sooner, all principal and accrued interest will be due and payable on October 1, 2018. Following this offering, we may have the funds to make the April 1, 2017 and July 1, 2017 payments, but we are uncertain of our ability to make any subsequent payments. In the event we do not raise sufficient equity or debt capital or restructure or amend the Note and we are unable to make any future payments when due, the RedPath Equityholder Representative may determine to begin foreclosure proceedings, bankruptcy proceedings or similar proceedings or pursue other remedies available to it.

The Fifth Amendment also amends the Note to add as an event of default our failure to maintain a minimum net cash balance from operations of no less than \$400,000, excluding proceeds from borrowed money, at the end of every week. The Fifth Amendment also contains a reporting requirement for us to provide to the RedPath Equityholder Representative, on a weekly basis, a 13-week cash flow forecast commencing November 22, 2016.

### Reverse Stock Split; NASDAQ Non-Compliance and Threat of Delisting

On December 28, 2016, we effected a one-for-ten reverse split of our issued and outstanding shares of our common stock in order to achieve the requisite increase in the market price of our common stock to be in compliance with the NASDAQ minimum bid price requirement. At the effective time of the reverse split, every 10 shares of common stock issued and outstanding were automatically combined into one share of issued and outstanding common stock, without any change in the par value per share. Our common stock began trading on The Nasdaq Capital Market on a reverse stock split-adjusted basis on December 29, 2016. There was no change in our ticker symbol, "IDXG," as a result of the reverse stock split.

On January 13, 2017, we were notified by NASDAQ that we had regained compliance with the minimum bid price requirement. The letter from NASDAQ noted that for the last 10 days from December 29, 2016 to January 12, 2017, the closing bid price of our common stock had been at \$1.00 or greater. Accordingly, NASDAQ informed us that we had regained compliance with the minimum bid price requirement, as set forth in NASDAQ Listing Rule 5550(a)(2), and that the matter was closed. We cannot assure you that the market price of our common stock will remain at the level required for continuing compliance with that requirement.

As previously disclosed in our Current Report on Form 8-K filed on November 29, 2016, we are non-compliant with the NASDAQ stockholders' equity requirement of \$2.5 million, as set forth in NASDAQ Listing Rule 5550(b)(1). We were given until January 9, 2017 to submit a compliance plan for the NASDAQ staff's consideration, and we timely submitted our compliance plan on such date. The NASDAQ staff reviewed and considered our compliance plan, and on February 1, 2017, the NASDAQ staff notified us that we were granted an extension until May 22, 2017 to evidence compliance with the stockholders' equity requirement. Pursuant to the terms of the extension, by May 22, 2017, we must choose one of two alternatives to evidence compliance with the stockholders' equity Report on Form 10-Q for the period ended June 30, 2017, we may at that time receive a delisting notice. Upon the receipt of such delisting notice, we would have the right to request a hearing before an independent NASDAQ Listing Qualifications Panel, or the Panel, which would result in an automatic stay of any suspension or delisting action pending the issuance of the Panel decision following the hearing and the expiration of any additional extension granted by the Panel. In the event that we do request a hearing, there can be no assurance that we would be successful in maintaining our listing on The Nasdaq Capital Market.

As previously disclosed in our Current Report on Form 8-K filed on October 4, 2016, Heinrich Dreismann, Ph.D., resigned as a member of our Board effective as of September 30, 2016. In connection with Dr. Dreismann's resignation and to comply with NASDAQ Listing Rule 5605(c)(4)(B), on October 5, 2016, we notified NASDAQ that, as a result of the vacancy on the Audit Committee of our Board, or the Audit Committee, created by Dr. Dreismann's resignation, the Audit Committee only has two members, and we are not in compliance with NASDAQ Listing Rule 5605(c)(2)(A), which requires the Audit Committee be comprised of at least three members. In response to our notice, NASDAQ issued a letter to us on October 6, 2016 acknowledging our notice of non-compliance with the audit committee requirements set forth in NASDAQ Listing Rule 5605(c)(2)(A). In its letter, NASDAQ notified us that we can rely on the cure period provided by NASDAQ Listing Rule 5605(c)(4), which allows us until the earlier of (i) our next annual meeting of stockholders or (ii) October 2, 2017 to regain compliance, or, if the next annual meeting of stockholders is held before March 29, 2017, then we must evidence compliance no later than March 29, 2017. We intend to appoint an additional independent director to our Board and to the Audit Committee prior to the end of the cure period.

## Certain Defaults of Current Obligations

For the nine months ended September 30, 2016, we had an operating loss of \$13.1 million. As of September 30, 2016, we had cash and cash equivalents of \$1.7 million and current liabilities of \$19.9 million. From September 30, 2016 through December 31, 2016, we provided working capital by extending our payables primarily by not making timely payments on current obligations and debt incurred prior to the sale of our CSO business, entering into payment plans, negotiating termination agreements on commitments that were not useful to our current business and not paying certain severance obligations to terminated employees. On December 22, 2016, we completed the Registered Direct Offering with gross proceeds to us of \$1.9 million, of which approximately \$1.3 million was used to make the first principal payment on the Note due to the RedPath Equityholder Representative on December 31, 2016. On January 6, 2017, we completed the Second Registered Direct Offering with gross proceeds to us of approximately \$4.2 million, and on January 25, 2017, we completed the Third Registered Direct Offering with gross proceeds to us of approximately \$4.2 million. The proceeds from the registered direct offerings have improved our overall cash position. However, we remain in default of certain of our current obligations, including as set forth below:

- We received a Notice of Default dated December 12, 2016 for non-payment of November and December rent for our Parsippany, New Jersey facility, or the Parsippany Lease, which has been substantially vacant since the sale of substantially all of the CSO business in December 2015. In the notice, the landlord stated the amount of rent due, \$112,519.19, had been deducted from a security deposit of \$136,975.25. We paid the past due November 2016 rent and negotiations are underway to obtain a waiver of default and to replenish the deposit amount. The lease term for the property ends on June 30, 2017.
- Pursuant to the terms of our Credit and Security Agreement dated September 28, 2016 with SCM Specialty Finance Opportunities Fund, L.P., or the Credit Agreement, the default under the Parsippany Lease creates a cross-default under the Credit Agreement. We have not yet drawn down on the credit facility, as we are negotiating revisions to certain covenants in the Credit Agreement, and we will not be permitted to draw down under the credit facility until the default referred to above is cured.
- We have outstanding past due severance obligations in the aggregate amount of \$2.9 million due to five former senior executives in connection with their respective separation agreements. The five former senior executives have agreed to accept 35% of the total severance obligations if the payment is received by each of the severance holders in full by March 1, 2017. We are using approximately \$1.028 million of the proceeds from the Third Registered Direct Offering to satisfy the obligations due to the five former senior executives once releases of the Company and our directors, officers and agents are executed by all five former senior executives, which we expect to be completed shortly. See "Settlement Agreement with Former Senior Executives" for more information.
- In September 2016, we stopped making payments pursuant to certain payment plans we had entered into with certain vendors for outstanding claims with an aggregate amount of \$1.8 million, and as of January 20, 2017, we had outstanding royalty payments due to third parties totaling approximately \$708,655.
- We have approximately \$226,000 of outstanding state tax liabilities known to be claimed due by the taxing authority of various state jurisdictions.

### **Corporate Information**

We were originally incorporated in New Jersey in 1986 and began commercial operations in 1987. In connection with our initial public offering, we re-incorporated in Delaware in 1998. We currently operate under one operating segment, which is our molecular diagnostic business. We conduct our business through our wholly-owned subsidiaries, Interpace LLC, which was formed in Delaware in 2013, and Interpace Diagnostics Corporation (formerly known as RedPath Integrated Pathology, Inc.), which was formed in Delaware in 2007. Our executive offices are located at Morris Corporate Center 1, Building A, 300 Interpace Parkway, Parsippany, New Jersey 07054. Our telephone number is (855) 776-6419.

	THE OF	FERING
Common stock offered by us		shares
Public offering price	\$	per share
Common stock to be outstanding immediately after this offering		shares
Over-allotment option	after th total nu offering provide in the c	we granted to the underwriters an option, exercisable within 45 days the closing of this offering, to purchase up to an additional 15% of the umber of shares of common stock to be offered by us pursuant to this g, solely for the purpose of covering over-allotments, if any; ed, that in no event may the aggregate market value of securities sold offering, including from the over-allotment option, exceed the tions set forth in General Instruction I.B.6. of Form S-3.
Use of Proceeds	repaym purpose proceee	end to use the net proceeds from this offering for working capital, nent of indebtedness and other liabilities and general corporate es. <sup>(1)</sup> For a more complete description of our anticipated use of ds from this offering, see " <i>Use of Proceeds</i> " on page S-20 of this ctus supplement.
Risk Factors	informa on page prospec ended l for the heading as well	estment in our common stock involves a high degree of risk. See the ation contained in or incorporated by reference under " <i>Risk Factors</i> " e S-9 of this prospectus supplement, page 2 of the accompanying ctus, page 17 of our Annual Report on Form 10-K for the fiscal year December 31, 2015, page 36 of our Quarterly Report on Form 10-Q quarterly period ended September 30, 2016 and under similar gs in the other documents that are incorporated by reference herein, as the other information included in or incorporated by reference in ospectus supplement and the accompanying prospectus.
Reverse Stock Split:	issued and per	cember 28, 2016, we effected a one-for-ten reverse split on our and outstanding shares of common stock. All warrant, option, share r share information in this prospectus gives retroactive effect to the r-ten reverse stock split.
The Nasdaq Capital Market symbol		mmon stock is quoted and traded on The Nasdaq Capital Market he symbol "IDXG."

(1) Pursuant to our Employment Agreement with Jack Stover, our President and Chief Executive Officer, dated October 30, 2016, Mr. Stover is entitled to receive a bonus equal to 3% of the net proceeds received by us in the offering, or approximately \$\$\\$.

The number of shares of our common stock to be outstanding immediately after this offering is based on 1,816,252 shares of common stock outstanding as of September 30, 2016, plus 360,000 shares of common stock issued in the Registered Direct Offering or issued upon exercise of prefunded warrants thereafter, 630,000 shares of common stock issued in the Second Registered Direct Offering, and 855,000 shares of common stock issued in the Third Registered Direct Offering. Unless specifically stated otherwise, the information in this prospectus supplement is as of September 30, 2016, gives effect to a one-for-ten reverse stock split of our common stock effected on December 28, 2016, includes 360,000 shares of common stock issued in the Registered Direct Offering or issued upon exercise of prefunded warrants thereafter, 630,000 shares of common stock issued in the Second Registered Direct Offering, and 855,000 shares of common stock issued in the Third Registered Direct Offering and excludes:

- 115,138 shares of common stock issuable upon the settlement of restricted stock units, or RSUs, issued to our employees and directors;
- 102,680 shares of common stock issuable upon settlement of stock appreciate rights, or SARs, issued to certain executive officers and members of senior management, at a weighted average exercise price of \$46.71 per share, of which 102,680 shares of common stock are vested and exercisable;
- 219,491 shares of common stock reserved for future issuance under our Amended and Restated 2004 Stock Award and Incentive Plan; and
- 855,000 shares of common stock issuable upon exercise of the Warrants issued in the Private Placement that was

completed concurrently with the Third Registered Direct Offering. See "Registered Direct Public Offerings."

Except as otherwise indicated herein, all information in this prospectus supplement assumes the underwriters do not exercise the over-allotment option.

### SUMMARY FINANCIAL DATA

On December 28, 2016, we effected a one-for-ten reverse split of our issued and outstanding shares of common stock. The following table presents summary condensed consolidated statements of comprehensive loss for the periods indicated and demonstrates the impact of the reverse stock split. The information is only a summary and should be read in conjunction with "Management's Discussion and Analysis of Financial Condition and Results of Operations" included in our Annual Report on Form 10-K for the fiscal year ended December 31, 2015 and the financial information and related notes incorporated by reference in this prospectus supplement. See "*Incorporation of Certain Documents by Reference*" on page S-30 of this prospectus supplement and "*Where You Can Find Additional Information*" on page S-29 of this prospectus supplement. We have derived the summary condensed consolidated statements of comprehensive loss for the three and nine month periods ended September 30, 2016 from our unaudited condensed consolidated statements of comprehensive loss for the years ended December 31, 2015 and the summary condensed by reference in this prospectus supplement. We have derived the summary condensed consolidated statements of comprehensive loss for the three and nine month periods ended September 30, 2016 from our unaudited condensed consolidated statements of comprehensive loss for the years ended December 31, 2015 and December 31, 2014 from our audited consolidated statements of comprehensive loss that are incorporated by reference in this prospectus supplement.

# INTERPACE DIAGNOSTICS GROUP, INC. CONDENSED CONSOLIDATED STATEMENTS OF COMPREHENSIVE LOSS

(in thousands, except for per share data)

	I	e Months Ended		e Months Ended		For The Ye		2
		ember 30,	Sep	tember 30,	De	ecember 31,	D	ecember 31,
		2016 audited)	(u)	2016 naudited)		2015		2014
Revenue, net	\$	3,316	\$	9,963	\$	9,432	\$	1,474
Gross profit		1,470		5,097		2,522		206
Operating loss		(6,488)		(13,181)		(40,408)		(17,826)
Net loss		(7,493)		(14,613)		(11,356)		(16,073)
Net loss per basic and diluted share of common stock	\$	(4.13)	\$	(8.11)	\$	(7.34)	\$	(10.79)
Weighted average number of common shares and common share equivalents outstanding:								
Basic and diluted		1,816		1,803		1,548		1,490

#### **RISK FACTORS**

Investing in our common stock involves a high degree of risk. Before investing in our common stock, you should carefully consider the risks described below, together with all of the other information contained in this prospectus supplement and the accompanying prospectus and incorporated by reference herein and therein, including from our most recent Annual Report on Form 10-K and subsequent Quarterly Reports on Form 10-Q. Some of these factors relate principally to our business and the industry in which we operate. Other factors relate principally to your investment in our securities. The risks and uncertainties described therein and below are not the only risks facing us. Additional risks and uncertainties not presently known to us or that we currently deem immaterial may also materially and adversely affect our business and operations.

If any of the matters included in the following risks were to occur, our business, financial condition, results of operations, cash flows or prospects could be materially and adversely affected. In such case, you may lose all or part of your investment.

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### **RISKS RELATING TO OUR BUSINESS**

In the event that the RedPath Equityholder Representative does not grant an extension of the \$1.3 million third and fourth principal payments on its secured promissory note now due October 1, 2017 and January 1, 2018, respectively, or if we do not raise sufficient equity or debt capital or if we do not restructure or amend the Note, we may not be able to make such payments or any subsequent payments and may therefore face foreclosure and/or bankruptcy proceedings in which event stockholders will likely not be able to recover their investments in us.

In connection with our acquisition of RedPath on October 31, 2014, we entered into the Note. On September 30, 2016, the Note was amended to extend by one month, until November 1, 2016, subject to the terms of the amendment, the due date for the first quarterly payment of principal under the Note. Effective October 31, 2016, the Note was amended to extend until November 20, 2016, subject to the terms of the amendment, the due date for the first quarterly payment of principal. On November 16, 2016, the Note was further amended to, among other things, extend the due date for the first quarterly payment until December 31, 2016. On December 29, 2016, we used approximately \$1.3 million of the proceeds received from the Registered Direct Offering to pay the first quarterly installment of principal. Subsequent payments are to be made on the first day of each fiscal quarter, beginning on April 1, 2017. Following this offering, we may have the funds to make the April 1, 2017 and July 1, 2017 payments, but we are uncertain of our ability to make any subsequent payments. In the event we do not raise sufficient equity or debt capital or we are not able to restructure or amend the Note by October 1, 2017, the RedPath Equityholder Representative may determine to begin foreclosure proceedings, bankruptcy proceedings or similar proceedings or pursue other remedies available to it or we may be forced to accept a below market offer to sell the Company's assets. In the event of an asset sale, foreclosure, bankruptcy or similar proceedings, due to the amount of secured and unsecured debt outstanding, it is likely that stockholders will not be able to recoup their investment in us.

# There are substantial doubts about our ability to continue as a going concern due to our operating history of net losses, negative working capital and insufficient cash flows, and lack of liquidity to pay our current obligations and if we are unable to continue our business, our shares may have little or no value.

Our ability to become a profitable operating company is dependent upon our ability to generate revenues and/or obtain financing adequate to support our cost structure. We do not currently have enough cash on hand to meet our obligations over the next twelve months, and we cannot provide our stockholders any assurance that we will be able to raise sufficient funding from the generation of revenue, the sale of our common stock, or through financing to sustain the Company over the next twelve months.

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For the nine months ended September 30, 2016, we had an operating loss of \$13.1 million. As of September 30, 2016, we had cash and cash equivalents of \$1.7 million and current liabilities of \$19.9 million. From September 30, 2016 through December 31, 2016, we have provided working capital by extending our payables primarily by not making timely payments on current obligations and debt incurred prior to the sale of our CSO business, entering into payment plans, negotiating termination agreements on commitments that were not useful to our current business and not paying certain severance obligations to terminated employees. On December 22, 2016, we completed the Registered Direct Offering with gross proceeds to us of \$1.9 million, of which approximately \$1.3 million was used to make the first principal payment on the Note due to the RedPath Equityholder Representative on December 31, 2016. On January 6, 2017, we completed the Second Registered Direct Offering with gross proceeds to us of approximately \$4.2 million, and on January 25, 2017, we completed the Third Registered Direct Offering with gross process to us of approximately \$4 million. The proceeds from the registered direct offerings have improved our overall cash position. However, we remain in default of certain of our current obligations and certain vendors have threatened litigation against us. For example, see the section entitled "*Certain Defaults of Current Obligations*."

These factors have raised substantial doubts about our ability to continue as a going concern. We plan to attempt to raise additional equity capital by selling shares of common stock in this offering and, if necessary, through one or more private placements or additional public offerings. However, the doubts raised, relating to our ability to continue as a going concern, may make investing in our securities an unattractive investment for potential investors. These factors, among others, may make it difficult to raise any additional capital.

# Our molecular diagnostics business has limited revenue, and we expect to incur net losses for the foreseeable future and may never achieve or sustain profitability.

In 2014, we acquired RedPath and certain assets from Asuragen, Inc., or Asuragen. As a result, we now offer PancraGEN<sup>®</sup>, ThyGenX<sup>®</sup> and ThyraMIR<sup>®</sup> and to a limited extent, PathFinder TG- Barrett's esophagus. The revenue generated from our molecular diagnostics business was \$9.4 million for the fiscal year ended December 31, 2015 and \$9.9 million for the nine months ended September 30, 2016. Our molecular diagnostics business had an operating loss of approximately \$40.4 million and \$13.1 million, respectively, for the fiscal year ended December 31, 2015 and the nine months ended September 30, 2016. Although we expect the revenue generated from our molecular diagnostics business to grow in the future, there can be no assurance that we will achieve revenue sufficient to offset expenses. Over the next several years, we expect to continue to devote resources to increase adoption of, and reimbursement for, our molecular diagnostic tests and to develop and acquire additional diagnostic solutions. However, our business may never achieve or sustain profitability, and our failure to achieve and sustain profitability in the future could have a material adverse effect on our business, financial condition and results of operations.

# Our inability to finance our business on acceptable terms in the future may limit our ability to develop and commercialize new molecular diagnostic solutions and technologies and grow our business, and potentially force us to seek bankruptcy protection.

We expect capital expenditures and operating expenses to increase over the next several years as we expand our infrastructure and commercial operations. In December 2015, we sold a majority of our CSO business to Publicis Healthcare Solutions, Inc., or Publicis, pursuant to an Asset Purchase Agreement, dated as of October 30, 2015, by and between us and Publicis, or the Asset Purchase Agreement, for a total cash payment of \$28.5 million, or the Asset Sale, including an initial upfront cash payment of \$25.5 million and \$3.0 million of a working capital adjustment. We used a significant portion of the net proceeds received at the closing of the Asset Sale to pay the balance of the outstanding loan under the Credit Agreement, dated October 31, 2014, by and among us, SWK Funding LLC and the financial institutions party thereto from time to time as lenders, and related fees. As a result, we will need to finance our business through collaborations, equity offerings, debt financings, or licensing arrangements. Additional funding may not be available to us on acceptable terms, or at all. If we raise funds by issuing equity securities could result in increased fixed payment obligations and could also result in restrictive covenants, such as limitations on our ability to incur additional debt or issue additional equity, limitations on our ability to acquire or license intellectual property rights, and other operating restrictions that could adversely affect our ability to conduct our business.

There are no assurances that funding will be available when we need it on terms that we find favorable, if at all. As of September 30, 2016, we had cash and cash equivalents of \$1.7 million, net accounts receivable of \$2.8 million, current assets of \$6.7 million and current liabilities of \$19.9 million. On December 22, 2016, we completed the Registered Direct Offering with gross proceeds to us of \$1.9 million, of which approximately \$1.3 million was used to make the first principal payment on the Note due to the RedPath Equityholder Representative on December 31, 2016. On January 6, 2017, we completed the Second Registered Direct Offering with gross proceeds to us of approximately \$4.2 million, and on January 25, 2017, we completed the Third Registered Direct Offering with gross process to us of approximately \$4 million. While the proceeds from the registered direct offerings have improved, and the proceeds from this offering will further improve, our overall cash position, our ability to raise additional financing through equity offerings in the future may be more difficult and costly once we file our Annual Report on Form 10-K for the fiscal year ended December 31, 2016. At that time, we may lose our eligibility to use our registration statement on Form S-3 (File No. 333-207263) declared effective by the SEC on October 9, 2015. In addition, we granted the Participation Right to the investors who participated in the Second Registered Direct Offering. If we fail to comply with the applicable provisions of the Participation Right or do not receive waivers from such investors, we may not be able to raise funds through another equity offering. Further, our ability to raise additional financing may be dependent upon our ability to restructure our existing obligations, including \$9.3 million of obligations (currently \$8.2 million present value) to the former equityholders of RedPath. If we are unable to secure additional financing on terms acceptable to us and on a timely basis, we may have to delay, reduce the scope of or eliminate one or more molecular diagnostic tests or selling and marketing initiatives, we may have to seek stockholder

approval to downsize or wind down our operations through liquidation, bankruptcy or a sale of our assets and/or we may not be able to continue as a going concern. Specifically, in order to continue in business and reduce our obligations that we cannot manage or meet, we may be required to seek the protection of Chapter 11 bankruptcy proceedings. If we are required to seek Chapter 11 protection and we are unable to successfully negotiate sufficient reduction in obligations to meet our revenues, we may be required to file for Chapter 7 liquidation. Additionally, the former equityholders of RedPath carry a lien on virtually all of our assets to secure our obligations. Thus, Chapter 7 proceedings would likely result in limited if any distribution of remaining assets to our common stockholders. These actions would have a material adverse effect on our business, financial condition and results of operations.

# We may not be able to fund the remaining obligations of our previously sold CSO business, which could have a material adverse effect on our business and results of operations.

As a result of the Asset Sale, not all of our CSO obligations were assumed by Publicis. These obligations consist of accounts payable, costs relating to the closeout of the portion of the CSO business that principally related to the provision of services for multiple non-competing brands for different clients, or the ERT Unit, which Publicis did not acquire in the Asset Sale, and termination of various vendor contracts that had been associated with the CSO business. As such, we continue to pay some of these obligations, but may not be able to satisfy all of these remaining obligations. If we are unable to satisfy all our remaining CSO obligations, our business and results of operations could be materially and adversely affected.

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# Our profitability will be impaired by our obligations to make royalty and milestone payments to Asuragen and the former equityholders of RedPath.

In connection with our acquisition of RedPath and certain assets of Asuragen in 2014, we are obligated to make certain royalty and milestone payments. Under the Asuragen License Agreement, we owed \$500,000, all of which was paid as of January 13, 2017. We are further obligated to pay royalties on the future net sales of the miR*Inform*<sup>®</sup> pancreas platform for a period of ten years following a qualifying sale, on the future net sales of the miR*Inform*<sup>®</sup> thyroid platform through August 13, 2024 and on certain other thyroid diagnostics tests for a period of ten years following a qualifying sale. With respect to our acquisition of RedPath, the former equityholders of RedPath are entitled to an additional \$5 million cash payment upon the achievement by us of \$14.0 million or more in annual net sales of PathFinder TG for the management of Barrett's esophagus and a further \$5 million cash payment upon the achievement by us of \$37.0 million or more in annual net sales of a basket of assays of Interpace LLC and Interpace Diagnostics Corporation. In addition, we are obligated to pay revenue based payments through 2025 of 6.5% on annual net sales above \$12.0 million of PancraGEN<sup>®</sup> and 10% on annual net sales up to \$30 million of PathFinder TG- Barrett's esophagus for the management of Barrett's esophagus.

Even if we are able to successfully launch the above referenced diagnostic tests, our profitability will be impaired by our obligations to make royalty and milestone payments to Asuragen and the former equityholders of RedPath. Although we believe, under such circumstances, that the increase in revenue will exceed the corresponding royalty and milestone payments, our obligations to Asuragen and the former equityholders of RedPath could have a material adverse effect on our business, financial condition and results of operations if we are unable to manage our operating costs and expenses at profitable levels.

# We have a limited operating history as a molecular diagnostics company, which may make it difficult for you to evaluate the success of our business to date and to assess our future viability.

We were originally incorporated in New Jersey in 1986 and began commercial operations in 1987. In connection with our initial public offering, we re-incorporated in Delaware in 1998. From 1987 until the Asset Sale, our operations focused primarily on our CSO business, which was the personal promotion of pharmaceutical customers' products through outsourced sales teams. We now conduct our molecular diagnostics business through our wholly owned subsidiaries, Interpace LLC, which was formed in Delaware in 2013, and Interpace Diagnostics Corporation, which was formed in Delaware in 2007. We began our own commercial sales of our molecular diagnostic tests in late 2014. Consequently, any evaluations about our future success, performance or viability may not be as accurate as they could be if we had a longer operating history.

# Recent changes in our senior management team and the lack of shared experience among the current members of our senior management team could negatively affect our results of operations and our business may be harmed.

Effective as of December 22, 2015, Nancy Lurker resigned as our President and Chief Executive Officer and as a member of our Board. Our Board appointed Jack E. Stover, previously Chairman of our Audit Committee, as Interim President and Chief Executive Officer, and subsequently, effective June 21, 2016, Mr. Stover was appointed President and Chief Executive Officer. Additionally, in light of the departure of our previous Chief Financial Officer, James Early was appointed as Chief Financial Officer effective as of October 11, 2016. Mr. Early also serves as our principal accounting officer. From August 29, 2016 until October 11, 2016, Mr. Early was engaged by us as a consultant to perform the role of interim chief financial officer.

As a result of these changes, we may experience disruption or have difficulty in maintaining or developing our business during this transition. Further, our senior management team has limited experience working together as a group. This lack of shared experience could negatively impact our senior management team's ability to quickly and efficiently respond to problems and effectively manage our business. If our management team is not able to work together as a group, our results of operations may suffer and our business may be harmed.

# The loss of members of our senior management team or our inability to attract and retain key personnel could adversely affect our business.

As a small company with 59 full-time employees as of February 1, 2017, the success of our business depends largely on the skills, experience and performance of members of our senior management team and others in key management positions. The efforts of these persons will be critical to us as we continue to grow our molecular diagnostics business and develop and/or acquire additional molecular diagnostic tests. If we were to lose one or more of these key employees, we may experience difficulties in competing effectively, developing our technologies and implementing our business strategy. In addition, our commercial laboratory operations depend on our ability to attract and retain highly skilled scientists, including licensed clinical laboratory scientists. We may not be able to attract or retain qualified scientists and technicians in the future due to the competition for qualified personnel, and we may have to pay higher salaries to attract and retain qualified personnel. We may also be at a disadvantage in recruiting and retaining key personnel as our small size, limited resources, limited liquidity, work force reductions in late 2015 and recent changes in our senior management team may be viewed as providing a less stable environment, with fewer opportunities than would be the case at one of our larger competitors. If we are not able to attract and retain the necessary personnel to accomplish our business objectives, we may experience constraints that could adversely affect our ability to support our clinical laboratory and commercialization.

### **RISKS RELATING TO OUR INTELLECTUAL PROPERTY**

# Changes in U.S. patent law could diminish the value of patents in general, thereby impairing our ability to protect our molecular diagnostic tests, and if we are unable to protect our patents effectively, our business would be harmed.

In the United States, as a result of the changing patentability laws, we currently intend to maintain our existing and future applications, where we believe maintaining those applications is commercially beneficial in our judgment, including by filing requests to continue examination (RCEs), Continuation-In-Part applications, and noticing and filing appeals until such time as the patent law becomes more favorable or better clarity is provided by the United States Patent and Trademark Office that will enable the best possible claims to proceed to allowance. Our strategy may change from time to time and there are no assurances that the United States patent law will become clearer or more favorable to our ability to enforce our current United States patents or to obtain future United States patents.

The patent law in foreign jurisdictions and how the patent law is applied in foreign jurisdictions may or may not be more favorable to us, but there are also no assurances provided regarding our ability to enforce our non-United States patents or to obtain foreign patents directed to our current and planned future products.

## **RISKS RELATING TO OUR COMMON STOCK**

# We do not meet certain of The Nasdaq Capital Market continued listing requirements and therefore, we risk delisting, which may decrease our stock price and make it harder for our stockholders to trade our stock.

Our common stock is currently listed for trading on The Nasdaq Capital Market. We do not currently meet certain NASDAQ continued listing requirements and therefore, risk delisting of our securities. Delisting would have an adverse effect on the price of our common stock and likely also on our business. Additionally, our ability to publicly or privately sell equity securities and the liquidity of our common stock could be adversely affected if our common stock was delisted from The Nasdaq Capital Market or if we are unable to transfer our listing to another U.S. national securities exchange.

NASDAQ has adopted a number of listing standards that are applicable to our common stock for continued listing on The Nasdaq Capital Market. As previously disclosed and as discussed above under the section entitled "*Summary of Prospectus Supplement*," we recently regained compliance with the minimum bid price requirement in NASDAQ Listing Rule 5550(a)(2), but we currently are not in compliance with the minimum stockholders' equity requirement in NASDAQ Listing Rule 5550(b)(1) (nor the alternatives of market value of listed securities or net income from continuing operations). We were given until January 9, 2017 to submit a compliance plan for the NASDAQ staff's consideration, and we timely submitted our compliance plan on such date. The NASDAQ staff reviewed and considered our compliance plan, and on February 1, 2017, the NASDAQ staff notified us that we were granted an extension until May 22, 2017 to evidence compliance with the stockholders' equity requirement. Pursuant to the terms of the extension, by May 22, 2017, we must choose one of two alternatives to evidence compliance with the stockholders' equity Report on Form 10-Q for the period ended June 30, 2017, we may at that time receive a delisting notice. Upon the receipt of such delisting notice, we would have the right to request a hearing before the Panel, which would result in an automatic stay of any suspension or delisting action pending the issuance of the Panel decision following the hearing and the expiration of any additional extension granted by the Panel. In the event that we do request a hearing, there can be no assurance that we would be successful in maintaining our listing on The Nasdaq Capital Market. We are conducting this offering in part as a step in our efforts to increase our stockholders' equity to regain compliance with NASDAQ Listing Rule 5550(b)(1).

Further, as discussed above under the section entitled "Summary of Prospectus Supplement," we are also currently not in compliance with the audit committee requirement in NASDAQ Listing Rule 5605(c)(2)(A), although we intend to appoint an additional independent director to our Board and to the Audit Committee prior to the end of the cure period.

Our common stock currently remains listed on The Nasdaq Capital Market under the symbol "IDXG." There can be no assurance that we will be able to regain or maintain compliance with the NASDAQ continued listing requirements, or that our common stock will not be delisted from The Nasdaq Capital Market in the future. If our common stock is delisted by NASDAQ, it could lead to a number of negative implications, including an adverse effect on the price of our common stock, increased volatility in our common stock, reduced liquidity in our common stock the loss of federal preemption of state securities laws and greater difficulty in obtaining financing. In addition, delisting of our common stock could deter broker-dealers from making a market in or otherwise seeking or generating interest in our common stock, could result in a loss of current or future coverage by certain sell-side analysts and might deter certain institutions and persons from investing in our securities at all. Delisting could also cause a loss of confidence of our customers, collaborators, vendors, suppliers and employees, which could harm our business and future prospects.

If our common stock is delisted by NASDAQ in the future, our common stock may be eligible to trade on the OTC Bulletin Board, OTC QB or another over-the-counter market. Any such alternative would likely result in it being more difficult for us to raise additional capital through the public or private sale of equity securities and for investors to dispose of, or obtain accurate quotations as to the market value of, our common stock. In addition, there can be no assurance that our common stock would be eligible for trading on any such alternative exchange or markets. For these reasons and others, delisting could adversely affect the price of our securities and our business, financial condition and results of operations.

# We have a substantial number of authorized common and preferred shares available for future issuance that could cause dilution of our stockholders' interest, adversely impact the rights of holders of our common stock and cause our stock price to decline.

We have a total of 100,000,000 shares of common stock and 5,000,000 shares of preferred stock authorized for issuance. As of September 30, 2016, we had 98,129,494 shares of common stock and 5,000,000 shares of preferred stock available for issuance. As of September 30, 2016, we have reserved 217,818 shares of our common stock for issuance upon the exercise of outstanding awards under our stock incentive plan and 219,491 additional shares available for future grants of awards under our stock incentive plan. On October 14, 2016, we issued an aggregate of 87,871 options to purchase shares of our common stock having an exercise price of \$1.60 to certain employees under our stock incentive plan, of which 21,968 options are vested and exercisable as of the date of this prospectus supplement. In connection with the registered direct offerings, we issued 360,000 shares of common stock after exercise of the prefunded warrants, 630,000 shares of common stock and 855,000 shares of common stock on December 22, 2016, January 6, 2017 and January 25, 2017, respectively. In connection with the Third Registered Direct Offering, we also issued warrants in the concurrent Private Placement to purchase up to 855,000 shares of common stock. See *"Registered Direct Public Offerings"* for additional information. We may seek financing that could result in the issuance of additional shares of our capital stock and/or rights to acquire additional shares of our capital stock. We may also make acquisitions that result in issuances of additional shares of our capital stock. Those additional issuances of capital stock could result in substantial dilution of our existing stockholders. Furthermore, the book value per share of our common stock may be reduced. This reduction would occur if the exercise price of any issued warrants, the conversion price of any convertible notes or the

conversion ratio of any issued preferred stock is lower than the book value per share of our common stock at the time of such exercise or conversion. Additionally, new investors in any subsequent issuances of our securities could gain rights, preferences and privileges senior to those of holders of common stock.

The addition of a substantial number of shares of our common stock into the market or by the registration of any of our other securities under the Securities Act may significantly and negatively affect the prevailing market price for our common stock. The future sales of shares of our common stock issuable upon the exercise of outstanding warrants and options may have a depressive effect on the market price of our common stock, as such warrants and options would be more likely to be exercised at a time when the price of our common stock is greater than the exercise price.

# Our largest stockholders continue to have significant influence, which could delay or prevent a change in corporate control that may otherwise be beneficial to our stockholders.

Prior to the Third Registered Direct Offering, John P. Dugan, our former chairman, beneficially owned approximately 17.35% of our outstanding common stock as of January 5, 2017, and Empery Asset Management, LP and Sabby Healthcare Master Fund, Ltd. each beneficially owned approximately 7.48% of our outstanding common stock based solely on the information contained in the Schedule 13G filed by each entity on January 9, 2017 and January 10, 2017, respectively. As a result, these stockholders may be able to exercise significant influence over the election of all of our directors and to determine the outcome of most corporate actions requiring stockholder approval, including a merger with or into another company, the sale of all or substantially all of our assets and amendments to our certificate of incorporation. This ownership concentration by these stockholders could delay or prevent a change in corporate control.

# Our stock price is volatile and could be further affected by events not within our control, and an investment in our common stock could suffer a decline in value.

The trading price of our common stock has been and will continue to be subject to:

- general volatility in the trading markets;
- significant fluctuations in our quarterly operating results;
- significant changes in our cash and cash equivalent reserves;
- announcements regarding our business or the business of our competitors;
- announcements regarding our equity offerings;
- strategic actions by us or our competitors, such as acquisitions or restructurings;
- industry and/or regulatory developments;
- changes in revenue mix;
- changes in revenue and revenue growth rates for us and for the industries in which we operate;
- changes in accounting standards, policies, guidance, interpretations or principles; and
- statements or changes in opinions, ratings or earnings estimates made by brokerage firms or industry analysts relating to the markets in which we operate or expect to operate.

### Our quarterly and annual revenues and operating results may vary, which may cause the price of our common stock to fluctuate.

Our quarterly and annual operating results may vary as a result of a number of factors, including:

- the commencement, delay, cancellation or completion of sales and marketing programs;
- regulatory developments;
- uncertainty about when sales of our molecular diagnostic tests will be recognized;
- timing and amount of expenses for implementing new programs and accuracy of estimates of resources required for ongoing programs;
- timing and integration of any acquisitions; and
- changes in regulations related to diagnostics, pharmaceutical, biotechnology and healthcare companies.

We believe that quarterly, and in certain instances annual, comparisons of our financial results are not necessarily meaningful and should not be relied upon as an indication of future performance. Fluctuations in quarterly and annual results could materially and adversely affect the market price of our common stock in a manner unrelated to our long-term operating performance.

# We have anti-takeover defenses that could delay or prevent an acquisition and could adversely affect the price of our common stock.

Our certificate of incorporation, as amended, and amended and restated bylaws include provisions, such as providing for three classes of directors, which may make it more difficult to remove our directors and management and may adversely affect the price of our common stock. In addition, our certificate of incorporation, as amended, authorizes the issuance of "blank check" preferred stock, which allows our Board to create one or more classes of preferred stock with rights and preferences greater than those afforded to the holders of our common stock. This provision could have the effect of delaying, deterring or preventing a future takeover or a change in control, unless the takeover or change in control is approved by our Board. We are also subject to laws that may have a similar effect. For example, Section 203 of the General Corporation Law of the State of Delaware prohibits us from engaging in a business combination with an interested stockholder for a period of three years from the date the person became an interested stockholder unless certain conditions are met. As a result of the foregoing, it will be difficult for another company to acquire us and, therefore, could limit the price that possible investors might be willing to pay in the future for shares of our common stock. In addition, the rights of our common stock holders will be subject to, and may be adversely affected by, the rights of holders of any class or series of preferred stock that may be issued in the future and in this offering.

# We have not declared any cash dividends on our capital stock and do not intend to declare or pay any cash dividends in the foreseeable future. Future earnings, if any, will be used to finance the future operation and growth of our business. As a result, capital appreciation, if any, will be your sole source of gain.

We have never paid cash dividends on our capital stock. We do not currently anticipate paying cash dividends on our common stock in the foreseeable future and we may not have sufficient funds legally available to pay dividends. Even if the funds are legally available for distribution, we may nevertheless decide not to pay any dividends. We presently intend to retain all earnings for our operations. As a result, capital appreciation, if any, of our common stock will be your sole source of gain for the foreseeable future.

## **RISKS RELATED TO THIS OFFERING**

### Our management has broad discretion as to the use of the net proceeds from this offering.

We cannot specify with certainty all of the particular uses of the net proceeds we will receive from this offering. Our management will have broad discretion in the application of the net proceeds, including for any of the purposes described in the section of this prospectus supplement entitled "*Use of Proceeds*." Accordingly, you will have to rely upon the judgment of our management with respect to the use of the proceeds. Our management may spend a portion or all of the net proceeds from this offering in ways that holders of our common stock may not desire or that may not yield a significant return or any return at all. The failure by our management to apply these funds effectively could harm our business. Pending their use, we may also invest the net proceeds from this offering in a manner that does not produce income or that loses value.

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# If you purchase the common stock sold in this offering, you will experience immediate dilution as a result of this offering and future equity issuances.

Because the price per share of our common stock being offered may be higher than the book value per share of our common stock, you may suffer immediate substantial dilution in the net tangible book value of the common stock you purchase in this offering. See the section entitled "*Dilution*" of this prospectus supplement for a more detailed discussion of the dilution you will incur if you purchase common stock in this offering.

The issuance of additional shares of our common stock in future offerings could be dilutive to stockholders if they do not invest in future offerings. Moreover, to the extent that we issue options or warrants to purchase, or securities convertible into or exchangeable for, shares of our common stock in the future and those options, warrants or other securities are exercised, converted or exchanged, stockholders may experience further dilution.

### **RISKS RELATED TO THE REVERSE STOCK SPLIT**

## We completed a reverse stock split of our issued and outstanding shares of common stock prior to the completion of this offering. However, we cannot assure you that we will be able to continue to comply with the minimum bid price requirements of The Nasdaq Capital Market.

On December 28, 2016, we effected a one-for-ten reverse split of our issued and outstanding shares of our common stock in order to achieve the requisite increase in the market price of our common stock to be in compliance with the NASDAQ minimum bid price requirement. We cannot assure you that the market price of our common stock will remain at the level required for continuing compliance with that requirement. It is not uncommon for the market price of a company's common stock to decline in the period following a reverse stock split. If the market price of our common stock declines, the percentage decline may be greater than would have occurred in the absence of a reverse stock split. In any event, other factors unrelated to the number of shares of our common stock outstanding, such as negative financial or operational results or future announcements of equity offerings, could adversely affect the market price of our common stock and jeopardize our ability to maintain the NASDAQ minimum bid price requirement. In addition to specific listing and maintenance standards, NASDAQ has broad discretionary authority over the initial and continued listing of securities, which it could exercise with respect to the listing of our common stock.

#### The reverse stock split may decrease the liquidity of the shares of our common stock.

The liquidity of the shares of our common stock may be affected adversely by the reverse stock split given the reduced number of shares that are outstanding following the reverse stock split, especially if the market price of our common stock does not increase as a result of the reverse stock split.

# Following the reverse stock split, the resulting market price of our common stock may not attract new investors, including institutional investors, and may not satisfy the investing requirements of those investors. Consequently, the trading liquidity of our common stock may not improve.

Although we believe that a higher market price of our common stock may help generate greater or broader investor interest, we cannot assure you that the reverse stock split will result in a share price that will attract new investors, including institutional investors, as some investors analysts and other stock market participants have negative perceptions of reverse stock splits. In addition, there can be no assurance that the market price of our common stock will satisfy the investing requirements of those investors. As a result, the trading liquidity of our common stock may not necessarily improve.



### SPECIAL NOTE REGARDING FORWARD-LOOKING STATEMENTS

This prospectus supplement, the accompanying prospectus and the documents incorporated by reference herein contain forward-looking statements. All statements that address operating performance, events or developments that we expect or anticipate will occur in the future are forward-looking statements. In some cases, you can identify forward-looking statements by terms such as "may," "will," "should," "could," "would," "expects," "plans," "anticipates," "believes," "estimates," "projects," "predicts," "potential" and similar expressions intended to identify forward-looking statements.

The forward-looking statements in this prospectus supplement, the accompanying prospectus and the documents incorporated by reference herein and therein include, among other things, statements about:

- our ability to profitably grow our business, including our ability to finance our business on acceptable terms and successfully compete in the market;
- our ability to obtain and maintain broad adoption of and reimbursement for our molecular diagnostic tests in a changing reimbursement environment;
- our ability to continue as a going concern due to our operating history of net losses, negative working capital and insufficient cash flows, and lack of liquidity to pay our current obligations;
- whether we are able to successfully utilize our operating experience to sell our molecular diagnostic tests;
- our limited operating history as a molecular diagnostics company;
- our dependence on a concentrated selection of payors for our molecular diagnostic tests;
- the demand for our molecular diagnostic tests from physicians and patients;
- our reliance on our internal sales forces for business expansion;
- our dependence on third parties for the supply of some of the materials used in our molecular diagnostic tests;
- our ability to scale our operations, testing capacity and processing technology;
- our ability to restructure, defer or convert into equity certain of our debt obligations and liabilities;
- our ability to meet the legacy obligations of our CSO business previously sold or to meet the acquisition indebtedness related to acquiring our molecular diagnostics businesses;
- our ability to find a buyer for all or a portion of our assets to forestall foreclosure proceedings in the event we cannot make subsequent payments due to the RedPath Equityholder Representative under the Note or the Company does not obtain further financing or restructure or amend the Note;
- our ability to negotiate acceptable agreements, including amendments with our secured and unsecured creditors, sufficient to enable us to continue operations and fund our near term operations;
- the risk of not making our quarterly installment payments due to the RedPath Equityholder Representative or not obtaining an extension and the impact on our business;
- our ability to comply with the other requirements of the secured Note to the RedPath Equityholder Representative;



- the risk of foreclosure by the secured creditors and the possible sale of our assets;
- the risk of the sale of our assets not yielding sufficient proceeds to either pay the secured creditors or unsecured creditors or provide any return to stockholders;
- the risk of filing a Chapter 7 bankruptcy proceeding after any sale of assets;
- product liability claims against us;
- our ability to gain sufficient stockholder support in order to potentially enter into any transaction that may further dilute our stockholders;
- our involvement in current and future litigation against us;
- the effect current and future laws, licensing requirements and regulation have on our business, especially the changing FDA environment as it relates to molecular diagnostics;
- our exposure to environmental liabilities as a result of our business;
- the susceptibility of our information systems to security breaches, loss of data and other disruptions;
- our billing practices and our ability to collect on claims for the sale of our molecular diagnostic tests;
- our ability to attract and retain qualified sales representatives and other key employees and management personnel;
- competition in the segment of the molecular diagnostics industry in which we operate or expect to operate;
- our ability to obtain additional funds in order to implement our business models and strategies;
- the results of any future impairment testing for other intangible assets;
- our ability to successfully identify, complete and integrate any future acquisitions and the effects of any such items on our revenues, profitability and ongoing business;
- our compliance with our license agreements and our ability to protect and defend our intellectual property rights;
- our ability to remain listed on The Nasdaq Capital Market despite our having received notices of non-compliance, including for failing to have three independent audit committee members and failing to meet the stockholders' equity requirement;
- the effect our largest stockholders may have on us;
- failure of third-party service providers to perform their obligations to us;
- our ability to comply with our line of credit covenants, if the line is utilized; and
- the volatility of our stock price and fluctuations in our quarterly and annual revenues and earnings.

Forward-looking statements are only predictions and are not guarantees of future performance. These statements are based on current expectations and assumptions involving judgments about, among other things, future economic, competitive and market conditions and future business decisions, all of which are difficult or impossible to predict accurately and many of which are beyond our control. These predictions are also affected by known and unknown risks, uncertainties and other factors that may cause our actual results to be materially different from those expressed or implied by any forward-looking statement. Many of these factors are beyond our ability to control or predict.

You should read this prospectus supplement, the accompanying prospectus and the documents that we incorporate by reference herein and therein completely and with the understanding that our actual future results may be materially different from what we expect. These forward-looking statements speak only as of the date when made. We do not undertake any obligation to publicly update or revise any forward-looking statements, whether as a result of new information, future events or otherwise, except as required by law. Before making an investment decision, you should carefully consider the risk factors discussed and incorporated by reference in this prospectus supplement and the accompanying prospectus.

# **USE OF PROCEEDS**

We estimate that the net proceeds of this offering, after deducting underwriting discounts and commissions and the other estimated offering expenses payable by us, will be approximately \$ million. We intend to use the net proceeds received from this offering for working capital, repayment of indebtedness and other liabilities and general corporate purposes.<sup>(1)</sup>

As of the date of this prospectus supplement, we cannot specify with certainty all of the particular uses of the proceeds from this offering. As a result, our management will have broad discretion in the allocation and use of the net proceeds from this offering, and investors will be relying on the judgment of our management regarding the application of the proceeds of this offering. The actual use and allocation of proceeds realized from this offering will depend upon our operating revenues and cash position and our working capital requirements and may change. We may also invest the net proceeds temporarily in a variety of capital preservation investments, including short-term, investment-grade, interest-bearing instruments and U.S. government securities, until we use them for their stated purposes.

(1) Pursuant to our Employment Agreement with Jack Stover, our President and Chief Executive Officer, dated October 30, 2016, Mr. Stover is entitled to receive a bonus equal to 3% of the net proceeds received by us in the offering, or approximately \$

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# **DIVIDEND POLICY**

We have not declared any cash dividends and do not intend to declare or pay any cash dividends in the foreseeable future. Future earnings, if any, will be used to finance the future operation and growth of our businesses.

# CAPITALIZATION

The following table sets forth our capitalization as of September 30, 2016:

- on an actual basis, adjusted to give retroactive effect to a one-for-ten reverse split of our issued and outstanding shares of common stock effected on December 28, 2016;
- on an as adjusted basis, after giving effect to the Registered Direct Offering completed on December 22, 2016, the Second Registered Direct Offering completed on January 6, 2017 and the Third Registered Direct Offering completed on January 25, 2017; and
- on an as adjusted basis to give effect to this offering, based on a public offering price of \$ per share of common stock, after deducting the estimated underwriting discounts and commissions and estimated offering expenses payable by us.

The information set forth in the following table should be read in conjunction with and is qualified in its entirety by our "Management's Discussion and Analysis of Financial Condition and Results of Operations" and consolidated financial statements and notes thereto incorporated by reference in this prospectus supplement and the accompanying prospectus. See "*The Offering*" in this prospectus supplement for information relating to the expected number of shares of our common stock to be outstanding after this offering.

	Sep	ctual as of tember 30, 2016 naudited) (In tho	Decer 2 Janu 201 Janu 2 Off	djusted for nber 22, 016, uary 6, 17 and uary 25, 2017 čerings except share	As Adjusted for this Offering data)	
Cash and cash equivalents	\$	1,693		10,965	uataj	
Total assets	+	45,964	Ť	55,236		
Long-term debt, net of debt discount		5,267		5,267		
Total liabilities		47,443		47,443		
Stockholders' equity						
Preferred stock, par value \$0.01 per share; 5,000,000 shares authorized, no						
shares issued and outstanding						
Common stock, par value \$.01 per share; 100,000,000 shares authorized;						
1,870,506 share issued and 1,816,252 outstanding, actual; 3,715,506						
issued and 3,661,252 outstanding, as adjusted; issued and outstanding, as						
adjusted to give effect to this offering		19		37		
Additional paid-in capital		126,010		136,184		
Accumulated deficit		(125,865)		(126,785)		
Accumulated other comprehensive income		-				
Treasury stock, at cost (54,254 shares)		(1,643)		(1,643)		
Total stockholders' (deficit) equity		(1,479)		7,793		
Total liabilities and stockholders' (deficit) equity	\$	45,964	\$	55,236		



## DILUTION

Purchasers of common stock in this offering will experience immediate dilution to the extent of the difference between the public offering price per share of common stock, and the net tangible book value per share of common stock immediately after this offering.

Our net tangible book value as of September 30, 2016 was approximately \$(38,699,000), or \$(21.31) per share. Net tangible book value per share is determined by dividing the net of total tangible assets less total liabilities, by the aggregate number of shares of common stock outstanding as of September 30, 2016. After giving effect to the sale by us of 360,000 shares of common stock after exercise of the prefunded warrants in the Registered Direct Offering completed on December 22, 2016, 630,000 shares of common stock in the Second Registered Direct Offering completed on January 6, 2017 and 855,000 shares of common stock in the Third Registered Direct Offering completed on January 25, 2017, our as adjusted net tangible book value as of September 30, 2016 would have been approximately \$(29,427,000), or \$(8.04) per share. This represents an immediate increase in net tangible book value of \$13.27 per share to our existing stockholders and an immediate dilution of \$(12.73) per share of common stock issued to the investors who purchased securities in the registered direct offerings. After giving effect to the sale by us of shares of common stock in this offering at a public offering price of \$ per share of common stock, and after deducting the underwriting discounts and commissions and estimated offering expenses, our as adjusted net tangible book value as of September 30, 2016 would have been approximately \$( ) million, or \$( ) per share of common stock. This represents an immediate increase in net tangible book value of \$ per share to our existing stockholders and an immediate dilution of \$( ) per share of common stock issued to the new investors purchasing securities in this offering.

The following table illustrates this per share dilution:

Public offering price per share of common stock	\$
Net tangible book value per share as of September 30, 2016	\$ (21.31)
Increase per share attributable to new investors after the December 22, 2016, January 6,	
2017 and January 25, 2017 offerings	\$ 13.27
Increase per share attributable to new investors after this offering	\$
Net tangible book value per share after this offering	\$
Dilution per share to new investors	\$

The above table is based on 1,816,252 shares of common stock outstanding as of September 30, 2016, gives effect to a one-for-ten reverse stock split of our common stock effected on December 28, 2016, includes 360,000 shares of common stock issued in the Registered Direct Offering or issued upon exercise of prefunded warrants thereafter, 630,000 shares of common stock issued in the Second Registered Direct Offering, and 855,000 shares of common stock issued in the Third Registered Direct Offering and excludes:

- 115,138 shares of common stock issuable upon the settlement of RSUs issued to our employees and directors;
- 102,680 shares of common stock issuable upon settlement of SARs issued to certain executive officers and members of senior management, at a weighted average exercise price of \$46.71 per share, of which 102,680 shares of common stock are vested and exercisable;
- 219,491 shares of common stock reserved for future issuance under our Amended and Restated 2004 Stock Award and Incentive Plan; and
- 855,000 shares of common stock issuable upon exercise of the Warrants issued in the Private Placement that was completed concurrently with the Third Registered Direct Offering. See "*Registered Direct Public Offerings*."

The information above assumes that the underwriters do not exercise their over-allotment option. If the underwriters exercise their over-allotment option in full, the as adjusted net tangible book value will increase to \$ per share, representing an immediate increase to existing stockholders of \$ per share and an immediate dilution of \$ per share to new investors.

To the extent that outstanding options or warrants, including the Warrants issued in the Private Placement, are exercised, new options are issued under our equity incentive plan, or we issue additional shares of common stock in the future, there may be further dilution to investors participating in this offering. In addition, we may choose to raise additional capital because of market conditions or strategic considerations, even if we believe that we have sufficient funds for our current or future operating plans. 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.

# UNDERWRITING

We have entered into an underwriting agreement with Maxim Group LLC acting as the sole book-running manager and sole representative for the underwriters named below. Subject to the terms and conditions of the underwriting agreement, the underwriters named below have agreed to purchase, and we have agreed to sell to them, the number of shares of common stock at the public offering price, less the underwriting discounts and commissions, as set forth on the cover page of this prospectus supplement and as indicated below:

Underwriters	Number of Shares
Maxim Group LLC	
Total	

The underwriting agreement provides that the obligations of the underwriters to pay for and accept delivery of the shares of common stock offered by this prospectus supplement are subject to the approval of certain legal matters by their counsel and to other conditions. The underwriters are obligated to take and pay for all of the shares of common stock offered by this prospectus supplement if any such shares of common stock are taken, other than those shares of common stock covered by the over-allotment option described below.

#### **Over-Allotment Option**

We have granted to the underwriters an option, exercisable not later than 45 days after the effective date of the underwriting agreement, to purchase up to additional shares of common stock at the public offering price less the underwriting discounts and commissions set forth on the cover page of this prospectus supplement. The underwriters may exercise this option only to cover over-allotments made in connection with this offering; provided, that in no event may the aggregate market value of securities sold in the offering, including from the over-allotment option, exceed the limitations set forth in General Instruction I.B.6. of Form S-3. We will be obligated, pursuant to the option, to sell these additional shares of common stock to the underwriters to the extent the option is exercised. If any additional shares of common stock are purchased, the underwriters will offer the additional shares of common stock on the same terms as those on which the other shares of common stock are being offered hereunder.

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### Commissions

We have agreed to pay the underwriters a cash fee equal to 8% of the gross proceeds raised in this offering. The representative of the underwriters, Maxim Group LLC, has advised us that the underwriters propose to offer the shares of common stock directly to the public at the public offering price set forth on the cover of this prospectus supplement. After the offering to the public, the offering price and other selling terms may be changed by the representative without changing the proceeds we will receive from the underwriters.

The following table summarizes the public offering price, underwriting commissions and proceeds before expenses to us assuming both no exercise and full exercise of the underwriters' option to purchase additional shares of common stock. The underwriting commissions are equal to the public offering price per share less the amount per share the underwriters pay us for the shares of common stock.

	Per Share	Total Without Over- Allotment	Total With Over- Allotment
Public offering price	\$	\$	\$
Underwriting discounts and commissions	\$	\$	\$
Proceeds to us before expenses	\$	\$	\$

We estimate the total expenses of this offering, including registration, filing and listing fees, printing fees and legal and accounting expenses, but excluding underwriting discounts and commissions, will be approximately \$ , all of which are payable by us.

#### Lock-Up Agreements

We and each of our officers and directors have agreed, subject to certain exceptions, not to offer, issue, sell, contract to sell, encumber, grant any option for the sale of or otherwise dispose of any shares of our common stock or other securities convertible into or exercisable or exchangeable for shares of our common stock for a period of 180 days after the date of this prospectus supplement without the prior written consent of Maxim Group LLC.

Maxim Group LLC may in its sole discretion and at any time without notice release some or all of the shares subject to lock-up agreements prior to the expiration of the lock-up period. When determining whether or not to release shares from the lock-up agreements, the representative will consider, among other factors, the security holder's reasons for requesting the release, the number of shares for which the release is being requested and market conditions at the time.

#### **Subsequent Equity Sales**

Subject to certain exceptions, until thirty (30) days following the date hereof, neither we nor any of our subsidiaries may issue, enter into any agreement to issue or announce the issuance or proposed issuance of any shares of common stock or common stock equivalents. In addition, until thirty (30) days following the date hereof, we are prohibited from effecting or entering into an agreement to effect any issuance by us or any of our subsidiaries of common stock or common stock equivalents (or a combination of units thereof) involving a variable rate transaction (as defined in the underwriting agreement).

#### **Determination of Offering Price**

There is a material disparity between the offering price of the shares of our common stock being offered under this prospectus supplement and the market price of the common stock at the date of this prospectus supplement. We believe that the market price of our common stock at the date of this prospectus supplement is not the appropriate offering price for the shares of our common stock because the market price is affected by a number of factors. The public offering price was determined by negotiation by us and Maxim Group LLC as representative of the underwriters. The principal factors considered by us and the representative in determining the public offering price included:

- the recent trading history of our common stock on the Nasdaq Capital Market, including market prices and trading volume of our common stock;
- the current market price of our common stock on the Nasdaq Capital Market;
- the recent market prices of, and demand for, publicly traded common stock of generally comparable companies;
- the information set forth or incorporated by reference in this prospectus supplement and otherwise available to the representative;
- our past and present financial performance and an assessment of our management;
- our prospects for future earnings and the present state of our products;
- the current status of commercialized molecular diagnostic tests and product developments by our competitors;
- our history and prospects, and the history and prospects of the industry in which we compete;
- the general condition of the securities markets at the time of this offering; and

• other factors deemed relevant by the representative and us.

#### Price Stabilization, Short Positions and Penalty Bids

In connection with this offering, the underwriters may engage in transactions that stabilize, maintain or otherwise affect the price of our common stock. Specifically, the underwriters may over-allot in connection with this offering by selling more shares of common stock than are set forth on the cover page of this prospectus supplement. This creates a short position in our common stock for the underwriters' own account. The short position may be either a covered short position or a naked short position. In a covered short position, the number of shares of common stock over-allotted by the underwriters is not greater than the number of shares of common stock that they may purchase in the over-allotment option. In a naked short position, the number of shares of common stock in the over-allotment option. To close out a short position, the underwriters may elect to exercise all or part of the over-allotment option. The underwriters may also elect to stabilize the price of our common stock or reduce any short position by bidding for, and purchasing, common stock in the open market.

The underwriters may also impose a penalty bid. This occurs when a particular underwriter or dealer repays selling concessions allowed to it for distributing a security in this offering because the underwriter repurchases that security in stabilizing or short covering transactions.

Finally, the underwriters may bid for, and purchase, shares of our common stock in market making transactions, including "passive" market making transactions as described below.

These activities may stabilize or maintain the market price of our common stock at a price that is higher than the price that might otherwise exist in the absence of these activities. The underwriters are not required to engage in these activities, and may discontinue any of these activities at any time without notice. These transactions may be effected on The Nasdaq Capital Market, in the over-the-counter market, or otherwise.

In connection with this offering, the underwriters and selling group members, if any, or their affiliates may engage in passive market making transactions in our common stock immediately prior to the commencement of sales in this offering, in accordance with Rule 103 of Regulation M under the Securities Exchange Act of 1934, as amended, or the Exchange Act. Rule 103 generally provides that:

- a passive market maker may not effect transactions or display bids for our common stock in excess of the highest independent bid price by persons who are not passive market makers;
- net purchases by a passive market maker on each day are generally limited to 30% of the passive market maker's average daily trading volume in our common stock during a specified two-month prior period or 200 shares of common stock, whichever is greater, and must be discontinued when that limit is reached; and
- passive market making bids must be identified as such.

#### **Other Terms**

In addition, we have agreed to reimburse the underwriters for all reasonable out-of-pocket expenses up to \$45,000, including but not limited to reasonable legal fees, incurred by the underwriters in connection with the offering. We will reimburse the underwriters for all such expenses regardless of whether the offering is consummated.

#### Our Relationships with the Underwriters

The underwriters and their affiliates have engaged, and may in the future engage, in investment banking transactions and other commercial dealings in the ordinary course of business with us or our affiliates. The underwriters and their affiliates have received, or may in the future receive, customary fees and commissions for these transactions. Maxim Group LLC acted as the placement agent in connection with the registered direct offerings completed on December 22, 2016, January 6, 2017 and January 25, 2017 and the Private Placement completed concurrently with the Third Registered Direct Offering. In its role as placement agent, Maxim Group LLC received an aggregate of \$815,380 in placement agent fees. Additionally, in connection with the Registered Direct Offering, we granted Maxim Group LLC a right of first refusal to act as lead managing underwriter and book runner for any and all future public and private equity and debt offerings of ours for a period of twelve (12) months from the closing of the Registered Direct Offering ending on December 22, 2017.

In addition, in the ordinary course of their business activities, the underwriters and their affiliates may make or hold a broad array of investments and actively trade debt and equity securities (or related derivative securities) for their own account and for the accounts of their customers. Such investments and securities activities may involve securities and/or instruments of ours or our affiliates. The underwriters and their affiliates may also make investment recommendations and/or publish or express independent research views in respect of such securities or financial instruments and may hold, or recommend to clients that they acquire, long and/or short positions in such securities and instruments

### Indemnification

We have agreed to indemnify the underwriters against liabilities relating to the offering arising under the Securities Act and the Exchange Act, liabilities arising from breaches of some or all of the representations and warranties contained in the underwriting agreement, and to contribute to payments that the underwriters may be required to make for these liabilities.

The underwriting agreement will be filed as an exhibit to our Current Report on Form 8-K to be filed with the SEC in connection with this offering.

#### **Electronic Distribution**

A prospectus supplement and accompanying base prospectus in electronic format may be made available on a website maintained by the representative of the underwriters and may also be made available on a website maintained by other underwriters. The underwriters may agree to allocate a number of shares to underwriters for sale to their online brokerage account holders. Internet distributions will be allocated by the representatives of the underwriters to underwriters that may make Internet distributions on the same basis as other allocations. In connection with the offering, the underwriters or syndicate members may distribute prospectus supplements and accompanying base prospectuses electronically. No forms of electronic prospectus other than prospectus supplements and accompanying base prospectuses that are printable as Adobe® PDF will be used in connection with this offering.

The underwriters have informed us that they do not expect to confirm sales of shares of common stock offered by this prospectus supplement to accounts over which they exercise discretionary authority.

Other than the prospectus supplement in electronic format, the information on any underwriter's website and any information contained in any other website maintained by an underwriter is not part of this prospectus supplement or the registration statement of which this prospectus forms a part, has not been approved and/or endorsed by us or any underwriter in its capacity as underwriter and should not be relied upon by investors.

#### Foreign Regulatory Restrictions on Purchase of Securities Offered Hereby Generally

No action has been or will be taken in any jurisdiction (except in the United States) that would permit a public offering of the securities offered by this prospectus supplement and accompanying base prospectus, or the possession, circulation or distribution of this prospectus supplement and accompanying base prospectus or any other material relating to us or the securities offered hereby in any jurisdiction where action for that purpose is required. Accordingly, the securities offered hereby may not be offered or sold, directly or indirectly, and neither of this prospectus supplement and accompanying base prospectus nor any other offering material or advertisements in connection with the securities offered hereby may be distributed or published, in or from any country or jurisdiction except in compliance with any applicable rules and regulations of any such country or jurisdiction.

Each of the underwriters may arrange to sell securities offered by this prospectus supplement and accompanying base prospectus in certain jurisdictions outside the United States, either directly or through affiliates, where they are permitted to do so.

# **DESCRIPTION OF SECURITIES**

#### **Common Stock**

On December 22, 2015, we filed a certificate of amendment to our certificate of incorporation with the Secretary of State of the State of Delaware to increase the number of authorized shares of common stock from 40,000,000 to 100,000,000, par value \$0.01 per share. Additionally, on December 28, 2016, we filed a certificate of amendment to our certificate of incorporation, or the Certificate of Amendment, to effectuate a one-for-ten reverse split of our issued and outstanding common stock. At the effective time of the reverse split, every 10 shares of common stock issued and outstanding were automatically combined into one share of issued and outstanding common stock, without any change in the par value per share. As of February 2, 2017, 3,661,252 shares of our common stock were outstanding.

The following is qualified in its entirety by reference to our certificate of incorporation, as amended, and our amended and restated bylaws, and by the provisions of applicable law. A copy of our certificate of incorporation, as amended, and our amended and restated bylaws are included as exhibits to our most recent Annual Report on Form 10-K. A copy of the Certificate of Amendment was filed as Exhibit 3.1 to our Current Report on Form 8-K filed on December 28, 2016.

Holders of our common stock are entitled to one vote for each share on all matters submitted to a vote of stockholders, and do not have cumulative voting rights. Generally, in matters other than the election of directors, the affirmative vote of a majority of the votes cast authorizes such an action, except where Delaware General Corporation Law prescribes a different percentage of votes or a different exercise of voting power. For the election of directors, directors are elected by a plurality of the votes of the shares present in person or represented by proxy and entitled to vote. Holders of our common stock are entitled to receive, as, when and if declared by our board of directors from time to time, such dividends and other distributions in cash, stock or property from our assets or funds legally available for such purposes, subject to any preferential dividend or other rights of any then outstanding preferred stock.

No preemptive, conversion, or other subscription rights apply to our common stock. All outstanding shares of our common stock are fully paid and non-assessable. In the event of our liquidation, dissolution or winding up, holders of our common stock are entitled to share ratably in the assets available for distribution, subject to any preferential or other rights of any then outstanding preferred stock. The voting, dividend and liquidation rights of the holders of our common stock are subject to and qualified by the rights of the holders of the preferred stock.

#### LEGAL MATTERS

The validity of the shares of common stock offered by this prospectus supplement is being passed upon for us by Pepper Hamilton LLP, New York, New York. Certain legal matters in connection with this offering will be passed upon for Maxim Group LLC by Ellenoff Grossman & Schole LLP, New York, New York.

#### EXPERTS

The financial statements and schedule of Interpace Diagnostics Group, Inc. (formerly known as PDI, Inc.) as of December 31, 2015 and 2014 and for each of the two years in the period ended December 31, 2015 incorporated by reference in this prospectus supplement have been so incorporated in reliance on the report of BDO USA, LLP, an independent registered public accounting firm, incorporated herein by reference, given on the authority of said firm as experts in auditing and accounting.

#### WHERE YOU CAN FIND MORE INFORMATION

This prospectus supplement and the accompanying prospectus are part of the registration statement on Form S-3 we filed with the SEC under the Securities Act and do not contain all the information set forth in the registration statement. Whenever a reference is made in this prospectus supplement and the accompanying prospectus to any of our contracts, agreements or other documents, the reference may not be complete and you should refer to the exhibits that are a part of the registration statement or the exhibits to the reports or other documents incorporated herein by reference for a copy of such contract, agreement or other document. Because we are subject to the information and reporting requirements of the Exchange Act, we file or furnish, as applicable, annual, quarterly and current reports, proxy statements and other information with the SEC. You may obtain information on the operation of the SEC's public reference facilities by calling the SEC at 1-800-SEC-0330. You can request copies of these documents, upon payment of a duplicating fee, by writing to the SEC at its principal office at 100 F Street NE, Room 1580, Washington, D.C. 20549-1004. The SEC maintains an Internet website at http://www.sec.gov that contains reports, proxy and information statements, and other information regarding issuers that file or furnish, as applicable, electronically with the SEC. The documents we file or furnish, as applicable, with the SEC are accessible through the Internet at that website. Our reports on Forms 10-K, 10-Q and 8-K, and amendments to those reports, are also available for download, free of charge, as soon as reasonably practicable after these reports are filed with or furnished to, as applicable, the SEC, at our website at www.interpacediagnostics.com. The content contained in, or that can be accessed through, our website is not a part of this prospectus. In addition, you may request copies of these documents filed or furnished, as applicable, at no cost, by writing or telephoning us at the following address or telephone number:

> Interpace Diagnostics Group, Inc. Morris Corporate Center I, Building A 300 Interpace Parkway, Parsippany, NJ 07054 (855) 776-6419

#### INCORPORATION OF CERTAIN INFORMATION BY REFERENCE

The SEC allows us to "incorporate by reference" the information we file with it, which means that we can disclose important information to you by referring you to those documents. The information incorporated by reference is considered to be part of this prospectus, and information that we file later with the SEC will automatically update and supersede this information. We incorporate by reference the documents listed below:

- our Annual Report on Form 10-K for the fiscal year ended December 31, 2015 filed on March 30, 2016, Amendment No. 1 to our Annual Report on Form 10-K for the fiscal year ended December 31, 2015 filed on April 29, 2016 and Amendment No. 2 to our Annual Report on Form 10-K for the fiscal year ended December 31, 2015 filed on June 14, 2016;
- our Definitive Proxy Statement on Schedule 14A filed on June 22, 2016, including any amendments or supplements filed for the purpose of updating such Definitive Proxy Statement;
- our Quarterly Report on Form 10-Q for the fiscal quarter ended March 31, 2016 filed on May 12, 2016, our Quarterly Report on Form 10-Q for the fiscal quarter ended June 30, 2016 filed on August 15, 2016 and our Quarterly Report on Form 10-Q for the fiscal quarter ended September 30, 2016 filed on November 17, 2016;
- our Current Reports on Form 8-K and Form 8-K/A filed on January 11, 2016, January 22, 2016, February 4, 2016, March 2, 2016, March 29, 2016, June 22, 2016, July 11, 2016, August 8, 2016, September 2, 2016, September 14, 2016, October 4, 2016, October 13, 2016, October 14, 2016, October 20, 2016, November 3, 2016, November 29, 2016, December 19, 2016, December 21, 2016, December 28, 2016, January 3, 2017, January 5, 2017, January 6, 2017, January 20, 2017 and January 25, 2017;
- the description of the our common stock contained in our Form 8-A that we filed with the SEC on May 13, 1998 pursuant to the Exchange Act and any amendment or report filed for the purpose of further updating such description.

We also incorporate by reference any future filings (except as specifically enumerated above, other than any filings or portions of such reports that are not deemed "filed" under the Exchange Act in accordance with the Exchange Act and applicable SEC rules, including current reports furnished under Item 2.02 or Item 7.01 of Form 8-K and exhibits filed on such form that are related to such items unless such Form 8-K expressly provides to the contrary) made with the SEC pursuant to Sections 13(a), 13(c), 14 or 15(d) of the Exchange Act, including those made after the date of the initial filing of the registration statement of which this prospectus supplement forms a part, until we file a post-effective amendment that indicates the termination of the offering of the securities made by this prospectus supplement and will become a part of this prospectus supplement from the date that such documents are filed with the SEC. Information in such future filings will automatically be deemed to modify and supersede any information in any document we previously filed with the SEC that is incorporated or deemed to be incorporated herein by reference to the extent that statements in the later filed document modify or replace such earlier statements.

To obtain copies of these filings, see "Where You Can Find More Information" on page S-29 of this prospectus.

# PROSPECTUS

#### PDI, Inc.

# \$100,000,000 Common Stock, Preferred Stock, Warrants, Units and Subscription Rights

This prospectus covers our offer and sale from time to time of any combination of common stock, preferred stock, warrants, units or subscription rights described in this prospectus in one or more offerings. This prospectus provides a general description of the securities we may offer and sell. Each time we offer and sell securities we will provide specific terms of the securities offered in a supplement to this prospectus. The prospectus supplement may also add, update or change information contained in this prospectus. The aggregate offering price of all securities sold by us under this prospectus may not exceed \$100,000,000.

The aggregate market value of our outstanding common stock held by non-affiliates was \$15,115,138 based on 16,720,037 shares of outstanding common stock, of which 7,129,782 shares are held by non-affiliates, and a per share price of \$2.12 based on the closing sale price of our common stock on September 4, 2015. We have not offered any securities pursuant to General Instruction I.B.6. of Form S-3 during the prior 12 calendar month period that ends on and includes the date of this prospectus. Pursuant to General Instruction I.B.6 of Form S-3, in no event will we sell securities registered on this registration statement in a public primary offering with a value exceeding more than one-third of our public float in any 12-month period so long as our public float remains below \$75.0 million.

The securities may be offered and sold by us from time to time at fixed prices, at market prices or at negotiated prices, and may be offered and sold to or through one or more underwriters, dealers or agents or directly to purchasers on a continuous or delayed basis. See "Plan of Distribution" in this prospectus and in the applicable prospectus supplement.

Our common stock is currently listed on NASDAQ under the symbol "PDII". On October 7, 2015, the last reported sale price of our common stock on NASDAQ was \$1.71 per share.

You should rely only on the information contained or incorporated by reference in this prospectus. We have not authorized any other person to provide you with different information.

Investing in these securities involves risks, including those set forth in the "Risk Factors" section of our most recent Annual Report on Form 10-K, as revised or supplemented by our Quarterly Reports on Form 10-Q filed with the U.S. Securities and Exchange Commission since the filing of our most recent Annual Report on Form 10-K, each of which is incorporated by reference into this prospectus. We may include specific risk factors in supplements to this prospectus under the caption "Risk Factors." This prospectus may not be used to sell our securities unless accompanied by a prospectus supplement. Neither the U.S. Securities and Exchange Commission nor any state securities commission has approved or disapproved of these securities or determined if this prospectus is truthful and complete. Any representation to the contrary is a criminal offense.

This prospectus is dated October 9, 2015.

We have not authorized any dealer, salesman or other person to give any information or to make any representation other than those contained or incorporated by reference in this prospectus and any accompanying supplement to this prospectus. You must not rely upon any information or representation not contained or incorporated by reference in this prospectus or any accompanying prospectus supplement. This prospectus and any accompanying supplement to this prospectus do not constitute an offer to sell or the solicitation of an offer to buy any securities other than the registered securities to which they relate, nor do this prospectus and any accompanying supplement to this prospectus constitute an offer to sell or the solicitation of an offer to buy securities in any jurisdiction to any person to whom it is unlawful to make such offer or solicitation in such jurisdiction. "PDI," "Company," "we," "us" and "our" refer to PDI, Inc. and its consolidated subsidiaries.

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#### ABOUT THIS PROSPECTUS

This prospectus is part of a registration statement that we filed with the U.S. Securities and Exchange Commission, or the SEC. This prospectus covers the primary offering by us of up to an aggregate of \$100,000,000 of securities. We may offer and sell any combination of the securities described in this prospectus in one or more offerings. This prospectus provides you with a general description of the securities we may offer and sell. Each time we offer and sell securities under this prospectus, we will provide a prospectus supplement that will contain specific information about the terms of that offering. The prospectus supplement may also add, update or change information contained in this prospectus. You should read both this prospectus and any prospectus supplement together with additional information described under the heading "Where You Can Find More Information."

We have filed or incorporated by reference exhibits to the registration statement of which this prospectus forms a part. You should read the exhibits carefully for provisions that may be important to you.

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

#### WHERE YOU CAN FIND MORE INFORMATION

We file annual, quarterly and current reports, proxy statements and other information with the SEC. You may read and copy any document we file with the SEC at the SEC's public reference room at 100 F Street NE, Room 1580, Washington, D.C. 20549. You may obtain information on the operation of the SEC's public reference facilities by calling the SEC at 1-800-SEC-0330. You can request copies of these documents, upon payment of a duplicating fee, by writing to the SEC at its principal office at 100 F Street NE, Room 1580, Washington, D.C. 20549-1004. The SEC maintains an Internet website at http://www.sec.gov that contains reports, proxy and information statements, and other information regarding issuers that file electronically with the SEC. Our SEC filings are accessible through the Internet at that website. Our reports on Forms 10-K, 10-Q and 8-K, and amendments to those reports, are also available for download, free of charge, as soon as reasonably practicable after these reports are filed with the SEC, at our website at www.pdi-inc.com. The content contained in, or that can be accessed through, our website is not a part of this prospectus.

# INCORPORATION OF INFORMATION BY REFERENCE

The SEC allows us to "incorporate by reference" the information we file with it, which means that we can disclose important information to you by referring you to those documents. The information incorporated by reference is considered to be part of this prospectus, and information that we file later with the SEC will automatically update and supersede this information. We incorporate by reference the documents listed below:

- Our Annual Report on Form 10-K for the fiscal year ended December 31, 2014 that we filed with the SEC on March 5, 2015;
- Our Amendment No. 1 to Quarterly Report on Form 10-Q/A for the fiscal quarter ended September 30, 2014 that we filed with the SEC on April 10, 2015, our Quarterly Report on Form 10-Q for the fiscal quarter ended March 31, 2015 that we filed with the SEC on May 12, 2015, and our Quarterly Report on Form 10-Q for the fiscal quarter ended June 30, 2015 that we filed with the SEC on August 14, 2015;
- Our Current Reports on Form 8-K and Form 8-K/A filed with the SEC on October 29, 2014, January 16, 2015, June 8, 2015 and June 9, 2015;
- The description of the our common stock contained in our Form 8-A filed with the SEC on May 13, 1998 pursuant to the Securities Exchange Act of 1934, as amended, or the Exchange Act, and any amendment or report filed for the purpose of further updating such description;
- All documents filed by us with the SEC pursuant to Sections 13(a), 13(c), 14 or 15(d) of the Exchange Act after the date of the initial filing of the registration statement of which this prospectus is a part and prior to the effectiveness of such registration statement; and

• All documents filed by us with the SEC pursuant to Sections 13(a), 13(c), 14 or 15(d) of the Exchange Act on or after the date of this prospectus and before we stop offering the securities under this prospectus.

We will provide without charge to each person, including any beneficial owner, to whom this prospectus is delivered, upon his or her written or oral request, a copy of any or all documents referred to above which have been or may be incorporated by reference into this prospectus but not delivered with this prospectus excluding exhibits to those documents unless they are specifically incorporated by reference into those documents. You can request those documents by writing to us at the following address or by calling us at the telephone number listed below:

> PDI, Inc. Morris Corporate Center I, Building A 300 Interpace Parkway, Parsippany, NJ 07054 (800) 242-7494

The most recent information that we file with the SEC automatically updates and supersedes older information. The information contained in any such filing will be deemed to be a part of this prospectus, commencing on the date on which the filing is made.

Information furnished under Items 2.02 or 7.01 (or corresponding information furnished under Item 9.01 or included as an exhibit) in any past or future Current Report on Form 8-K that we furnish to the SEC, unless otherwise specified in such report, is not incorporated by reference in this prospectus.

# CAUTIONARY NOTE REGARDING FORWARD-LOOKING STATEMENTS

This prospectus and the documents incorporated by reference in this prospectus contain forward-looking statements. All statements that address operating performance, events or developments that we expect or anticipate will occur in the future are forward-looking statements. In some cases, you can identify forward-looking statements by terms such as "may," "will," "should," "could," "would," "expects," "plans," "anticipates," "believes," "estimates," "projects," "prodicts," "potential" and similar expressions intended to identify forward-looking statements.

These forward-looking statements are based on management's beliefs and assumptions and on information currently available to our management. Our management believes that these forward-looking statements are reasonable as and when made. However, you should not place undue reliance on any such forward-looking statements because such statements speak only as of the date when made. We do not undertake any obligation to publicly update or revise any forward-looking statements, whether as a result of new information, future events or otherwise, except as required by law. In addition, forward-looking statements are subject to certain risks and uncertainties that could cause actual results, events and developments to differ materially from our historical experience and our present expectations or projections. Before making an investment decision, you should carefully consider these risks as well as any other information we include or incorporate by reference in this prospectus or include in any applicable prospectus supplement. You should read this prospectus and the documents that we have filed as exhibits to the registration statement of which this prospectus forms a part in their entireties.

# **RISK FACTORS**

Our business is influenced by many factors that are difficult to predict, and that involve uncertainties that may materially affect actual operating results, cash flows and financial condition. Before making an investment decision, you should carefully consider these risks, including those set forth in the "Risk Factors" section of our most recent Annual Report on Form 10-K, as revised or supplemented by our Quarterly Reports on Form 10-Q filed with the SEC since the filing of our most recent Annual Report on Form 10-K, each of which is incorporated by reference into this prospectus, and you should also carefully consider any other information we include or incorporate by reference in this prospectus or include in any applicable prospectus supplement.

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# PDI, INC.

#### Overview

We are a leading healthcare commercialization company providing go-to-market strategy and execution to established and emerging pharmaceutical, biotechnology, diagnostics and healthcare companies in the United States through our Commercial Services segment, and developing and commercializing molecular diagnostic tests through our Interpace Diagnostics segment. Our Commercial Services segment is focused on providing outsourced pharmaceutical, biotechnology, medical device and diagnostic sales teams to our corporate customers. Through this business, we offer a range of complementary sales support services designed to achieve our customers' strategic and financial objectives. Our Interpace Diagnostics segment is focused on developing and commercializing molecular diagnostic tests, leveraging the latest technology and personalized medicine for better patient diagnosis and management. Through our Interpace Diagnostics segment, we aim to provide physicians and patients with diagnostic options for detecting genetic and other molecular alterations that are associated with gastrointestinal and endocrine cancers. Our customers in our Interpace Diagnostics segment consist primarily of physicians, hospitals and clinics.

You can get more information regarding our business and industry by reading our most recent Annual Report on Form 10-K and the other reports we file with the SEC. See "Where You Can Find More Information" and "Incorporation of Information by Reference."

#### **Corporate Information**

We were originally incorporated in New Jersey in 1986 and began commercial operations in 1987. In connection with our initial public offering, we re-incorporated in Delaware in 1998. We conduct our Commercial Services segment through our parent company, PDI, Inc. and our wholly-owned subsidiary, PDI BioPharma, LLC, which was formed in New Jersey in 2011. We conduct our Interpace Diagnostics segment through our wholly-owned subsidiaries, Interpace Diagnostics, LLC, which was formed in Delaware in 2013 and Interpace Diagnostics Corporation (formerly known as RedPath Integrated Pathology, Inc.), which was formed in Delaware in 2007. Our executive offices are located at Morris Corporate Center 1, Building A, 300 Interpace Parkway, Parsippany, New Jersey 07054. Our telephone number is (800) 242-7494.

# **USE OF PROCEEDS**

Unless otherwise indicated in a prospectus supplement, we anticipate that the net proceeds from our sale of any securities will be used for general corporate purposes, including working capital, continued development of our products, acquisitions of assets or businesses, retirement of debt and other business opportunities.

# **DESCRIPTION OF SECURITIES**

We may offer shares of our common stock and preferred stock, warrants or units or subscription rights to purchase any of such securities, with a total value of up to \$100,000,000, from time to time in one or more offerings under this prospectus at prices and on terms to be determined by market conditions at the time of the offering. This prospectus provides you with a general description of the securities that we may offer. In connection with each offering, we will provide a prospectus supplement that will describe the specific amounts, prices and terms of the securities being offered, including, to the extent applicable:

- designation or classification;
- aggregate offering price;
- rates and times of payment of dividends;
- redemption, conversion or exchange terms;

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- conversion or exchange prices or rates and any provisions for changes to or adjustments in the conversion or exchange
  prices or rates and in the securities or other property receivable upon conversion or exchange;
- ranking;
- restrictive covenants;
- voting or other rights; and
- important federal income tax considerations.

The prospectus supplement also may add, update or change information contained in this prospectus or in documents we have incorporated by reference. However, no prospectus supplement will offer a security that is not included in the Registration Statement at the time of its effectiveness or offer a security of a type that is not described in this prospectus.

#### **DESCRIPTION OF CAPITAL STOCK**

Our authorized capital stock consists of 40,000,000 shares of common stock, par value \$0.01 per share, and 5,000,000 shares of preferred stock, par value \$0.01 per share. As of October 7, 2015, 16,720,037 shares of our common stock, and no shares of our preferred stock, were outstanding.

The following is qualified in its entirety by reference to our certificate of incorporation, as amended, and our amended and restated bylaws, and by the provisions of applicable law. A copy of our certificate of incorporation, as amended, and our amended and restated bylaws are included as exhibits to our most recent Annual Report on Form 10-K.

#### **Common Stock**

Holders of our common stock are entitled to one vote for each share on all matters submitted to a vote of stockholders, and do not have cumulative voting rights. Generally, in matters other than the election of directors, the affirmative vote of a majority of the votes cast authorizes such an action, except where Delaware General Corporation Law prescribes a different percentage of votes or a different exercise of voting power. For the election of directors, directors are elected by a plurality of the votes of the shares present in person or represented by proxy and entitled to vote. Holders of our common stock are entitled to receive, as, when and if declared by our board of directors from time to time, such dividends and other distributions in cash, stock or property from our assets or funds legally available for such purposes, subject to any preferential dividend or other rights of any then outstanding preferred stock.

No preemptive, conversion, or other subscription rights apply to our common stock. All outstanding shares of our common stock are fully paid and non-assessable. In the event of our liquidation, dissolution or winding up, holders of our common stock are entitled to share ratably in the assets available for distribution, subject to any preferential or other rights of any then outstanding preferred stock. The voting, dividend and liquidation rights of the holders of our common stock are subject to and qualified by the rights of the holders of the preferred stock.

#### **Preferred Stock**

Our board of directors has the authority, without action by our stockholders, to designate and issue preferred stock in one or more classes or one or more series of stock within any class and to designate the rights, preferences and privileges of each class or series, which may be greater than the rights of our common stock. It is not possible to state the actual effect of the issuance of any shares of preferred stock upon the rights of holders of our common stock until our board of directors determines the specific rights of the holders of such preferred stock. However, the effects might include, among other things:

- restricting dividends on the common stock;
- diluting the voting power of the common stock;
- impairing the liquidation rights of the common stock; or
- delaying or preventing a change in our control without further action by the stockholders.

# Anti-Takeover Effects of Provisions of Our Certificate of Incorporation, as Amended, Our Amended and Restated Bylaws and Delaware Law

Provisions of Delaware law and our certificate of incorporation, as amended, and amended and restated bylaws could make the following more difficult:

- the acquisition of us by means of a tender offer;
- the acquisition of us by means of a proxy contest or otherwise; or
- the removal of our incumbent officers and directors.

These provisions, summarized below, are expected to discourage certain types of coercive takeover practices and inadequate takeover bids. These provisions are also designed to encourage persons seeking to acquire control of us to first negotiate with our board of directors. We believe the benefits of increased protection of our potential ability to negotiate with the proponent of an unfriendly or unsolicited proposal to acquire or restructure us outweigh the disadvantages of discouraging such proposals because negotiation of such proposals could result in an improvement of their terms:

- *Classified Board of Directors.* Under our certificate of incorporation, as amended, our board of directors is divided into three classes of directors serving staggered three-year terms which means that the entire board of directors will not be up for election each year.
- *Stockholder meetings*. Under our certificate of incorporation, as amended, only our board of directors, the chairman of our board of directors and the chief executive officer (or the president if there is no chief executive officer) may call special meetings of stockholders.
- *Preferred stock*. Under our certificate of incorporation, as amended, we are authorized to issue 5,000,000 shares of preferred stock, which could make it more difficult for a third party to acquire voting control of our company.
- *Requirements for advance notification of stockholder proposals and director nominations.* Our amended and restated bylaws establish advance notice procedures with respect to stockholder proposals and the nomination of candidates for election as directors. These provisions may preclude stockholders from bringing matters before an annual meeting of stockholders or from making nominations for directors at an annual meeting of stockholders.
- No action by written consent. Under our certificate of incorporation, as amended, stockholders may only take action at an
  annual or special meeting of stockholders and may not act by written consent when our capital stock is registered under
  Section 12 of the Exchange Act or any similar successor statute.
- *Supermajority voting*. In order to amend certain provisions of our certificate of incorporation, as amended, including the prohibition on action by written consent of stockholders and the provision relating to calling of a special meeting of stockholders, the affirmative vote of holders of at least 75% of our outstanding capital stock is required.

- Delaware anti-takeover law. We are subject to Section 203 of the Delaware General Corporation Law, an anti-takeover law. In general, Section 203 prohibits a publicly held Delaware corporation from engaging in a "business combination" with an "interested stockholder" for a period of three years following the date the person became an interested stockholder, unless the "business combination" or the transaction in which the person became an interested stockholder is approved in a prescribed manner. Generally, a "business combination" includes a merger, asset or stock sale, or other transaction resulting in a financial benefit to the interested stockholder. Generally, an "interested stockholder" is a person who, together with affiliates and associates, owns or within three years prior to the determination of interested stockholder status, owned, 15% or more of a corporation's voting stock. The existence of this provision may have an anti-takeover effect with respect to transactions not approved in advance by our board of directors, including discouraging attempts that might result in a premium over the market price for the shares of common stock held by stockholders.
- No cumulative voting. Our certificate of incorporation, as amended, does not provide for cumulative voting.
- Limitation of Liability

Our certificate of incorporation, as amended, limits the liability of directors and officers to the fullest extent permitted by Delaware law and require that we indemnify our directors and officers to such extent, except that we will not be obligated to indemnify any such person for claims brought voluntarily and not by way of defense, or for any amounts paid in settlement of an action without our prior written consent.

In addition, our certificate of incorporation, as amended, provides that a director is not personally liable to us or our stockholders for monetary damages for breach of his or her fiduciary duty as director, except for liability (i) for any breach of the director's duty of loyalty to us or our stockholders; (ii) for acts or omissions not in good faith or which involve intentional misconduct or a knowing violation of law, (iii) for willful or negligent conduct in paying dividends or repurchasing stock out of any other lawfully available funds, or (iv) for any transaction from which the director derives an improper personal benefit.

### Listing

Our common stock is listed on The NASDAQ Global Market under the symbol "PDII."

#### **Transfer Agent and Registrar**

The transfer agent and registrar for our common stock is American Stock Transfer and Trust Company, LLC. Its address is 6201 15<sup>th</sup> Avenue, Brooklyn, NY 11219, and its telephone number is (718) 921-8200.

# **DESCRIPTION OF WARRANTS**

We may issue warrants to purchase common stock, preferred stock or other securities or any combination of the foregoing. We may issue warrants independently or together with other securities. Warrants sold with other securities may be attached to or separate from the other securities. We will issue warrants under one or more warrant agreements between us and a warrant agent that we will name in the prospectus supplement.

The prospectus supplement relating to any warrants that we may offer will include specific terms relating to the offering. We will file the form of any warrant agreement with the SEC, and you should read the warrant agreement for provisions that may be important to you. The prospectus supplement will include some or all of the following terms:

- the title of the warrants;
- the aggregate number of warrants offered;

- the designation, number and terms of the common stock, preferred stock or other securities purchasable upon exercise of the warrants, and procedures by which those numbers may be adjusted;
- the exercise price of the warrants;
- the dates or periods during which the warrants are exercisable;
- the designation and terms of any securities with which the warrants are issued;
- if the warrants are issued as a unit with another security, the date, if any, on and after which the warrants and the other security will be separately transferable;
- if the exercise price is not payable in U.S. dollars, the foreign currency, currency unit or composite currency in which the exercise price is denominated;
- any minimum or maximum amount of warrants that may be exercised at any one time;
- any terms, procedures and limitations relating to the transferability, exchange, exercise, amendment or termination of the warrants; and
- any adjustments to the terms of the warrants resulting from the occurrence of certain events or from the entry into or consummation by us of certain transactions.

#### **DESCRIPTION OF UNITS**

As specified in any applicable prospectus supplement, we may issue units consisting of one or more warrants, shares of preferred stock, shares of common stock or any combination of such securities.

# DESCRIPTION OF SUBSCRIPTION RIGHTS

As specified in any applicable prospectus supplement, we may issue subscription rights consisting of one or more shares of preferred stock, shares of common stock or any combination of such securities.

# PLAN OF DISTRIBUTION

We may sell the securities in one or more of the following ways (or in any combination) from time to time:

- through underwriters or dealers;
- directly to a limited number of purchasers or to a single purchaser; or
- through agents.

Each time we offer and sell securities under this prospectus, we will file a prospectus supplement. The prospectus supplement will state the terms of the offering of the securities, including:

- the name or names of any underwriters, dealers or agents;
- the purchase price of such securities and the proceeds to be received by us, if any;
- any underwriting discounts or agency fees and other items constituting underwriters' or agents' compensation;

- any public offering price;
- any discounts or concessions allowed or reallowed or paid to dealers; and
- any securities exchanges on which the securities may be listed.

Any public offering price and any discounts or concessions allowed or reallowed or paid to dealers may be changed from time to

time.

If we use underwriters in the sale, the securities will be acquired by the underwriters for their own account and may be resold from time to time in one or more transactions, including:

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

Unless otherwise stated in a prospectus supplement, the obligations of the underwriters to purchase any securities will be conditioned on customary closing conditions and the underwriters will be obligated to purchase all of such series of securities, if any are purchased.

We may sell the securities through agents from time to time and may enter into arrangements for "at-the-market" offerings or similar transactions. The prospectus supplement will name any agent involved in the offer or sale of the securities and any commissions we pay to them. Generally, any agent will be acting on a best efforts basis for the period of its appointment. An agent may also choose to purchase securities for its own account, as principal.

We may authorize underwriters, dealers or agents to solicit offers by certain purchasers to purchase the securities from us at the public offering price set forth in the prospectus supplement pursuant to delayed delivery contracts providing for payment and delivery on a specified date in the future. The contracts will be subject only to those conditions set forth in the prospectus supplement, and the prospectus supplement will set forth any commissions we pay for solicitation of these contracts.

In offering the shares covered by this prospectus, any broker-dealers and any other participating broker-dealers who execute sales, may be deemed to be "underwriters" within the meaning of the Securities Act in connection with these sales. Any profits realized by such broker-dealers may be deemed to be underwriting discounts and commissions.

Underwriters and agents may be entitled under agreements entered into with us to indemnification by us against certain civil liabilities, including liabilities under the Securities Act, or to contribution with respect to payments which the underwriters or agents may be required to make. Underwriters and agents may be customers of, engage in transactions with, or perform services for us and our affiliates in the ordinary course of business.

Each series of securities will be a new issue of securities and will have no established trading market other than the common stock which is listed on the NASDAQ Global Market. Any underwriters to whom securities are sold for public offering and sale may make a market in the securities, but such underwriters will not be obligated to do so and may discontinue any market making at any time without notice. The securities, other than the common stock, may or may not be listed on a national securities exchange.

The underwriters, dealers and agents may engage in other transactions with us, or perform other services for us, in the ordinary course of their business.

# EXPERTS

The financial statements and schedule of PDI, Inc. as of December 31, 2014 and 2013 and for each of the two years in the period ended December 31, 2014, the financial statements of RedPath Integrated Pathology, Inc. as of December 31, 2013 and for the year in the period ended December 31, 2013, and the financial statements of the Acquired Property of Asuragen, Inc. as of December 31, 2013 and 2012 and for each of the two years in the period ended December 31, 2013, as incorporated by reference in this prospectus have been so incorporated in reliance on the reports of BDO USA, LLP, an independent registered public accounting firm, incorporated herein by reference, given on the authority of said firm as experts in auditing and accounting.

The financial statements of RedPath Integrated Pathology, Inc. as of December 31, 2012 and for the year in the period ended December 31, 2012 incorporated by reference in this prospectus have been so incorporated in reliance on the report of Alpern Rosenthal LLP, independent auditors, incorporated herein by reference, given on the authority of said firm as experts in auditing and accounting.

#### LEGAL MATTERS

Pepper Hamilton LLP will provide us with an opinion as to certain legal matters in connection with the securities being offered hereby.

# UPDATED FINANCIAL INFORMATION

On October 31, 2014, PDI and its wholly-owned subsidiary, Interpace Diagnostics, LLC, entered into an Agreement and Plan of Merger to acquire RedPath Integrated Pathology, Inc., a molecular diagnostics company.

Item 11 of Form S-3 requires that we include in this prospectus, to the extent not incorporated by reference herein from certain other reports we have filed with the SEC, information required by Rule 3-05 and Article 11 of Regulation S-X. Our unaudited pro forma combined condensed statement of operations for the fiscal year ended December 31, 2014 is attached hereto as Exhibit 99.1 and is incorporated by reference herein.

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**Shares of Common Stock** 

**Prospectus Supplement** 

Maxim Group LLC

February , 2017