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

FORM S-1

Registration Statement Under The Securities Act of 1933

INTERPACE DIAGNOSTICS GROUP, INC.

(Exact name of Registrant as specified in its charter)

Delaware

3841

22-2919486

(State or other jurisdiction
of incorporation or organization)

(Primary Standard Industrial
Classification Code Number)

(I.R.S. Employer
Identification No.)

**Morris Corporate Center 1, Building A
300 Interpace Parkway, Parsippany, NJ 07054
(844) 405-9655**

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

Jack Stover

President and Chief Executive Officer

Interpace Diagnostics Group, Inc.

Morris Corporate Center 1, Building A

300 Interpace Parkway, Parsippany, NJ 07054

(844) 405-9655

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

COPIES TO:

**Merrill M. Kraines, Esq.
Pepper Hamilton LLP
The New York Times Building
37th Floor 620 Eighth Avenue
New York, NY 10018-1405
(212) 808-2711**

**Barry I. Grossman, Esq.
Benjamin S. Reichel, Esq.
Ellenoff Grossman & Schole LLP
1345 Avenue of the Americas
New York, NY 10105
(212) 370-1300**

Approximate date of commencement of proposed sale to the public:

As soon as practicable after this Registration Statement becomes effective.

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

If this Form is filed to register additional securities for an offering pursuant to Rule 462(b) under the Securities Act of 1933, please check the following box and list the Securities Act registration statement number of the earlier effective registration statement for the same offering [] 333-218140

If this Form is a post-effective amendment filed pursuant to Rule 462(c) under the Securities Act of 1933, check the following box and list the Securities Act registration statement number of the earlier effective registration statement for the same offering []

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

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

Large accelerated filer

[]

Accelerated filer

[]

Non-accelerated filer
Emerging Growth Company

(Do not check if a smaller reporting company)

Smaller reporting company

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

CALCULATION OF REGISTRATION FEE

Title of Each Class of Securities to be Registered(1)	Proposed Maximum Aggregate Offering Price(2)(3)	Amount of Registration Fee
Common stock, \$0.01 par value per share	\$ 862,500(4)	\$ 99.96
Pre-funded warrants to purchase shares of common stock and common stock issuable upon exercise thereof	\$ 862,500(4)	\$ 99.96
Common warrants to purchase shares of common stock	\$ (5)(7)	\$
Shares of common stock issuable upon exercise of the common warrants	\$ 1,035,000 (8)	\$ 119.96
Total	\$ 2,760,000	\$ 319.88(6)

- (1) Represents only the additional number of shares of common stock, shares of common stock issuable upon exercise of the common warrants, and pre-funded warrants being registered and includes shares of common stock issuable upon exercise of the underwriters' option to purchase additional shares of common stock and/or common warrants. Does not include the securities that the Registrant previously registered on the Registration Statement on Form S-1, as amended (Reg. No. 333-218140). Pursuant to Rule 416, the securities being registered hereunder include such indeterminate number of additional securities as may be issuable to prevent dilution resulting from stock splits, stock dividends or similar transactions.
- (2) Estimated solely for the purpose of calculating the amount of the registration fee in accordance with Rule 457(o) under the Securities Act.
- (3) Includes the offering price of additional securities that the underwriters have the option to purchase to cover our allotments, if any.
- (4) The proposed maximum offering price of the common stock registered pursuant to this registration statement will be reduced on a dollar-for-dollar basis based on the offering price of any pre-funded warrants offered and sold in the offering, and as such the proposed maximum aggregate offering price of the common stock and pre-funded warrants (including the common stock issuable upon exercise of the pre-funded warrants), if any, will remain at \$862,500.
- (5) The common warrants to be issued to investors hereunder are included in the price of the common stock and/or pre-funded warrants, as applicable, above.
- (6) The Registrant previously registered an aggregate of \$47,840,000 worth of its common stock, common warrants and pre-funded warrants on a Registration Statement on Form S-1, as amended (Reg. No. 333-218140) for which filing fees of \$5,544.67 were paid.
- (7) No fee pursuant to Rule 457(g) under the Securities Act.
- (8) We assumed the common warrants were exercisable at a per share exercise price equal to 120% of the public offering price. The proposed maximum aggregate public offering price of the warrants being registered pursuant to this registration statement was calculated to be \$1,035,000, which is equal to 120% of \$862,500.

The Registration Statement shall become effective upon filing with the Securities and Exchange Commission in accordance with Rule 462(b) under the Securities Act of 1933, as amended.

EXPLANATORY NOTE

This registration statement is being filed with respect to the registration of additional shares of common stock, pre-funded warrants and common warrants of Interpace Diagnostics Group, Inc., a Delaware corporation, pursuant to Rule 462(b) under the Securities Act of 1933, as amended. The contents of the registration statement on Form S-1 (333-218140), initially filed by Interpace Diagnostics Group, Inc. with the Securities and Exchange Commission (the "Commission") on May 22, 2017, as amended by Pre-Effective Amendment No. 1, as filed with the Commission on June 7, 2017, Pre-Effective Amendment No. 2, as filed with the Commission on June 13, 2017 and Pre-Effective Amendment No. 3, as filed with the Commission on June 13, 2017, including all exhibits thereto, are incorporated herein by reference.

SIGNATURES

Pursuant to the requirements of the Securities Act of 1933, as amended, the registrant has duly caused this registration statement to be signed on its behalf by the undersigned, thereunto duly authorized in the City of Parsippany, State of New Jersey, on June 16, 2017.

INTERPACE DIAGNOSTICS GROUP, INC.

By: /s/ Jack E. Stover

Jack E. Stover
President and Chief Executive Officer

Pursuant to the requirements of the Securities Act of 1933, as amended, this registration statement has been signed by the following persons in the capacities and as of the dates indicated.

<u>Signature</u>	<u>Title</u>	<u>Date</u>
<u>/s/ Jack E. Stover</u> Jack E. Stover	President, Chief Executive Officer, and Director (Principal Executive Officer)	June 16, 2017
<u>/s/ James E. Early</u> James E. Early	Chief Financial Officer (Principal Financial Officer and Principal Accounting Officer)	June 16, 2017
<u>/s/ Jack E. Stover *</u> Joseph Keegan, PhD	Director	June 16, 2017
<u>/s/ Jack E. Stover *</u> Stephen J. Sullivan	Director	June 16, 2017

* Pursuant to power of attorney

EXHIBIT INDEX

Exhibit Number	Description
5.1*	Opinion of Pepper Hamilton LLP with respect to the legality of the securities being registered
23.1*	Consent of BDO USA LLP, Independent Registered Public Accounting Firm.
23.2*	Consent of Pepper Hamilton LLP (included in Exhibit 5.1).
24.1**	Power of Attorney (included as part of the signature page of the registration statement on Form S-1 (333-218140), initially filed by Interpace Diagnostics Group, Inc. with the Securities and Exchange Commission on May 22, 2017).

* Filed herewith.

** Previously filed.

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Eighteenth and Arch Streets
Philadelphia, PA 19103-2799
215.981.4000
Fax 215.981.4750

June 16, 2017

Interpace Diagnostics Group, Inc.
Morris Corporate Center I, Building A
300 Interpace Parkway
Parsippany, NJ 07054

Re: Registration Statement for Additional Shares Filed Under Rule 462(b)

Ladies and Gentlemen:

We have acted as counsel to Interpace Diagnostics Group, Inc., a Delaware corporation (the “*Company*”), in connection with the preparation of the Registration Statement on Form S-1 filed by the Company with the Securities and Exchange Commission (the “*Commission*”) on June 16, 2017 (as amended, the “*Registration Statement*”) pursuant to the requirements of Rule 462(b) of the Securities Act of 1933, as amended (the “*Act*”). The Registration Statement incorporates by reference the Registration Statement on Form S-1 filed by the Company on May 22, 2017 (the “*Original Registration Statement*”, File No. 333-218140), as amended by Pre-Effective Amendment No. 1 filed with the Commission on June 7, 2017, Pre-Effective Amendment No. 2 filed with the Commission on June 13, 2017 (the “*Second Amendment*”) and Pre-Effective Amendment No. 3 filed with the Commission on June 13, 2017. The Registration Statement relates to the registration under the Act (the “*Offering*”) of (i) up to an additional \$862,500 of shares (“*Firm Shares*”) of the Company’s common stock, par value \$0.01 per share (the “*Common Stock*”), (ii) up to an additional \$1,035,000 of shares of Common Stock (the “*Warrant Shares*”) underlying the warrants to purchase shares of Common Stock (the “*Common Warrants*”) at an exercise price equal to \$1.25 per share and (iii) up to an additional \$862,500 of warrants to purchase shares of Common Stock at an exercise price equal to \$0.01 per share (the “*Pre-Funded Warrants*”), in an underwritten public offering pursuant to an underwriting agreement (the “*Underwriting Agreement*”) substantially in the form filed as an exhibit to the Second Amendment to be entered by and among the Company and the several underwriters (such underwriters, for whom Maxim Group LLC is acting as representative, the “*Underwriters*”). The Firm Shares, the Common Warrants, the Pre-Funded Warrants and the Warrant Shares are hereinafter referred to collectively as the “*Securities*.”

	Boston	Washington, D.C.	Los Angeles	New York	Pittsburgh	
Detroit	Berwyn	Harrisburg	Orange County	Princeton	Silicon Valley	Wilmington

Interpace Diagnostics Group, Inc.
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In our capacity as counsel, you have requested that we render the opinions set forth in this letter and we are furnishing this opinion letter to you pursuant to the requirements of Item 601(b)(5) of Regulation S-K under the Act.

In connection herewith, we have examined originals or copies, certified or otherwise identified to our satisfaction, of (i) the Registration Statement as filed with the Commission, (ii) the form of Underwriting Agreement filed as Exhibit 1.1 to the Second Amendment, (iii) the Company's Certificate of Incorporation, including all amendments to date, (iv) the Company's Amended and Restated Bylaws, as amended to date, (v) resolutions of the board of directors of the Company (the "**Board**") relating to the Offering and (vi) such other documents as we have deemed necessary or appropriate for purposes of rendering the opinion set forth herein.

In rendering the opinions set forth below, we have assumed that (i) all information contained in all documents reviewed by us is true and correct; (ii) all signatures on all documents examined by us are genuine; (iii) all documents submitted to us as originals are authentic and all documents submitted to us as copies conform to the originals of those documents; (iv) each natural person signing any document reviewed by us had the legal capacity to do so; (v) any certificates representing Securities to be issued pursuant to the Offering, as applicable, will be duly executed and delivered; (vi) the Company will have reserved, from its authorized but unissued and unreserved shares of Common Stock, a number sufficient to issue all Common Stock issuable pursuant to the Offering (including Common Stock issuable upon the exercise of any Common Warrants or Pre-Funded Warrants) and the issuance of such Common Stock will not exceed the number of then-authorized shares of Common Stock of the Company. As to any facts material to the opinions expressed herein, which were not independently established or verified, we have relied upon statements and representations of officers and other representatives of the Company and others.

Based upon the foregoing, and having due regard for such legal considerations as we deem relevant, we are of the opinion that:

1. The Firm Shares have been duly authorized and, when issued by the Company in accordance with and in the manner described in the Original Registration Statement and in accordance with the resolutions adopted by the Board, will be validly issued, fully paid and non-assessable;

2. The Pre-Funded Warrants have been duly authorized and, when duly executed and delivered by the Company in accordance with and in the manner described in the Original Registration Statement and in accordance with the resolutions adopted by the Board, will constitute valid and binding agreements of the Company under the laws of Delaware enforceable against the Company in accordance with its terms, subject to applicable bankruptcy, insolvency, fraudulent conveyance, moratorium and similar laws affecting creditors' rights generally and equitable principles of general applicability;

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3. The Common Warrants have been duly authorized and, when duly executed and delivered by the Company in accordance with and in the manner described in the Original Registration Statement and in accordance with the resolutions adopted by the Board, will constitute valid and binding agreements of the Company under the laws of Delaware enforceable against the Company in accordance with its terms, subject to applicable bankruptcy, insolvency, fraudulent conveyance, moratorium and similar laws affecting creditors' rights generally and equitable principles of general applicability; and

4. The Warrant Shares have been duly authorized and, if issued upon exercise of the Common Warrants or Pre-Funded Warrants against payment therefor in accordance with the terms of the Common Warrants or Pre-Funded Warrants, as applicable, would be validly issued, fully paid and nonassessable.

The foregoing opinions are limited to the substantive laws of the State of Delaware and we do not express any opinion herein concerning any other law. We express no opinion as to compliance with any federal or state securities laws, including the securities laws of the State of Delaware or as to federal or state laws regarding fraudulent transfers. We assume no obligation to supplement this opinion if any applicable law changes after the date hereof or if we become aware of any fact that might change the opinion expressed herein after the date hereof.

We hereby consent to the filing of this opinion as a part of the Registration Statement and to the reference of our firm under the caption "Legal Matters" in the Original Registration Statement. In giving such consent, we do not hereby admit that we are in the category of persons whose consent is required under Section 7 of the Securities Act or the rules and regulations of the Commission.

Very truly yours,

/s/ Pepper Hamilton LLP

Pepper Hamilton LLP

Consent of Independent Registered Public Accounting Firm

Interpace Diagnostics Group, Inc.
Parsippany, New Jersey

We hereby consent to the use in the Registration Statement on Form S-1 MEF filed pursuant to Rule 462(b) under the Securities Act of 1933 of our report dated March 31, 2017, relating to the consolidated financial statements and schedules of Interpace Diagnostics Group, Inc., which is incorporated by reference in that Registration Statement. Our report contains an explanatory paragraph regarding the Company's ability to continue as a going concern.

We also consent to the reference to us under the caption "Experts" in the Prospectus incorporated by reference into such Registration Statement.

/s/ BDO USA, LLP

BDO USA, LLP
Woodbridge, New Jersey

June 16, 2017

BDO USA, LLP, a Delaware limited liability partnership, is the U.S. member of BDO International Limited, a UK company limited by guarantee, and forms part of the international BDO network of independent member firms.

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