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

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**SCHEDULE 13D**

**Under the Securities Exchange Act of 1934  
(Amendment No. 1)\***

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**OPTIMIZERX CORPORATION**

(Name of Issuer)

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**Common Stock, par value \$0.001 per share  
(Title of Class of Securities)**

**760174 10 2  
(CUSIP Number)**

**WPP plc  
Sea Containers  
18 Upper Ground  
London, United Kingdom SE1 9GL  
Telephone: +44(0) 20 7408 2204  
Attention: Andrea Harris, Esq.**

(Name, Address and Telephone Number of Person Authorized to Receive Notices and Communications)

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*Copies to:*

**Curt Myers, Esq.  
Davis & Gilbert LLP  
1740 Broadway  
New York, New York 10019  
(212) 468-4800**

**December 20, 2018  
(Date of Event which Requires Filing of this Statement)**

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If the filing person has previously filed a statement on Schedule 13G to report the acquisition that is the subject of this Schedule 13D, and is filing this schedule because of §§ 240.13d-1(e), 240.13d-1(f) or 240.13d-1(g), check the following box.

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**NOTE:** Schedules filed in paper format shall include a signed original and five copies of the schedule, including all exhibits. See §§ 240.13d-7 for other parties to whom copies are to be sent.

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\* The remainder of this cover page shall be filled out for a reporting person's initial filing on this form with respect to the subject class of securities, and for any subsequent amendment containing information which would alter the disclosures provided in a prior cover page.

The information required on the remainder of this cover page shall not be deemed to be "filed" for the purpose of Section 18 of the Securities Exchange Act of 1934 ("Act") or otherwise subject to the liabilities of that section of the Act but shall be subject to all other provisions of the Act.

1	NAMES OF REPORTING PERSONS WPP LUXEMBOURG GAMMA THREE S.À R.L.	
2	CHECK THE APPROPRIATE BOX IF A MEMBER OF A GROUP (See Instructions)  (a) <input type="checkbox"/> (b) <input type="checkbox"/>	
3	SEC USE ONLY	
4	SOURCE OF FUNDS (See Instructions) WC	
5	CHECK IF DISCLOSURE OF LEGAL PROCEEDINGS IS REQUIRED PURSUANT TO ITEMS 2(d) or 2(e)  <input type="checkbox"/>	
6	CITIZENSHIP OR PLACE OF ORGANIZATION LUXEMBOURG	
NUMBER OF SHARES BENEFICIALLY OWNED BY EACH REPORTING PERSON WITH	7	SOLE VOTING POWER 0 (SEE ITEMS 2 AND 5)
	8	SHARED VOTING POWER 0 (SEE ITEMS 2 AND 5)
	9	SOLE DISPOSITIVE POWER 0 (SEE ITEMS 2 AND 5)
	10	SHARED DISPOSITIVE POWER 0 (SEE ITEMS 2 AND 5)
11	AGGREGATE AMOUNT BENEFICIALLY OWNED BY EACH REPORTING PERSON 0 (SEE ITEMS 2 AND 5)	
12	CHECK IF THE AGGREGATE AMOUNT IN ROW (11) EXCLUDES CERTAIN SHARES  <input type="checkbox"/>	
13	PERCENT OF CLASS REPRESENTED BY AMOUNT IN ROW (11) 0 (SEE ITEM 5)	
14	TYPE OF REPORTING PERSON (See Instructions) OO	

1	NAMES OF REPORTING PERSONS WPP PLC	
2	CHECK THE APPROPRIATE BOX IF A MEMBER OF A GROUP (See Instructions)  (a) <input type="checkbox"/> (b) <input type="checkbox"/>	
3	SEC USE ONLY	
4	SOURCE OF FUNDS (See Instructions) AF	
5	CHECK IF DISCLOSURE OF LEGAL PROCEEDINGS IS REQUIRED PURSUANT TO ITEMS 2(d) or 2(e)  <input type="checkbox"/>	
6	CITIZENSHIP OR PLACE OF ORGANIZATION JERSEY	
NUMBER OF SHARES BENEFICIALLY OWNED BY EACH REPORTING PERSON WITH	7	SOLE VOTING POWER 0 (SEE ITEMS 2 AND 5)
	8	SHARED VOTING POWER 0 (SEE ITEMS 2 AND 5)
	9	SOLE DISPOSITIVE POWER 0 (SEE ITEMS 2 AND 5)
	10	SHARED DISPOSITIVE POWER 0 (SEE ITEMS 2 AND 5)
11	AGGREGATE AMOUNT BENEFICIALLY OWNED BY EACH REPORTING PERSON 0 (SEE ITEMS 2 AND 5)	
12	CHECK IF THE AGGREGATE AMOUNT IN ROW (11) EXCLUDES CERTAIN SHARES  <input type="checkbox"/>	
13	PERCENT OF CLASS REPRESENTED BY AMOUNT IN ROW (11) 0 (SEE ITEM 5)	
14	TYPE OF REPORTING PERSON (See Instructions) CO	

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This Amendment No. 1 relates to the Schedule 13D filed by the Reporting Persons with the Securities and Exchange Commission (the “Commission”) on October 2, 2015 (the “Schedule 13D”), relating to the common stock, par value \$0.001 per share (the “Common Stock”) of OptimizeRx Corporation, a Nevada corporation. Unless set forth below, all Items are unchanged from the Schedule 13D. Capitalized terms used herein and not otherwise defined herein shall have the meanings ascribed to such terms in the Schedule 13D.

**Item 2. Identity and Background.**

Paragraphs (a)-(c) and (f) of Item 2 of the Schedule 13D are hereby deleted and replaced with the following:

- (a)-(c) This Schedule 13D is being filed by WPP Luxembourg Gamma Three S.à r.l., a private limited liability company (*société à responsabilité limitée*) incorporated under the laws of the Grand Duchy of Luxembourg (“Lux Gamma Three”) and WPP plc, a corporation formed under the laws of Jersey. WPP plc indirectly holds 100% of the outstanding stock of Lux Gamma Three through a series of intervening holding companies. Lux Gamma Three and WPP plc are sometimes referred to herein collectively as the “Reporting Persons” and individually as a “Reporting Person.”
- WPP plc and its subsidiaries (the “WPP Group”) comprise one of the largest communications services businesses in the world. The WPP Group provides communications services on a national, multinational and global basis. It operates from over 3,000 offices in 112 countries including associates. The WPP Group organizes its businesses into four business segments: Advertising and Media Investment Management; Data Investment Management; Public Relations & Public Affairs; and Brand Consulting, Health & Wellness and Specialist Communications (including direct, digital and interactive marketing).
- The address of the principal office of Lux Gamma Three is 124 Boulevard de la Petrusse, Luxembourg, L-2330. The address of the principal office of WPP plc is Sea Containers, 18 Upper Ground, London, United Kingdom SE1 9GL.
- (d) During the past five years, none of the Reporting Persons nor, to the knowledge of the Reporting Persons, any of their respective executive officers or directors, has been convicted in a criminal proceeding (excluding traffic violations and similar misdemeanors).

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- (e) During the past five years, none of the Reporting Persons nor, to the knowledge of the Reporting Persons, any of their respective executive officers or directors, has been a party to a civil proceeding of a judicial or administrative body of competent jurisdiction as a result of which such person was or is subject to a judgment, decree or final order enjoining future violations of, or prohibiting or mandating activities subject to, federal or state securities laws, or finding any violation with respect to such laws.
  - (f) The name, citizenship, business address, principal business occupation or employment of each of the directors and executive officers of each of the Reporting Persons are set forth on Annex A hereto.

**Item 5. Interest in Securities of the Issuer.**

Item 5 of the Schedule 13D is hereby amended and restated as follows:

- (a), (b) As of the date hereof, the Reporting Persons do not beneficially own, and do not have sole power to vote or to direct the vote, sole power to dispose or to direct the disposition of, or shared power to dispose or to direct the disposition of, any shares of Common Stock.
- (c) As described in further detail in Item 6 below, on December 20, 2018, Lux Gamma Three sold 2,103,702 shares of Common Stock in an underwritten public offering (the "Offering"), pursuant to the underwriting agreement, dated December 18, 2018 (the "2018 Underwriting Agreement"), by and among the Company, Lux Gamma Three and William Blair & Company, L.L.C. and B. Riley FBR, Inc. as representatives (together, the "Representatives") of the several Underwriters named in Schedule II thereto (the "Underwriters"). Pursuant to the Underwriting Agreement, Lux Gamma Three sold such 2,103,702 shares of Common Stock to the Underwriters at a price per share of U.S. \$9.45.
- (d) Not applicable.
- (e) As of December 20, 2018, the Reporting Persons ceased to be the beneficial owners of more than 5% of the outstanding Common Shares.

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**Item 6. Contracts, Arrangements, Understandings or Relationships with Respect to Securities of the Issuer.**

Item 6 of the Schedule 13D is hereby further amended and supplemented by adding the following paragraphs immediately prior to the final paragraph thereof:

**2018 Underwriting Agreement**

On December 18, 2018, Lux Gamma Three entered into the 2018 Underwriting Agreement with the Company and the Representatives, pursuant to which Lux Gamma Three agreed to sell 2,103,702 shares of Common Stock to the Underwriters at a price per share of U.S. \$9.45 (the "Underwritten Shares"). On December 20, 2018, the Underwriters acquired all of the Underwritten Shares.

The 2018 Underwriting Agreement is filed as an exhibit to this Schedule 13D in Item 7.

**2018 Lock-Up Agreement**

In connection with the Offering and pursuant to the Underwriting Agreement, on December 13, 2018, Lux Gamma Three entered into a lock-up agreement (the "Lock-Up Agreement") with the Underwriters pursuant to which, with limited exceptions, without the prior written consent of the Underwriters, Lux Gamma Three may not, during the period ending 90 days after the date of the final prospectus relating to the Offering (the "Lock-Up Period"), (i) offer, sell, contract to sell, announce the intention to sell, pledge, grant any option to purchase or otherwise dispose of any securities of the Company, or any securities convertible into or exercisable or exchangeable for, or any rights to purchase or otherwise acquire, any securities of the Company held by Lux Gamma Three or acquired by Lux Gamma Three after the date of the Lock-Up Agreement, or that may be deemed to be beneficially owned by Lux Gamma Three (collectively, the "Lock-Up Shares"), pursuant to the Rules and Regulations promulgated under the Securities Act of 1933, as amended (the "Act"), and the Securities Exchange Act of 1934, as amended; (ii) exercise or seek to exercise or effectuate in any manner any rights of any nature that Lux Gamma Three has or may have hereafter to require the Company to register under the Act Lux Gamma Three's sale, transfer or other disposition of any of the Lock-Up Shares or other securities of the Company held by Lux Gamma Three, or to otherwise participate as a selling securityholder in any manner in any registration effected by the Company under the Act during the Lock-Up Period; or (iii) publicly disclose the intention to do any of the foregoing (except as may be required by applicable law).

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The 2018 Lock-Up Agreement is filed as an exhibit to this Schedule 13D in Item 7.

**Item 7. Material to be Filed as Exhibits.**

Item 7 of the Schedule 13D is hereby amended and restated as follows:

1. Joint Filing Agreement among the Reporting Persons, dated as of September 24, 2015 (previously filed).
2. Stock Purchase Agreement, dated as of September 24, 2015, incorporated by reference to Exhibit 10.1 to the Company's Current Report on Form 8-K, filed on September 30, 2015 (the "Form 8-K").
3. Investor Rights Agreement, dated as of September 24, 2015, incorporated by reference to Exhibit 10.2 to the Form 8-K.
4. Form of Underwriting Agreement.
5. Form of 2018 Lock-Up Agreement.

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After reasonable inquiry and to the best of my knowledge and belief, I certify that the information set forth in this statement is true, complete and correct.

Dated: December 20, 2018

WPP LUXEMBOURG GAMMA THREE S.À R.L.

By: /s/ Anne Ehrismann

Name: Anne Ehrismann

Title: Manager

By: /s/ Thierry Lenders

Name: Thierry Lenders

Title: Manager

WPP PLC

By: /s/ Paul W.G. Richardson

Name: Paul W.G. Richardson

Title: Group Chief Finance Officer



Annex A

Executive Officers and Directors

**WPP Luxembourg Gamma Three S.à r.l.**

<u>Name and Citizenship</u>	<u>Position</u>	<u>Principal Occupation or Employment</u>	<u>Business Address</u>
Anne Ehrismann France	Director	Manager	124 Boulevard de la Petrusse, Luxembourg, L-2330
Marc Feider Luxembourg	Director	Lawyer (Allen & Overy Luxembourg)	33 avenue J.F. Kennedy, L-1855 Luxembourg
Peter Gerrard Luxembourg	Director	Managing Director	124 Boulevard de la Petrusse, Luxembourg, L-2330
Thierry Lenders Belgium	Director	European Treasury Manager	Rue Jules Cockx 8-10, Brussels, 1160, Belgium
Emile Van Popering Netherlands	Director	Finance Director	Cantersteen 47, 1000 Brussels, Belgium
Lennart Stenke Luxembourg	Director	Company Director	124 Boulevard de la Petrusse, Luxembourg, L-2330
Astrid van Heulen-Mulder Netherlands	Director	CFO	Laan op Zuid 167, Rotterdam, 3072 DB, Netherlands

**WPP plc**

<u>Name and Citizenship</u>	<u>Position</u>	<u>Principal Occupation or Employment</u>	<u>Business Address</u>
Roberto Quarta United States and Italy	Chairman	Chairman	Sea Containers, 18 Upper Ground, London, United Kingdom SE1 9GL
Mark Read United Kingdom	Chief Executive Officer and Director	Chief Executive Officer	Sea Containers, 18 Upper Ground, London, United Kingdom SE1 9GL

Paul W.G. Richardson United Kingdom and United States	Group Finance Director and Director	Group Finance Director	Sea Containers, 18 Upper Ground, London, United Kingdom SE1 9GL
Jacques Aigrain France and Switzerland	Non-Executive Director	Senior Advisor (Warburg Pincus LLP), Non-Executive Director (London Stock Exchange Group plc), Supervisory Board Member (LyondellBasell NV and Swiss International Airlines AG)	Almack House, 28 King Street, St. James's, SW1Y 6QW, London, United Kingdom
Tarek Farahat Egypt and Brazil	Non-Executive Director	Global Adviser (JBS Worldwide), Director (Pilgrims Pride Corp.)	Sea Containers, 18 Upper Ground, London, United Kingdom SE1 9GL
Sir John Hood New Zealand	Non-Executive Director	President & CEO (Robertson Foundation), Chairman (Study Group Limited, BMT Group), Chair (Rhodes Trust), Director (Aurora Energy Research, Blackstone, Fletcher Trust, the Mandela Rhodes Foundation and the Said Business School Foundation, African Leadership Academy.	Sea Containers, 18 Upper Ground, London, United Kingdom SE1 9GL
Ruigang Li People's Republic of China	Non-Executive Director	Founding Chairman and CEO (CMC Capital Partners and CMC Holdings)	Unit 3607B-08, The Centre, 989 Changle Road, Xinhui District, Shanghai, 200031, China
Daniela Riccardi Italy	Non-Executive Director	CEO (Baccarat Company), Director (Kering SA and Comite Colbert)	11 place des Etats-Unis—75116 Paris, France
Nicole Seligman United States	Non-Executive Director	Director (Viacom Inc.)	Sea Containers, 18 Upper Ground, London, United Kingdom SE1 9GL
Hugo Shong United States	Non-Executive Director	President (IDG Asia/China), Global Chairman (IDG Capital), Director (Mei Ah Entertainment Group Ltd.)	Sea Containers, 18 Upper Ground, London, United Kingdom SE1 9GL
Sally Susman United States	Non-Executive Director	Executive Vice President, Corporate Affairs (Pfizer Inc.)	235 East 42nd Street, New York, NY 10017, United States

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Solomon Trujillo  
United States

Non-Executive Director

Director (Western Union Company,  
ProAmerica) and Chairman (Soufun  
Holdings)

Sea Containers, 18 Upper Ground,  
London, United Kingdom SE1  
9GL

Andrew Scott  
United Kingdom

Chief Operating Officer

Chief Operating Officer

Sea Containers, 18 Upper Ground,  
London, United Kingdom SE1  
9GL

2,103,702 Shares

OPTIMIZERX CORPORATION

Common Stock, par value \$0.001 per share

UNDERWRITING AGREEMENT

December 18, 2018

WILLIAM BLAIR & COMPANY, L.L.C.  
B. RILEY FBR, INC.  
As Representatives of the several  
Underwriters named in Schedule II hereto

c/o William Blair & Company, L.L.C.  
150 North Riverside Plaza  
Chicago, Illinois 60606

c/o B. Riley FBR, Inc.  
1300 17th Street N., Suite 1300  
Arlington, VA 22209

Ladies and Gentlemen:

The selling shareholder named in Schedule I hereto (the "**Selling Shareholder**") proposes to sell to the several Underwriters named in Schedule II hereto (the "**Underwriters**") an aggregate of 2,103,702 shares (the "**Firm Shares**") of Common Stock, par value \$0.001 per share (the "**Common Stock**"), of OptimizeRx Corporation, a Nevada corporation (the "**Company**"). The Company has also granted to the several Underwriters an option to purchase up to 315,555 additional shares of Common Stock on the terms and for the purposes set forth in Section 4 hereof (collectively, the "**Option Shares**"). The Firm Shares and any Option Shares purchased pursuant to this Underwriting Agreement are herein collectively called the "**Securities**."

The Company and the Selling Shareholder hereby confirm their agreement with respect to the sale of the Securities to the several Underwriters, for whom William Blair & Company, L.L.C. and B. Riley FBR, Inc. are acting as representatives (the "**Representatives**" or "**you**").

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1. **Registration Statement and Prospectus.** A shelf registration statement on Form S-3 (File No. 333-228357) with respect to the Securities, including a preliminary form of base prospectus, has been prepared by the Company in conformity with the requirements of the Securities Act of 1933, as amended (the “**Act**”), and the rules and regulations (“**Rules and Regulations**”) of the Securities and Exchange Commission (the “**Commission**”) thereunder and has been filed with the Commission. Such registration statement, including the amendments, exhibits and schedules thereto, as of the time it became effective, including the Rule 430B Information (as defined below), is referred to herein as the “**Registration Statement**.” The Company will prepare and file a prospectus supplement pursuant to Rule 424(b) of the Rules and Regulations that discloses the information previously omitted from the Base Prospectus (as defined below) in the Registration Statement in reliance upon Rule 430B of the Rules and Regulations, which information will be deemed retroactively to be a part of the Registration Statement in accordance with Rule 430B of the Rules and Regulations (“**Rule 430B Information**”). If the Company has elected to rely upon Rule 462(b) of the Rules and Regulations to increase the size of the offering registered under the Act, the Company will prepare and file with the Commission a registration statement with respect to such increase pursuant to Rule 462(b) of the Rules and Regulations (such registration statement, including the contents of the Registration Statement incorporated by reference therein is the “**Rule 462(b) Registration Statement**”). References herein to the “**Registration Statement**” will be deemed to include the Rule 462(b) Registration Statement at and after the time of filing of the Rule 462(b) Registration Statement. “**Base Prospectus**” means the base prospectus contained in the Registration Statement at the time of effectiveness of the Registration Statement. “**Preliminary Prospectus**” means any preliminary prospectus supplement to the Base Prospectus which is used prior to the filing of the Prospectus, together with the Base Prospectus. “**Prospectus**” means the prospectus supplement that discloses the public offering price and other final terms of the Securities and the offering and otherwise satisfies Section 10(a) of the Act that is filed pursuant to Rule 424(b) after the execution of this Agreement, together with the Base Prospectus. Any reference herein to the Registration Statement, the Base Prospectus, any Preliminary Prospectus or the Prospectus shall be deemed to refer to and include the documents incorporated by reference therein pursuant to Item 12 of Form S-3 which were filed under the Securities Exchange Act of 1934, as amended (the “**Exchange Act**”), on or before the effective date of the Registration Statement or the issue date of the Base Prospectus, any Preliminary Prospectus or the Prospectus, as the case may be; and any reference herein to the terms “amend,” “amendment” or “supplement” with respect to the Registration Statement, the Base Prospectus, any Preliminary Prospectus or the Prospectus shall be deemed to refer to and include the filing of any document under the Exchange Act after the effective date of the Registration Statement or the issue date of the Base Prospectus, any Preliminary Prospectus or the Prospectus, as the case may be, deemed to be incorporated by reference therein. All references in this Agreement to the Registration Statement, Base Prospectus, any Preliminary Prospectus, the Prospectus or any amendment or supplement to any of the foregoing, is deemed to include the copy filed with the Commission pursuant to its Electronic Data Gathering, Analysis and Retrieval System (“**EDGAR**”) or any successor system thereto.

All references herein to the Registration Statement, any Preliminary Prospectus or a Prospectus shall be deemed as of any time to include the documents and information incorporated therein by reference in accordance with the Rules and Regulations.

2. **Representations and Warranties of the Company.** The Company represents and warrants to, and agrees with, each Underwriter as follows:

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(a) *Registration Statement and Prospectuses.* The Registration Statement and any post-effective amendment thereto has become effective under the Act. No stop order suspending the effectiveness of the Registration Statement or any post-effective amendment thereto has been issued, and no proceeding for that purpose has been initiated or, to the Company's knowledge, threatened by the Commission. No order preventing or suspending the use of any Preliminary Prospectus or the Prospectus (or any supplement thereto) has been issued by the Commission and no proceeding for that purpose has been initiated or, to the Company's knowledge, threatened by the Commission. As of the time each part of the Registration Statement (or any post-effective amendment thereto) became or becomes effective, such part conformed or will conform in all material respects to the requirements of the Act and the Rules and Regulations. Upon the filing or first use within the meaning of the Rules and Regulations, each Preliminary Prospectus and the Prospectus (or any supplement to either) conformed or will conform in all material respects to the requirements of the Act and the Rules and Regulations. The conditions to the use of Form S-3 in connection with the offering and sale of the Securities as contemplated hereby have been satisfied.

(b) *Accurate Disclosure.* Each Preliminary Prospectus, at the time of filing thereof or the time of first use within the meaning of the Rules and Regulations, did not contain an untrue statement of a material fact or omit to state a material fact required to be stated therein or necessary to make the statements therein, in the light of the circumstances under which they were made, not misleading. Neither the Registration Statement nor any amendment thereto, at the effective time of each part thereof, at the First Closing Date (as defined below) or at the Second Closing Date (as defined below) contained, contains or will contain an untrue statement of a material fact or omitted, omits or will omit to state a material fact required to be stated therein or necessary to make the statements therein not misleading. As of the Time of Sale (as defined below), neither (A) the Time of Sale Disclosure Package (as defined below) nor (B) any issuer free writing prospectus (as defined below), when considered together with the Time of Sale Disclosure Package, included an untrue statement of a material fact or omitted to state a material fact necessary in order to make the statements therein, in light of the circumstances under which they were made, not misleading. Neither the Prospectus nor any supplement thereto, as of its issue date, at the time of any filing with the Commission pursuant to Rule 424(b) of the Rules and Regulations, at the First Closing Date or at the Second Closing Date, included, includes or will include an untrue statement of a material fact or omitted, omits or will omit to state a material fact necessary in order to make the statements therein, in light of the circumstances under which they were made, not misleading. The representations and warranties in this Section 2(b) shall not apply to statements in or omissions from any Preliminary Prospectus, the Registration Statement (or any amendment thereto), the Time of Sale Disclosure Package or the Prospectus (or any supplement thereto) made in reliance upon, and in conformity with, written information furnished to the Company by you, or by any Underwriter through you, specifically for use in the preparation of such document, it being understood and agreed that the only such information furnished by any Underwriter consists of the information described as such in Section 8(f) (the "***Underwriters Information***").

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Each reference to an “*issuer free writing prospectus*” herein means an issuer free writing prospectus as defined in Rule 433 of the Rules and Regulations.

“*Time of Sale Disclosure Package*” means the Preliminary Prospectus dated December 17, 2018, any free writing prospectus set forth on Schedule IV and the information on Schedule V, all considered together.

Each reference to a “*free writing prospectus*” herein means a free writing prospectus as defined in Rule 405 of the Rules and Regulations.

“*Time of Sale*” means 8:30 a.m. (New York time) on the date of this Agreement.

(c) Issuer Free Writing Prospectuses.

(i) Each issuer free writing prospectus, as of its issue date and at all subsequent times through the completion of the public offer and sale of the Securities or until any earlier date that the Company notified or notifies the Representatives as described in Section 5(c)(ii), did not, does not and will not include any information that conflicted, conflicts or will conflict with the information contained in the Registration Statement or the Prospectus. The foregoing sentence does not apply to statements in or omissions from any issuer free writing prospectus based upon and in conformity with written information furnished to the Company by you or by any Underwriter through you specifically for use therein; it being understood and agreed that the only such information furnished by any Underwriter consists of the Underwriters Information.

(ii) At the time of filing the Registration Statement and any post-effective amendment thereto, and at the date hereof, the Company was not and is not an “ineligible issuer,” as defined in Rule 405 of the Rules and Regulations, without taking account of any determination by the Commission pursuant to Rule 405 of the Rules and Regulations that it is not necessary that the Company be considered an ineligible issuer.

(iii) Each issuer free writing prospectus satisfied, as of its issue date and at all subsequent times through the completion of the public offer and sale of the Securities, all other conditions to use thereof as set forth in Rules 164 and 433 under the Act.

(d) No Other Offering Materials. The Company has not distributed and will not distribute any prospectus or other offering material in connection with the offering and sale of the Securities other than any Preliminary Prospectus, the Time of Sale Disclosure Package or the Prospectus or other materials permitted by the Act to be distributed by the Company; *provided, however*, that, except as set forth on Schedule IV hereto and in accordance with the provisions of Section 5(o) of this Agreement, the Company has not made and will not make any offer relating to the Securities that would constitute a free writing prospectus. The Company has not made and will not make any communication relating to the Securities that would constitute a Testing-the-Waters Communication. “*Testing-the-Waters Communication*” means any oral or written communication with potential investors undertaken in reliance on Section 5(d) of the Act.

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(e) *Incorporated Documents*. The documents incorporated by reference in the Registration Statement, the Time of Sale Disclosure Package and Prospectus, when they were filed with the Commission conformed in all material respects to the requirements of the Exchange Act, and none of such documents contained any untrue statement of a material fact or omitted to state a material fact necessary to make the statements therein, in the light of the circumstances under which they were made, not misleading; and any further documents so filed and incorporated by reference in the Registration Statement, the Time of Sale Disclosure Package and Prospectus, when such documents are filed with the Commission will conform in all material respects to the requirements of the Exchange Act and will not contain any untrue statement of a material fact or omit to state a material fact necessary to make the statements therein, in the light of the circumstances under which they were made, not misleading.

(f) *Financial Statements*. The financial statements of the Company, together with the related notes, set forth in the Registration Statement, the Time of Sale Disclosure Package and Prospectus comply in all material respects with the requirements of the Act and the Rules and Regulations and fairly present in all material respects the financial condition of the Company and its consolidated subsidiaries as of the dates indicated and the results of operations, cash flows and changes in stockholders' equity for the periods therein specified. The financial statements of the Company, together with the related notes, set forth in the Registration Statement, the Time of Sale Disclosure Package and Prospectus are in conformity with generally accepted accounting principles in the United States ("*GAAP*") consistently applied throughout the periods involved. The supporting schedules of the Company included or incorporated by reference in the Registration Statement present fairly in all material respects the information required to be stated therein. All non-GAAP financial information included in the Registration Statement, the Time of Sale Disclosure Package and the Prospectus complies with the applicable requirements of Regulation G and Item 10 of Regulation S-K under the Act. There is no pro forma or as adjusted financial information which is required to be included in the Registration Statement, the Time of Sale Disclosure Package or and the Prospectus or a document incorporated by reference therein in accordance with Regulation S-X which has not been included or incorporated as so required. Except as disclosed in the Registration Statement, the Time of Sale Disclosure Package and the Prospectus, there are no material off-balance sheet arrangements (as defined in Regulation S-K under the Act, Item 303(a)(4)(ii)) or any other relationships with unconsolidated entities or other persons, that may have a material current or, to the Company's knowledge, material future effect on the Company's financial condition, results of operations, liquidity, capital expenditures, capital resources or significant components of revenue or expenses. No other financial statements or schedules are required to be included or incorporated by reference in the Registration Statement, the Time of Sale Disclosure Package or the Prospectus. Sadler, Gibb & Associates, LLC, which has expressed its opinion with respect to the financial statements of the Company and related schedules filed as a part of the Registration Statement and included or incorporated by reference in the Registration Statement, the Time of Sale Disclosure Package and the Prospectus, is (x) an independent public accounting firm within the meaning of the Act and the Rules and Regulations, (y) a registered public accounting firm (as defined in Section 2(a)(12) of the Sarbanes-Oxley Act of 2002 (the "*Sarbanes-Oxley Act*")) and (z) not in violation of the auditor independence requirements of the Sarbanes-Oxley Act.



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(g) Organization and Good Standing. Each of the Company and its subsidiaries has been duly organized and is validly existing as an entity in good standing under the laws of its jurisdiction of organization and reorganization, as applicable. Each of the Company and its subsidiaries has full corporate power and authority to own its properties and conduct its business as currently being carried on and as described in the Registration Statement, the Time of Sale Disclosure Package and Prospectus, and is duly qualified to do business as a foreign entity in good standing in each jurisdiction in which it owns or leases real property or in which the conduct of its business makes such qualification necessary and in which the failure to so qualify or be in good standing would have a material adverse effect upon the business, management, properties, operations, condition (financial or otherwise) or results of operations of the Company and its subsidiaries, taken as a whole (“**Material Adverse Effect**”).

(h) Absence of Certain Events. Except as contemplated in the Registration Statement, the Time of Sale Disclosure Package and in the Prospectus, subsequent to the respective dates as of which information is given in the Time of Sale Disclosure Package, neither the Company nor any of its subsidiaries has incurred any material liabilities or obligations, direct or contingent, or entered into any material transactions, or declared or paid any dividends or made any distribution of any kind with respect to its capital stock; and there has not been any change in the capital stock (other than a change in the number of outstanding shares of Common Stock due to the issuance of shares upon the exercise of outstanding options or warrants or conversion of convertible securities, or due to the issuance of shares of Common Stock to the directors in satisfaction of their compensation for serving as a director), or any material change in the short-term or long-term debt (other than as a result of the conversion of convertible securities), or any issuance of options, warrants, convertible securities or other rights to purchase the capital stock, of the Company or any of its subsidiaries, or any material adverse change in the general affairs, condition (financial or otherwise), business, prospects, management, properties, operations or results of operations of the Company and its subsidiaries, taken as a whole (“**Material Adverse Change**”) or any development which could reasonably be expected to result in any Material Adverse Change.

(i) Absence of Proceedings. Except as set forth in the Time of Sale Disclosure Package and in the Prospectus, there is not pending or, to the knowledge of the Company, threatened or contemplated, any action, suit or proceeding (a) to which the Company or any of its subsidiaries is a party or (b) which, to the knowledge of the Company, has as the subject thereof any officer or director of the Company or its subsidiaries, any employee benefit plan sponsored by the Company or its subsidiaries or any property or assets owned or leased by the Company or its subsidiaries before or by any court or Governmental Authority (as defined below), or any arbitrator, which, individually or in the aggregate, might result in any Material Adverse Change, or would materially and adversely affect the ability of the Company to perform its obligations under this Agreement. There are no current or, to the knowledge of the Company, pending, legal, governmental or regulatory actions, suits or proceedings (x) to which the Company or its subsidiaries is subject or (y) which has as the subject thereof any officer or director of the Company or its subsidiaries, any employee plan sponsored by the Company or its subsidiaries or any property or assets owned or leased by the Company or its subsidiaries, that are required to be described in the Registration Statement, Time of Sale Disclosure Package and Prospectus by the Act or by the Rules and Regulations and that have not been so described.

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(j) *Authorization; No Conflicts; Authority.* This Agreement has been duly authorized, executed and delivered by the Company. This Agreement constitutes a valid, legal and binding obligation of the Company, enforceable in accordance with its terms, except as rights to indemnity hereunder may be limited by federal or state securities laws and except as such enforceability may be limited by bankruptcy, insolvency, reorganization or similar laws affecting the rights of creditors generally and subject to general principles of equity. The execution, delivery and performance of this Agreement and the consummation of the transactions herein contemplated will not (A) conflict with or result in a breach or violation of any of the terms or provisions of, or constitute a default under, or result in the creation or imposition of any lien, charge or encumbrance upon any property or assets of the Company or its subsidiaries pursuant to any indenture, mortgage, deed of trust, loan agreement or other agreement or instrument to which the Company or its subsidiaries is a party or by which the Company or its subsidiaries is bound or to which any of the property or assets of the Company or its subsidiaries is subject, (B) result in any violation of the provisions of the Company's charter or by-laws or (C) result in the violation of any law or statute or any judgment, order, rule, regulation or decree of any court or arbitrator or federal, state, local or foreign governmental agency or regulatory authority having jurisdiction over the Company or its subsidiaries or any of their properties or assets (each, a "**Governmental Authority**"), except in the case of clauses (A) and (C) as would not result in a Material Adverse Effect. No consent, approval, authorization or order of, or registration or filing with any Governmental Authority is required to be obtained by the Company for the execution, delivery and performance of this Agreement or for the consummation of the transactions contemplated hereby, including the issuance or sale of the Securities by the Company, except such as may be required under the Act, the rules of the Financial Industry Regulatory Authority, Inc. ("**FINRA**"), the rules of The Nasdaq Stock Market LLC or state securities or blue sky laws; and the Company has full power and authority to enter into this Agreement and to consummate the transactions contemplated hereby, including the authorization, issuance and sale of the Securities as contemplated by this Agreement.

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(k) *Capitalization; the Securities; Registration Rights.* All of the issued and outstanding shares of capital stock of the Company, including the outstanding shares of Common Stock, are duly authorized and validly issued, fully paid and nonassessable, have been issued in compliance with all federal and state and foreign securities laws, were not issued in violation of or subject to any preemptive rights or other rights to subscribe for or purchase securities that have not been waived in writing (a copy of which has been delivered to counsel to the Underwriters), and the holders thereof are not subject to personal liability by reason of being such holders; the Securities which may be sold hereunder have been duly authorized and, when issued, delivered and paid for in accordance with the terms of this Agreement, will have been validly issued and will be fully paid and nonassessable, and the holders thereof will not be subject to personal liability by reason of being such holders; and the capital stock of the Company, including the Common Stock, conforms in all material respects to the description thereof in the Registration Statement, in the Time of Sale Disclosure Package and in the Prospectus. Except as otherwise stated in the Registration Statement, in the Time of Sale Disclosure Package and in the Prospectus, (A) there are no preemptive rights or other rights to subscribe for or to purchase, or any restriction upon the voting or transfer of, any shares of Common Stock pursuant to the Company's charter, bylaws or any agreement or other instrument to which the Company or its subsidiaries is a party or by which the Company or its subsidiaries is bound, (B) none of the filing of the Registration Statement, the offering, or the sale of the Securities as contemplated by this Agreement give rise to any rights for or relating to the registration of any shares of Common Stock or other securities of the Company (collectively "**Registration Rights**") and (C) any person to whom the Company has granted Registration Rights has agreed not to exercise such rights until after expiration of the Lock-Up Period (as defined below). All of the issued and outstanding shares of capital stock of each of the Company's subsidiaries has been duly and validly authorized and issued and is fully paid and nonassessable, and, except as otherwise described in the Registration Statement, in the Time of Sale Disclosure Package and in the Prospectus, the Company owns of record and beneficially, free and clear of any security interests, claims, liens, proxies, equities or other encumbrances, all of the issued and outstanding shares of such stock. The Company has an authorized and outstanding capitalization as set forth in the Registration Statement, in the Time of Sale Disclosure Package and in the Prospectus under the caption "Description of Share Capital."

(l) *Stock Options.* Except as described in the Registration Statement, in the Time of Sale Disclosure Package, in the Prospectus, there are no options, warrants, agreements, contracts or other rights in existence to purchase or acquire from the Company or any subsidiaries of the Company any shares of the capital stock of the Company or the subsidiaries of the Company. The description of the Company's stock option, stock bonus and other stock plans or arrangements (the "**Company Stock Plans**"), and the options (the "**Options**") or other rights granted thereunder, set forth in the Time of Sale Disclosure Package and the Prospectus accurately and fairly presents in all material respects the information required to be shown with respect to such plans, arrangements, options and rights. Each grant of an Option (A) was duly authorized no later than the date on which the grant of such Option was by its terms to be effective by all necessary corporate action, including, as applicable, approval by the board of directors of the Company (or a duly constituted and authorized committee thereof) and any required stockholder approval by the necessary number of votes or written consents, and the award agreement governing such grant (if any) was duly executed and delivered by each party thereto and (B) was made in accordance with the terms of the applicable Company Stock Plan, and all applicable laws and regulatory rules or requirements, including all applicable federal securities laws.

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(m) *Compliance with Laws.* The Company and its subsidiaries holds, and is operating in compliance with, all franchises, grants, authorizations, licenses, permits, easements, consents, certificates and orders of any Governmental Authority or self-regulatory body required for the conduct of its business, except where the failure to do so would not, individually or in the aggregate, result in or reasonably be expected to have a Material Adverse Effect, and all such franchises, grants, authorizations, licenses, permits, easements, consents, certifications and orders are valid and in full force and effect, except where failure to be valid and in full force and effect would not, individually or in the aggregate, result in or reasonably be expected to have a Material Adverse Effect; and neither the Company nor its subsidiaries have received notice of any revocation or modification of any such franchise, grant, authorization, license, permit, easement, consent, certification or order or has reason to believe that any such franchise, grant, authorization, license, permit, easement, consent, certification or order will not be renewed in the ordinary course; and the Company and its subsidiaries is in compliance in all material respects with all applicable federal, state, local and foreign laws, regulations, orders and decrees.

(n) *Ownership of Assets.* The Company and its subsidiaries do not own any real property. The Company and its subsidiaries have good and marketable title to all personal property described in the Registration Statement, in the Time of Sale Disclosure Package and in the Prospectus as being owned by them, in each case free and clear of all liens, claims, security interests, other encumbrances or defects except such as are described in the Registration Statement, in the Time of Sale Disclosure Package and in the Prospectus. The property held under lease by the Company and its subsidiaries is held by them under valid, subsisting and enforceable leases (subject to the effects of (A) bankruptcy, insolvency, fraudulent conveyance, fraudulent transfer, reorganization, moratorium or other similar laws relating to or affecting rights or remedies of creditors generally; (B) the application of general principles of equity (including without limitation, concepts of materiality, reasonableness, good faith and fair dealing, regardless of whether enforcement is considered in proceedings at law or in equity); and (C) applicable laws and public policy with respect to rights to indemnify and contribution) with such exceptions with respect to any particular lease as do not interfere in any material respect with the conduct of the business of the Company or its subsidiaries.

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(o) *Intellectual Property*. The Company and its subsidiaries owns, possesses, or, to the knowledge of the Company, can acquire on reasonable terms, all material Intellectual Property (as defined below) necessary for the conduct of the Company's and its subsidiaries' business as now conducted or as described in the Registration Statement, the Time of Sale Disclosure Package and the Prospectus to be conducted. Furthermore, (A) to the knowledge of the Company, and except as described in the Registration Statement, in the Time of Sale Disclosure Package and in the Prospectus, there is no infringement, misappropriation or violation by third parties of any such Intellectual Property, except as such infringement, misappropriation or violation would not result in or reasonably be expected to have a Material Adverse Effect; (B) there is no pending or, to the knowledge of the Company, threatened, action, suit, proceeding or claim by others challenging the Company's or any of its subsidiaries' rights in or to any such Intellectual Property, except as such action, suit, proceeding or claim would not result in or reasonably be expected to have a Material Adverse Effect, and the Company is unaware of any facts which would form a reasonable basis for any such claim; (C) the Intellectual Property owned by the Company and its subsidiaries, and to the knowledge of the Company, the Intellectual Property licensed to the Company and its subsidiaries, has not been adjudged invalid or unenforceable, in whole or in part, and there is no pending or, to the knowledge of the Company, threatened action, suit, proceeding or claim by others challenging the validity or scope of any such Intellectual Property, and the Company is unaware of any facts which would form a reasonable basis for any such claim; (D) there is no pending or, to the knowledge of the Company, threatened action, suit, proceeding or claim by others that the Company or its subsidiaries infringes, misappropriates or otherwise violates any Intellectual Property or other proprietary rights of others, neither the Company or its subsidiaries has received any written notice of such claim, except as such action, suit, proceeding or claim would not result in or reasonably be expected to have a Material Adverse Effect, and the Company is unaware of any other fact which would form a reasonable basis for any such claim; and (E) to the Company's knowledge, no employee of the Company or its subsidiaries is in or has ever been in violation of any term of any employment contract, patent disclosure agreement, invention assignment agreement, non-competition agreement, non-solicitation agreement, nondisclosure agreement or any restrictive covenant to or with a former employer where the basis of such violation relates to such employee's employment with the Company or its subsidiaries or actions undertaken by the employee while employed with the Company or its subsidiaries, except as such violation would not result in or reasonably be expected to have a Material Adverse Effect. "*Intellectual Property*" shall mean all patents, patent applications, trade and service marks, trade and service mark registrations, trade names, copyrights, licenses, inventions, trade secrets, domain names, technology, know-how and other intellectual property.

(p) *No Violations or Defaults*. Neither the Company nor its subsidiaries is (A) in violation of its respective charter, bylaws or other organizational documents, or (B) except as would not result in or reasonably be expected to have a Material Adverse Effect, in breach of or otherwise in default, and no event has occurred which, with notice or lapse of time or both, would constitute such a default in the performance of any material obligation, agreement or condition contained in any bond, debenture, note, indenture, loan agreement or any other material contract, lease or other instrument to which it is subject or by which any of them may be bound, or to which any of the material property or assets of the Company or its subsidiaries is subject.

(q) *Taxes*. The Company and its subsidiaries have timely, or pursuant to a permitted extension, filed all federal, state, local and foreign income and franchise tax returns required to be filed (except in any case in which the failure to so file is not material) and are not in default in the payment of any taxes which were payable pursuant to said returns or any assessments with respect thereto, other than any which the Company or its subsidiaries is contesting in good faith, or to the extent such default is not material. There is no pending dispute with any taxing authority relating to any of such returns, and the Company has no knowledge of any proposed liability for any tax to be imposed upon the properties or assets of the Company or its subsidiaries for which there is not an adequate reserve reflected in the Company's financial statements included in the Registration Statement, the Time of Sale Disclosure Package and the Prospectus.

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(r) *Exchange Listing and Exchange Act Registration.* The Common Stock is registered pursuant to Section 12(b) of the Exchange Act, and is included or approved for listing on The Nasdaq Capital Market and the Company has taken no action designed to, or likely to have the effect of, terminating the registration of the Common Stock under the Exchange Act or delisting the Common Stock from The Nasdaq Capital Market nor has the Company received any notification that the Commission or The Nasdaq Capital Market is contemplating terminating such registration or listing. Except as previously disclosed to counsel for the Underwriters or as set forth in the Time of Sale Disclosure Package and the Prospectus, there are no affiliations with members of FINRA among the Company's officers or directors or, to the knowledge of the Company, any five percent or greater holders of capital stock of the Company or any beneficial owner of the Company's unregistered equity securities that were acquired during the 180-day period immediately preceding the initial filing date of the Registration Statement. The Company is currently in compliance in all material respects with the applicable requirements of The Nasdaq Capital Market for maintenance of inclusion of the Common Stock thereon.

(s) *Ownership of Other Entities.* Other than the subsidiaries of the Company listed in Exhibit 21.1 to the Registration Statement or as otherwise disclosed in the Registration Statement, Time of Sale Disclosure Package and Prospectus, the Company, directly or indirectly, owns no capital stock or other equity or ownership or proprietary interest in any corporation, partnership, association, trust or other entity.

(t) *Internal Controls.* The Company and its subsidiaries maintain a system of internal accounting controls sufficient to provide reasonable assurances that (i) transactions are executed in accordance with management's general or specific authorization; (ii) transactions are recorded as necessary to permit preparation of financial statements in conformity with GAAP and to maintain accountability for assets; (iii) access to assets is permitted only in accordance with management's general or specific authorization; and (iv) the recorded accountability for assets is compared with existing assets at reasonable intervals and appropriate action is taken with respect to any differences. Except as disclosed in the Registration Statement, in the Time of Sale Disclosure Package and in the Prospectus, the Company's internal control over financial reporting is effective and none of the Company, its board of directors and audit committee is aware of any "material weaknesses" (as defined by the Public Company Accounting Oversight Board) in its internal control over financial reporting, or any fraud, whether or not material, that involves management or other employees of the Company or its subsidiaries who have a significant role in the Company's internal controls; and since the end of the latest audited fiscal year, there has been no change in the Company's internal control over financial reporting (whether or not remediated) that has materially adversely affected, or is reasonably likely to materially adversely affect, the Company's internal control over financial reporting. The Company's board of directors has, subject to the exceptions, cure periods and the phase-in periods specified in the applicable stock exchange rules ("*Exchange Rules*"), validly appointed an audit committee to oversee internal accounting controls whose composition satisfies the applicable requirements of the Exchange Rules and the Company's board of directors and/or the audit committee has adopted a charter that satisfies the requirements of the Exchange Rules.

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(u) No Brokers or Finders. Other than as contemplated by this Agreement, the Company has not incurred and will not incur any liability for any finder's or broker's fee or agent's commission in connection with the execution and delivery of this Agreement or the consummation of the transactions contemplated hereby.

(v) Insurance. The Company and each of its subsidiaries carry, or are covered by, insurance from reputable insurers in such amounts and covering such risks as is adequate for the conduct of its business and the value of its properties as is customary for companies engaged in similar businesses in similar industries; all policies of insurance and any fidelity or surety bonds insuring the Company or its subsidiaries or its business, assets, employees, officers and directors are in full force and effect; the Company and its subsidiaries are in compliance with the terms of such policies and instruments in all material respects; there are no claims by the Company or its subsidiaries under any such policy or instrument as to which any insurance company is denying liability or defending under a reservation of rights clause; neither the Company nor its subsidiaries has been refused any insurance coverage sought or applied for; and neither the Company nor its subsidiaries has reason to believe that it will not be able to renew its existing insurance coverage as and when such coverage expires or to obtain similar coverage from similar insurers as may be necessary to continue its business at a cost that would not have a Material Adverse Effect.

(w) Investment Company Act. The Company is not and, after giving effect to the offering and sale of the Securities, will not be an "investment company," as such term is defined in the Investment Company Act of 1940, as amended.

(x) Sarbanes-Oxley Act. The Company is in compliance with all applicable provisions of the Sarbanes-Oxley Act and the rules and regulations of the Commission thereunder.

(y) Disclosure Controls. The Company has established and maintains disclosure controls and procedures (as defined in Rules 13a-15 and 15d-15 under the Exchange Act) and, except as disclosed in the Registration Statement, in the Time of Sale Disclosure Package and in the Prospectus, such controls and procedures are effective in ensuring that material information relating to the Company, including its subsidiaries, is made known to the principal executive officer and the principal financial officer. The Company has utilized such controls and procedures in preparing and evaluating the disclosures in the Company's Exchange Act filings and other public disclosure documents.

(z) *Anti-Bribery and Anti-Money Laundering Laws.* Each of the Company, its subsidiaries, or to the Company's knowledge its affiliates and any of their respective officers, directors, supervisors, managers, agents, or employees, has not violated, its participation in the offering will not violate, and the Company and its subsidiaries has instituted and maintains policies and procedures designed to ensure continued compliance with, each of the following laws: (A) anti-bribery laws, including but not limited to, any applicable law, rule, or regulation of any locality, including but not limited to any law, rule, or regulation promulgated to implement the OECD Convention on Combating Bribery of Foreign Public Officials in International Business Transactions, signed December 17, 1997, including the U.S. Foreign Corrupt Practices Act of 1977, as amended, the U.K. Bribery Act 2010, or any other law, rule or regulation of similar purposes and scope or (B) anti-money laundering laws, including but not limited to, applicable federal, state, international, foreign or other laws, regulations or government guidance regarding anti-money laundering, including, without limitation, Title 18 U.S. Code section 1956 and 1957, the Patriot Act, the Bank Secrecy Act, and international anti-money laundering principles or procedures by an intergovernmental group or organization, such as the Financial Action Task Force on Money Laundering, of which the United States is a member and with which designation the United States representative to the group or organization continues to concur, all as amended, and any executive order, directive, or regulation pursuant to the authority of any of the foregoing, or any orders or licenses issued thereunder.

(aa) *OFAC.*

(i) Neither the Company nor its subsidiaries, nor any of their directors, officers or employees, nor, to the Company's knowledge, any agent, affiliate or representative of the Company or its subsidiaries, is an individual or entity that is, or is owned or controlled by an individual or entity that is:

- (A) the subject of any sanctions administered or enforced by the U.S. Department of Treasury's Office of Foreign Assets Control, the United Nations Security Council, the European Union, Her Majesty's Treasury, or other relevant sanctions authority (collectively, "*Sanctions*"), nor
- (B) located, organized or resident in a country or territory that is the subject of Sanctions (including, without limitation, Burma/Myanmar, Cuba, Iran, Libya, North Korea, Sudan and Syria).

(ii) Neither the Company nor its subsidiaries will, directly or indirectly, use the proceeds of the offering, or lend, contribute or otherwise make available such proceeds to any subsidiary, joint venture partner or other individual or entity:

- (A) to fund or facilitate any activities or business of or with any individual or entity or in any country or territory that, at the time of such funding or facilitation, is the subject of Sanctions; or
- (B) in any other manner that will result in a violation of Sanctions by any individual or entity (including any individual or entity participating in the offering, whether as underwriter, advisor, investor or otherwise).



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(iii) For the past five years, neither the Company nor its subsidiaries has knowingly engaged in, and is not now knowingly engaged in, any dealings or transactions with any individual or entity, or in any country or territory, that at the time of the dealing or transaction is or was the subject of Sanctions.

(bb) *Compliance with Environmental Laws.* Except as disclosed in the Registration Statement, the Time of Sale Disclosure Package and the Prospectus, neither the Company nor its subsidiaries is in violation of any statute, any rule, regulation, decision or order of any Governmental Authority or any court, domestic or foreign, relating to the use, disposal or release of hazardous or toxic substances or relating to the protection or restoration of the environment or human exposure to hazardous or toxic substances (collectively, "**Environmental Laws**"), owns or operates any real property contaminated with any substance that is subject to any Environmental Laws, is liable for any off-site disposal or contamination pursuant to any Environmental Laws, or is subject to any claim relating to any Environmental Laws, which violation, contamination, liability or claim would individually or in the aggregate, have a Material Adverse Effect; and the Company is not aware of any pending investigation which might lead to such a claim. Neither the Company nor its subsidiaries anticipates incurring any material capital expenditures relating to compliance with Environmental Laws.

(cc) *Compliance with Occupational Laws.* The Company and its subsidiaries (A) is in compliance, in all material respects, with any and all applicable foreign, federal, state and local laws, rules, regulations, treaties, statutes and codes promulgated by any and all Governmental Authorities (including pursuant to the Occupational Health and Safety Act) relating to the protection of human health and safety in the workplace ("**Occupational Laws**"); (B) has received all material permits, licenses or other approvals required of it under applicable Occupational Laws to conduct its business as currently conducted; and (C) is in compliance, in all material respects, with all terms and conditions of such permit, license or approval. No action, proceeding, revocation proceeding, writ, injunction or claim is pending or, to the Company's knowledge, threatened against the Company or its subsidiaries relating to Occupational Laws, and the Company does not have knowledge of any facts, circumstances or developments relating to its operations that could reasonably be expected to form the basis for or give rise to such actions, suits, investigations or proceedings.

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(dd) *ERISA and Employee Benefits Matters.* (A) To the knowledge of the Company, no “prohibited transaction” as defined under Section 406 of ERISA or Section 4975 of the Code and not exempt under ERISA Section 408 and the regulations and published interpretations thereunder has occurred with respect to any Employee Benefit Plan. At no time has the Company or any ERISA Affiliate maintained, sponsored, participated in, contributed to or has or had any liability or obligation in respect of any Employee Benefit Plan subject to Part 3 of Subtitle B of Title I of ERISA, Title IV of ERISA, or Section 412 of the Code or any “multiemployer plan” as defined in Section 3(37) of ERISA or any multiple employer plan for which the Company or any ERISA Affiliate has incurred or could incur liability under Section 4063 or 4064 of ERISA. No Employee Benefit Plan provides or promises, or at any time provided or promised, retiree health, life insurance, or other retiree welfare benefits except as may be required by the Consolidated Omnibus Budget Reconciliation Act of 1985, as amended, or similar state law. Each Employee Benefit Plan is and has been operated in material compliance with its terms and all applicable laws, including but not limited to ERISA and the Code and, to the knowledge of the Company, no event has occurred (including a “reportable event” as such term is defined in Section 4043 of ERISA) and no condition exists that would subject the Company or any ERISA Affiliate to any material tax, fine, lien, penalty or liability imposed by ERISA, the Code or other applicable law. Each Employee Benefit Plan intended to be qualified under Code Section 401(a) is so qualified and has a favorable determination or opinion letter from the IRS upon which it can rely, and any such determination or opinion letter remains in effect and has not been revoked; to the knowledge of the Company, nothing has occurred since the date of any such determination or opinion letter that is reasonably likely to adversely affect such qualification; (B) with respect to each Foreign Benefit Plan, such Foreign Benefit Plan (1) if intended to qualify for special tax treatment, meets, in all material respects, the requirements for such treatment, and (2) if required to be funded, is funded to the extent required by applicable law, and with respect to all other Foreign Benefit Plans, adequate reserves therefor have been established on the accounting statements of the applicable Company or subsidiaries; (C) the Company does not have any obligations under any collective bargaining agreement with any union and no organization efforts are underway with respect to Company employees. As used in this Agreement, “**Code**” means the Internal Revenue Code of 1986, as amended; “**Employee Benefit Plan**” means any “employee benefit plan” within the meaning of Section 3(3) of ERISA, including, without limitation, all stock purchase, stock option, stock-based severance, employment, change-in-control, medical, disability, fringe benefit, bonus, incentive, deferred compensation, employee loan and all other employee benefit plans, agreements, programs, policies or other arrangements, whether or not subject to ERISA, under which (x) any current or former employee, director or independent contractor of the Company or its subsidiaries has any present or future right to benefits and which are contributed to, sponsored by or maintained by the Company or its subsidiaries or (y) the Company or its subsidiaries has had or has any present or future obligation or liability; “**ERISA**” means the Employee Retirement Income Security Act of 1974, as amended; “**ERISA Affiliate**” means any member of the Company’s controlled group as defined in Code Section 414(b), (c), (m) or (o); and “**Foreign Benefit Plan**” means any Employee Benefit Plan established, maintained or contributed to outside of the United States of America or which covers any employee working or residing outside of the United States.

(ee) *Business Arrangements.* Except as disclosed in the Registration Statement, the Time of Sale Disclosure Package and the Prospectus, neither the Company nor its subsidiaries has granted any material rights to develop, manufacture, produce, assemble, distribute, license, market or sell its products to any other person and is not bound by any material agreement that affects the exclusive right of the Company or its subsidiaries to develop, manufacture, produce, assemble, distribute, license, market or sell its products.

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(ff) *Labor Matters*. No labor problem or dispute with the employees of the Company or its subsidiaries exists or is threatened or imminent, and the Company is not aware of any existing or imminent labor disturbance by the employees of any of its or its subsidiaries' principal suppliers, contractors or customers, that could have a Material Adverse Effect.

(gg) *Disclosure of Legal Matters*. The statements in Preliminary Prospectus, the Time of Sale Disclosure Package, and the Prospectus under the heading "Description of Share Capital," and under the heading "Business" in the Company's annual report on Form 10-K for the year ended December 31, 2017, insofar as such statements purport to summarize such legal matters, agreements, documents, or proceedings discussed therein, are accurate in all material respects and fair summaries of such legal matters, agreements, documents, or proceedings, and present, in all material respects, the information required to be shown.

(hh) *Statistical Information*. Any third-party statistical and market-related data included in the Registration Statement, the Time of Sale Disclosure Package and the Prospectus are based on or derived from sources that the Company reasonably believes to be reliable and accurate in all material respects.

(ii) *Forward-looking Statements*. No forward-looking statement (within the meaning of Section 27A of the Act and Section 21E of the Exchange Act) contained in the Registration Statement, the Time of Sale Disclosure Package or the Prospectus has been made or reaffirmed without a reasonable basis or has been disclosed other than in good faith.

(jj) *Exports and Imports*. Except as disclosed in the Time of Sale Disclosure Package and the Prospectus, neither the Company nor, to the knowledge of the Company, any officer, director, affiliate, agent, distributor, or representative of the Company has any reason to believe that the Company or any of the foregoing persons or entities have taken or omitted to take any action in violation of, or which may cause the Company to be in violation of, any applicable U.S. law governing imports into or exports from the United States, reexports from one foreign country to another, disclosures of technology, or other cross-border transactions, including without limitation: the Arms Export Control Act (22 U.S.C.A. § 2278), the Export Administration Act (50 U.S.C. App. §§ 2401-2420), the International Traffic in Arms Regulations (22 C.F.R. §§ 120-130), the Export Administration Regulations (15 C.F.R. 730 et seq.), the Customs Laws of the United States (19 U.S.C. § 1 et seq.), the International Emergency Economic Powers Act (50 U.S.C. §§ 1701-1706), the Trading With the Enemy Act (50 U.S.C. App. §§ 5, 16), the Foreign Assets Control Regulations administered by the Office of Foreign Assets Control, any executive orders or regulations issued pursuant to the foregoing or by the agencies listed in Part 730 of the Export Administration Regulations, and any applicable non-U.S. laws of a similar nature. Except as disclosed in the Time of Sale Disclosure Package and the Prospectus, to the Company's knowledge, there has never been a claim or charge made in writing, investigation undertaken, violation found, or settlement of any enforcement action under any of the laws referred to herein by any governmental entity with respect to matters arising under such laws against the Company, or against its agents, distributors or representatives in connection with their relationship with the Company.

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(kk) *Related Party Transactions*. To the Company's knowledge, no transaction has occurred between or among the Company, on the one hand, and any of the Company's officers, directors or five percent or greater stockholders or any affiliate or affiliates of any such officer, director or five percent or greater stockholders that is required to be described that is not so described in the Registration Statement, the Time of Sale Disclosure Package and the Prospectus. The Company has not, directly or indirectly, extended or maintained credit, or arranged for the extension of credit, or renewed an extension of credit, in the form of a personal loan to or for any of its directors or executive officers in violation of applicable laws, including Section 402 of the Sarbanes-Oxley Act.

(ll) *Effect of Certificates*. Any certificate signed by any officer of the Company and delivered to the Representatives or to counsel for the Underwriters shall be deemed a representation and warranty by the Company to each Underwriter as to the matters covered thereby.

3. *Representations and Warranties of the Selling Shareholder*. The Selling Shareholder represents and warrants to each Underwriter as of the date hereof and the First Closing Date (as defined below) that:

(a) *Valid Title*. Such Selling Shareholder has, and immediately prior to the First Closing Date, such Selling Shareholder will have, good and valid title to, or a valid "security entitlement" within the meaning of Section 8-501 of the New York Uniform Commercial Code (the "*UCC*") in respect of, the Securities to be sold by such Selling Shareholder hereunder on such date, free and clear of all liens, security interests, encumbrances, equities or claims of any kind, other than pursuant to this Agreement; upon payment for the Securities to be sold by such Selling Shareholder pursuant to this Agreement, delivery of such Securities, as directed by the Underwriters, to Cede & Co. ("*Cede*") or such other nominee as may be designated by the Depository Trust Company ("*DTC*"), registration of such Securities in the name of Cede or such other nominee, and the crediting of such Securities on the books of DTC to securities accounts of the Underwriters (assuming that neither DTC nor any such Underwriter has notice of any "adverse claim," within the meaning of Section 8-105 of the UCC to such Securities), (A) DTC shall be a "protected purchaser" of such Securities within the meaning of Section 8-303 of the UCC and will acquire its interest in the Securities (including without limitation, all rights that such Selling Shareholder had or has the power to transfer in such Securities) free and clear of any "adverse claim" within the meaning of Section 8-102 of the UCC, (B) under Section 8-501 of the UCC, the Underwriters will acquire a valid security entitlement in respect of such Securities and (C) no action based on any "adverse claim" within the meaning of Section 8-102 of the UCC to such Securities may be asserted against the Underwriters with respect to such security entitlement; for purposes of this Section 3(a), such Selling Shareholder may assume that when such payment, delivery (if necessary) and crediting occur, (x) such Securities will have been registered in the name of Cede or another nominee designated by DTC, in each case on the Company's share registry in accordance with the Company's charter, bylaws and applicable law, (y) DTC will be registered as a "clearing corporation" within the meaning of Section 8-102 of the UCC and (z) appropriate entries to the accounts of the several Underwriters on the records of DTC will have been made pursuant to the UCC.

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(b) *Underwriting Agreement.* This Agreement has been duly authorized, executed and delivered by or on behalf of such Selling Shareholder.

(c) *Power of Attorney.* Such Selling Shareholder has the full right, power and authority to enter into an irrevocable power of attorney (a "*Power of Attorney*") authorizing and directing Tom Lobene, Mark Povey, Lance Maerov, Gaston Levin, Andrew Scott and any manager of the Selling Shareholder, each acting individually in the name and on behalf of the Company, as attorney-in-fact (the "*Attorney-in-Fact*"), to effect the sale and delivery of the Securities being sold by such Selling Shareholder, to enter into this Agreement and to take all such other action as may be necessary hereunder.

(d) *Payment of Expenses.* Such Selling Shareholder will pay all taxes, if any, on the transfer and sale, respectively, of the Securities being sold by such Selling Shareholder and the fees of such Selling Shareholder's counsel, accountant or other adviser.

(e) *Due Authorization: No Conflict: No Consent.* Such Selling Shareholder has full right, power and authority to enter into this Agreement; the execution, delivery and performance of this Agreement, the consummation by such Selling Shareholder of the transactions contemplated hereby and the compliance by such Selling Shareholder with its obligations hereunder have been duly authorized and do not and will not (with or without notice or lapse of time or both) (i) conflict with or result in a breach or violation of any of the terms or provisions of, constitute a default under, or result in the creation or imposition of any lien, encumbrance, security interest, claim or charge upon the Securities to be sold by such Selling Shareholder hereunder or any other property or assets of such Selling Shareholder pursuant to, any indenture, mortgage, deed of trust, loan agreement or other agreement or instrument to which such Selling Shareholder is a party or by which such Selling Shareholder is bound or to which any of the property or assets of such Selling Shareholder is subject, or (ii) result in any violation of any law, statute, rule, regulation, judgment, order or decree of any court or governmental agency or body, domestic or foreign, having jurisdiction over such Selling Shareholder or any property or assets of such Selling Shareholder, except, in the case of clauses (i) and (ii) above, for such conflicts, breaches or violations that would not, singly or in the aggregate, affect the validity of the Shares to be sold by the Selling Shareholder or impair the ability of the Selling Shareholder to consummate the transactions contemplated by this Agreement; and, except for the registration of the Securities under the Act and such consents, approvals, authorizations, registrations or qualifications as may be required under applicable state securities or blue sky laws in connection with the purchase and distribution of the Securities by the Underwriters, no consent, approval, authorization or order of, or filing or registration with, any such court or governmental or non-governmental agency or body is required for the execution, delivery and performance of this Agreement by such Selling Shareholder, and the consummation by such Selling Shareholder of the transactions contemplated hereby.

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(f) *No Material Misstatements.* At the respective times the Registration Statement and any amendments thereto became or become effective, at the date of this Agreement and at the First Closing Date, the Registration Statement and any amendments thereto did not and will not contain any untrue statement of a material fact or omit to state any material fact required to be stated therein or necessary to make the statements therein not misleading; and the Time of Sale Disclosure Package, the Prospectus and any amendments or supplements thereto, at time the Prospectus or any amendment or supplement thereto was issued and at the First Closing Date (as defined below), did not and will not contain an untrue statement of a material fact or omit to state a material fact required to be stated therein or necessary in order to make the statements therein, in light of the circumstances under which they were made, not misleading; *provided, however*, that the foregoing representations and warranties in this paragraph (f) apply only to the extent that any information contained in or omitted from the Registration Statement or Prospectus was made in reliance upon and in conformity with written information furnished to the Company by such Selling Shareholder it being understood and agreed that the only such information furnished by or on behalf of such Selling Shareholder specifically for inclusion in the Registration Statement, any Preliminary Prospectus, the Time of Sale Disclosure Package, the Prospectus or any issuer free writing prospectus consists of the name and address of such Selling Shareholder and the number of Shares held by such Selling Shareholder before and after the offering under the caption "Selling Shareholder" (in all cases excluding percentages) in the Preliminary Prospectus, Time of Sale Disclosure Package and Prospectus, as well as all of the information set forth in the footnote to the table therein (the "**Selling Shareholder Information**"); and *provided, further*, that the Selling Shareholder makes no representation or warranty with respect to any statements made in reliance upon and in conformity with the Underwriters Information.

(g) *No Other Offering Materials.* Such Selling Shareholder has not distributed and will not distribute any prospectus or other offering material in connection with the offering and sale of the Securities other than any Preliminary Prospectus, the Time of Sale Disclosure Package or the Prospectus or other materials permitted by the Act to be distributed by such Selling Shareholder; *provided, however*, that such Shareholder has not made nor will it make any offer relating to the Securities that would constitute a free writing prospectus.

(h) *No Material, Non-Public Information.* Such Selling Shareholder is not prompted to sell its Securities pursuant to this Agreement by any material information concerning the Company or its subsidiaries that has not been disclosed in the Time of Sale Disclosure Package.

(i) *No Stabilization.* Such Selling Shareholder has not taken, directly or indirectly, any action designed or intended to stabilize or manipulate the price of any security of the Company, or which caused or resulted in, or which might reasonably be expected to cause or result in, the stabilization or manipulation of the price of any security of the Company.

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(j) *Associated Persons.* Neither such Selling Shareholder nor any of its affiliates (within the meaning of FINRA Rule 5121(f)(1)) directly or indirectly controls, is controlled by, or is under common control with, or is an associated person (within the meaning of Article I, Section 1(ee) of the By-laws of FINRA) of, any member firm of FINRA.

Any certificate signed by or on behalf of the Selling Shareholder and delivered to the Representatives or to counsel for the Underwriters shall be deemed to be a representation and warranty by such Selling Shareholder to each Underwriter as to the matters covered thereby.

**4. *Purchase, Sale and Delivery of Securities.***

(a) *Firm Shares.* On the basis of the representations, warranties and agreements herein contained, but subject to the terms and conditions herein set forth, the Selling Shareholder agrees to sell to the several Underwriters the number of Firm Shares set forth opposite the name of the Selling Shareholder in Schedule I hereto, and each Underwriter agrees, severally and not jointly, to purchase from the Selling Shareholder the number of Firm Shares set forth opposite the name of such Underwriter in Schedule II hereto. The purchase price for each Firm Share shall be \$9.45 per share. In making this Agreement, each Underwriter is contracting severally and not jointly; except as provided in paragraph (d) of this Section 4, the agreement of each Underwriter is to purchase only the respective number of Firm Shares specified in Schedule II.

(b) *Option Shares.* On the basis of the representations, warranties and agreements herein contained, but subject to the terms and conditions herein set forth, the Company hereby grants to the several Underwriters an option to purchase all or any portion of the Option Shares at the same purchase price as the Firm Shares, for use solely in covering any overallotments made by the Underwriters in the sale and distribution of the Firm Shares. The option granted hereunder may be exercised in whole or in part at any time (but only one time) within 30 days after the effective date of this Agreement upon notice (confirmed in writing) by the Representatives to the Company setting forth the aggregate number of Option Shares as to which the several Underwriters are exercising the option and the date and time, as determined by you, when the Option Shares are to be delivered, but in no event earlier than the First Closing Date (as defined below) nor earlier than the second business day or later than the fifth business day after the date on which the option shall have been exercised. If the option is exercised, the number of Option Shares to be purchased by each Underwriter shall be the same percentage of the total number of Option Shares to be purchased by the several Underwriters as the number of Firm Shares to be purchased by such Underwriter is of the total number of Firm Shares to be purchased by the several Underwriters, as adjusted by the Representatives in such manner as the Representatives deem advisable to avoid fractional shares. No Option Shares shall be sold and delivered unless the Firm Shares previously have been, or simultaneously are, sold and delivered.

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(c) *Payment and Delivery.*

(i) The Securities to be purchased by each Underwriter hereunder, in book-entry form in such authorized denominations and registered in such names as the Representatives may request upon at least forty-eight hours' prior notice to the Company and the Selling Shareholder, shall be delivered by or on behalf of the Company and the Selling Shareholder to the Representatives, through the facilities of DTC, for the account of such Underwriter, with any transfer taxes payable in connection with the transfer of the Securities to the Underwriters duly paid, against payment by or on behalf of such Underwriter of the purchase price therefor by wire transfer of Federal (same-day) funds to the accounts specified by the Company and the Attorney-in-Fact to the Representatives at least forty-eight hours in advance. The time and date of such delivery and payment shall be, with respect to the Firm Shares, 10:00 a.m., New York time, on December 20, 2018, or such other time and date as the Representatives, the Company and the Attorney-in-Fact may agree upon in writing, and, with respect to the Option Shares, 10:00 a.m., New York time, on the date specified by the Representatives in the written notice given by you of the election to purchase such Option Shares, or such other time and date as the Representatives, the Company and the Attorney-in-Fact may agree upon in writing. Such time and date for delivery of the Firm Shares is herein called the "**First Closing Date**," such time and date for delivery of the Option Shares, if not the First Closing Date, is herein called a "**Second Closing Date**," and each such time and date for delivery is herein called a "**Closing**" or "**Closing Date**."

(ii) The documents to be delivered at each Closing by or on behalf of the parties hereto pursuant to Section 7 hereof, including the cross receipt for the Securities and any additional documents requested by the Underwriters pursuant to Section 7(k) hereof, will be delivered at the offices of the Company, and the Securities will be delivered to the Representatives, through the facilities of the DTC, for the account of such Underwriter, all at such Closing.

(d) *Purchase by Representatives on Behalf of Underwriters.* It is understood that the Representatives, individually and not as Representatives of the several Underwriters, may (but shall not be obligated to) make payment to the Company and the Selling Shareholder, on behalf of any Underwriter for the Securities to be purchased by such Underwriter. Any such payment by you shall not relieve any such Underwriter of any of its obligations hereunder. Nothing herein contained shall constitute any of the Underwriters an unincorporated association or partner with the Company.

5. *Covenants of the Company.* The Company covenants and agrees with the several Underwriters as follows:



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(a) Required Filings. The Company will prepare and file a Prospectus with the Commission containing the Rule 430B Information omitted from the Preliminary Prospectus within the time period required by, and otherwise in accordance with the provisions of, Rules 424(b) and 430B of the Rules and Regulations. If the Company has elected to rely upon Rule 462(b) of the Rules and Regulations to increase the size of the offering registered under the Act and the Rule 462(b) Registration Statement has not yet been filed and become effective, the Company will prepare and file the Rule 462(b) Registration Statement with the Commission within the time period required by, and otherwise in accordance with the provisions of, Rule 462(b) of the Rules and Regulations and the Act. The Company will prepare and file with the Commission, promptly upon the request of the Representatives, any amendments or supplements to the Registration Statement or Prospectus that, in the opinion of the Representatives, may be necessary or advisable in connection with the distribution of the Securities by the Underwriters; and the Company will furnish the Representatives and counsel for the Underwriters a copy of any proposed amendment or supplement to the Registration Statement or Prospectus and will not file any amendment or supplement to the Registration Statement or Prospectus to which the Representatives shall reasonably object by notice to the Company after having been furnished a copy a reasonable time prior to the filing.

(b) Notification of Certain Commission Actions. The Company will advise the Representatives, promptly after it shall receive notice or obtain knowledge thereof, of the issuance by the Commission of any stop order suspending the effectiveness of the Registration Statement, or any post-effective amendment thereto or preventing or suspending the use of any Preliminary Prospectus, the Time of Sale Disclosure Package, the Prospectus or any issuer free writing prospectus, of the suspension of the qualification of the Securities for offering or sale in any jurisdiction, or of the initiation or threatening of any proceeding for any such purpose; and the Company will promptly use its best efforts to prevent the issuance of any stop order or to obtain its withdrawal if such a stop order should be issued.

(c) Continued Compliance with Securities Laws.

(i) Within the time during which a prospectus (assuming the absence of Rule 172) relating to the Securities is required to be delivered under the Act by any Underwriter or any dealer (the "Prospectus Delivery Period"), the Company will comply with all requirements imposed upon it by the Act, as now and hereafter amended, and by the Rules and Regulations, as from time to time in force, so far as necessary to permit the continuance of sales of or dealings in the Securities as contemplated by the provisions hereof, the Time of Sale Disclosure Package and the Prospectus. If during such period any event occurs as a result of which the Prospectus (or if the Prospectus is not yet available to prospective purchasers, the Time of Sale Disclosure Package) would include an untrue statement of a material fact or omit to state a material fact necessary to make the statements therein, in the light of the circumstances then existing, not misleading, or if during such period it is necessary to amend the Registration Statement or supplement the Prospectus (or if the Prospectus is not yet available to prospective investors, the Time of Sale Disclosure Package) to comply with the Act, the Company promptly will (x) notify you of such untrue statement or omission, (y) amend the Registration Statement or supplement the Prospectus (or, if the Prospectus is not yet available to prospective purchasers, the Time of Sale Disclosure Package) (at the expense of the Company) so as to correct such statement or omission or effect such compliance and (z) notify you when any amendment to the Registration Statement is filed or becomes effective or when any supplement to the Prospectus (or, if the Prospectus is not yet available to prospective purchasers, the Time of Sale Disclosure Package) is filed.

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(ii) If at any time following issuance of an issuer free writing prospectus there occurred or occurs an event or development as a result of which such issuer free writing prospectus conflicted or would conflict with the information contained in the Registration Statement, any Preliminary Prospectus or the Prospectus relating to the Securities or included or would include an untrue statement of a material fact or omitted or would omit to state a material fact necessary in order to make the statements therein, in the light of the circumstances prevailing at that subsequent time, not misleading, the Company (x) has promptly notified or promptly will notify the Representatives of such conflict, untrue statement or omission, (y) has promptly amended or will promptly amend or supplement, at its own expense, such issuer free writing prospectus to eliminate or correct such conflict, untrue statement or omission and (z) has notified or promptly will notify you when such amendment or supplement was or is filed with the Commission to the extent required to be filed by the Rules and Regulations.

(d) Blue Sky Qualifications. The Company shall take or cause to be taken all necessary action to qualify the Securities for sale under the securities laws of such domestic United States or foreign jurisdictions as you reasonably designate and to continue such qualifications in effect so long as required for the distribution of the Securities, except that the Company shall not be required in connection therewith to qualify as a foreign corporation or to execute a general consent to service of process in any state or subject itself to taxation in any jurisdiction in which it is not otherwise subject to taxation on the date hereof.

(e) Provision of Documents. The Company will furnish, at its own expense, to the Underwriters and counsel for the Underwriters copies of the Registration Statement (one of which will be signed and will include all consents and exhibits filed therewith), and to the Underwriters and any dealer each Preliminary Prospectus, the Time of Sale Disclosure Package, the Prospectus, any issuer free writing prospectus and all amendments and supplements to such documents, in each case as soon as available and in such quantities as you may from time to time reasonably request.

(f) Rule 158. The Company will make generally available to its security holders as soon as practicable, but in no event later than 15 months after the end of the Company's current fiscal quarter, an earnings statement (which need not be audited) covering a 12 month period beginning after the effective date of the Registration Statement (which, for purposes of this paragraph, will be deemed to be the effective date of the Rule 462(b) Registration Statement, if applicable) that shall satisfy the provisions of Section 11(a) of the Act and Rule 158 of the Rules and Regulations.

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(g) *Payment and Reimbursement of Expenses.* The Selling Shareholder, whether or not the transactions contemplated hereunder are consummated or this Agreement is terminated, will pay or cause to be paid (A) all expenses (including transfer taxes allocated to the respective transferees) incurred in connection with the delivery to the Underwriters of the Securities, (B) all expenses and fees (including, without limitation, fees and expenses of the Company's accountants and counsel in connection with the preparation, printing, filing, delivery, and shipping of the Registration Statement (including the financial statements therein and all amendments, schedules, and exhibits thereto), the Securities, each Preliminary Prospectus, the Time of Sale Disclosure Package, the Prospectus, any issuer free writing prospectus and any amendment thereof or supplement thereto, and the printing, delivery, and shipping of this Agreement and other underwriting documents, including Blue Sky Memoranda (covering the states and other applicable jurisdictions), (C) all filing fees and fees incurred in connection with the qualification of the Securities for offering and sale by the Underwriters or by dealers under the securities or blue sky laws of the states and other jurisdictions which you shall designate, (D) the fees and expenses of any transfer agent or registrar, (E) the filing fees incident to, and the reasonable fees and disbursements of counsel (not to exceed \$30,000) for the Underwriters in connection with, securing any required review by FINRA of the terms of the sale of the Securities, (F) listing fees, if any, (G) the cost and expenses of the Company relating to investor presentations or any road show as defined in Rule 433(h) under the Act (a "*road show*") undertaken in connection with marketing of the Securities, including, without limitation, expenses associated with the preparation or dissemination of any electronic road show, expenses associated with the production of road show slides and graphics, fees and expenses of any consultants engaged in connection with the road show presentations with the prior approval of the Company, travel and lodging expenses of the representatives and officers of the Company and any such consultants, and 50% of the cost of any aircraft and other transportation chartered in connection with the road show; and (H) all other costs and expenses of the Company and the Selling Shareholder incident to the performance of its obligations hereunder that are not otherwise specifically provided for herein. Except as provided for in this Agreement, the Underwriters shall bear the costs and expenses incurred by them in connection with the sale of the Securities and the transactions contemplated hereby. If the sale of the Securities provided for herein is not consummated by reason of any failure, refusal or inability on the part of the Company to perform any agreement on its part to be performed, or because any other condition of the Underwriters' obligations hereunder required to be fulfilled by the Company is not fulfilled, the Company will reimburse the several Underwriters for all reasonable out-of-pocket accountable disbursements (including but not limited to fees and disbursements of counsel, printing expenses, travel expenses, postage, facsimile and telephone charges) incurred by the Underwriters in connection with their investigation, preparing to market and marketing the Securities or in contemplation of performing their obligations hereunder. If the sale of the Securities provided for herein is not consummated by reason of any failure, refusal or inability on the part of the Selling Shareholder to perform any agreement on its part to be performed, or because any other condition of the Underwriters' obligations hereunder required to be fulfilled by the Selling Shareholder is not fulfilled, the Seller Shareholder will reimburse the several Underwriters for all reasonable out-of-pocket accountable disbursements (including but not limited to fees and disbursements of counsel, printing expenses, travel expenses, postage, facsimile and telephone charges) incurred by the Underwriters in connection with their investigation, preparing to market and marketing the Securities or in contemplation of performing their obligations hereunder. If this Agreement is terminated by the Representatives pursuant to Section 10 hereof, each of the Company and the Selling Shareholder, severally but not jointly, will reimburse the several Underwriters for 50% of all reasonable out-of-pocket accountable disbursements (including but not limited to fees and disbursements of counsel, printing expenses, travel expenses, postage, facsimile and telephone charges) incurred by the Underwriters in connection with their investigation, preparing to market and marketing the Securities or in contemplation of performing their obligations hereunder.

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(h) *Use of Proceeds*. The Company will apply the net proceeds from the sale of the Securities to be sold by it hereunder for the purposes set forth in the Time of Sale Disclosure Package and in the Prospectus and will file such reports with the Commission with respect to the sale of the Securities and the application of the proceeds therefrom as may be required in accordance with Rule 463 of the Rules and Regulations.

(i) *Company Lock Up*. The Company will not, without the prior written consent of William Blair & Company, L.L.C., from the date of execution of this Agreement and continuing to and including the date 90 days after the date of the Prospectus (the "**Lock-Up Period**"), (A) offer, pledge, announce the intention to sell, sell, contract to sell, sell any option or contract to purchase, purchase any option or contract to sell, grant any option, right or warrant to purchase or otherwise transfer or dispose of, directly or indirectly, any shares of Common Stock or any securities convertible into or exercisable or exchangeable for Common Stock or (B) enter into any swap or other agreement that transfers, in whole or in part, any of the economic consequences of ownership of the Common Stock, whether any such transaction described in clause (A) or (B) above is to be settled by delivery of Common Stock or such other securities, in cash or otherwise, except to the Underwriters pursuant to this Agreement and (i) grants of options, shares of Common Stock and other awards to purchase or receive shares of Common Stock pursuant to the Company Stock Plans that are in effect as of or prior to the date hereof or otherwise in accordance with past practices of the Company as to the manner and timing of certain grants, (ii) issuances of shares of Common Stock upon the exercise, vesting or settlement of options or restricted stock units, warrants, or other awards outstanding as of the date hereof (including for this purpose shares of Common Stock withheld by the Company for the purpose of paying on behalf of the holder thereof the exercise price of stock options or for paying taxes due as a result of such exercise, vesting or settlement), or (iii) issuances of any shares of Common Stock (including upon exercise of options) related to the filing by the Company of any registration statement on Form S-8 or a successor form thereto relating to shares of Common Stock granted under any equity compensation plan or employee stock purchase plan, including relating to issuances or awards to officers or directors for compensatory purposes (including options) or to the directors in satisfaction of the compensation earned by the directors.

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(j) Stockholder Lock-Ups. The Company has caused to be delivered to you prior to the date of this Agreement a letter, in the form of Exhibit A hereto (the "**Lock-Up Agreement**"), from each individual or entity listed on Schedule III. The Company will enforce the terms of each Lock-Up Agreement and issue stop-transfer instructions to its transfer agent and registrar for the Common Stock with respect to any transaction or contemplated transaction that would constitute a breach of or default under the applicable Lock-Up Agreement.

(k) No Market Stabilization or Manipulation. The Company has not taken, and will not take, directly or indirectly, any action designed to or which might reasonably be expected to cause or result in, or which has constituted, the stabilization or manipulation of the price of any security of the Company to facilitate the sale or resale of the Securities, and has not effected any sales of Common Stock which are required to be disclosed in response to Item 701 of Regulation S-K under the Act which have not been so disclosed in the Registration Statement.

(l) SEC Reports. During the Prospectus Delivery Period, the Company will file on a timely basis with the Commission such periodic and special reports as required by the Rules and Regulations.

(m) Internal Controls. During the Prospectus Delivery Period, the Company will maintain such controls and other procedures, including, without limitation, those required by Sections 302 and 906 of the Sarbanes-Oxley Act and the applicable regulations thereunder, that are designed to ensure that information required to be disclosed by the Company in the reports that it files or submits under the Exchange Act is recorded, processed, summarized and reported within the time periods specified in the Commission's rules and forms, including, without limitation, controls and procedures designed to ensure that information required to be disclosed by the Company in the reports that it files or submits under the Exchange Act is accumulated and communicated to the Company's management, including its principal executive officer and its principal financial officer, or persons performing similar functions, as appropriate to allow timely decisions regarding required disclosure, to ensure that material information relating to Company, is made known to them by others within those entities.

(n) Sarbanes-Oxley. During the Prospectus Delivery Period, the Company will comply with all applicable provisions of the Sarbanes-Oxley Act.

(o) Free Writing Prospectuses. The Company represents and agrees that, unless it obtains the prior written consent of the Representatives, and each Underwriter severally represents and agrees that, unless it obtains the prior written consent of the Company and the Representatives, it has not made and will not make any offer relating to the Securities that would constitute an issuer free writing prospectus or that would otherwise constitute a free writing prospectus required to be filed with the Commission; provided that the prior written consent of the parties hereto shall be deemed to have been given in respect of the free writing prospectuses included in Schedule IV. Any such free writing prospectus consented to by the Company and the Representatives is hereinafter referred to as a "**Permitted Free Writing Prospectus**." The Company represents that it has treated or agrees that it will treat each Permitted Free Writing Prospectus as an issuer free writing prospectus, and has complied and will comply with the requirements of Rules 164 and 433 of the Rules and Regulations applicable to any Permitted Free Writing Prospectus. The Company represents that it has satisfied and agrees that it will satisfy the conditions in Rule 433 to avoid a requirement to file with the Commission any electronic road show.

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6. **Covenants of the Selling Shareholder.** The Selling Shareholder covenants and agrees with the several Underwriters as follows:

(a) **No Stabilization.** The Selling Shareholder will not take, directly or indirectly, any action designed to or that would reasonably be expected to cause or result in any stabilization or manipulation of the price of the Company's securities.

(b) **Forms W-8 and W-9.** The Selling Shareholder will deliver to the Representatives on or prior to the First Closing Date a properly completed and executed United States Treasury Department Form W-8 (if the Selling Shareholder is a non-United States person) or Form W-9 (if the Selling Shareholder is a United States person) or such other applicable form or statement specified by Treasury Department regulations in lieu thereof.

(c) **Free Writing Prospectuses.** The Selling Shareholder agrees that it will not, in such capacity, prepare or have prepared on its behalf or use or refer to any "free writing prospectus" (as defined in Rule 405 of the Exchange Act) and agrees that it will not, in such capacity, distribute any written materials in connection with the offer or sale of the Securities.

(d) **Selling Shareholder Information.** During the period when delivery of a prospectus (or, in lieu thereof, the notice referred to under Rule 173(a) of the Act) is required under the Act, the Selling Shareholder will advise the Representatives promptly, and will confirm such advice in writing to the Representatives, of any change in the such Selling Shareholder's Selling Shareholder Information.

(e) **Performance of Covenants and Satisfaction of Conditions.** The Selling Shareholder will use its reasonable best efforts to do and perform all things required to be done or performed under this Agreement by such Selling Shareholder prior to the First Closing Date and to satisfy all conditions precedent to the delivery of the Firm Shares.

7. **Conditions of Underwriters' Obligations.** The obligations of the several Underwriters hereunder are subject to the accuracy, as of the date hereof and at each of the First Closing Date and the Second Closing Date (as if made at such Closing Date), of and compliance with all representations, warranties and agreements of the Company and the Selling Shareholder contained herein, to the performance by the Company and the Selling Shareholder of their respective obligations hereunder and to the following additional conditions:

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(a) *Required Filings; Absence of Certain Commission Actions.* All filings required by Rules 424, 430B and 433 of the Rules and Regulations shall have been timely made (without reliance on Rule 424(b)(8) or Rule 164(b)); no stop order suspending the effectiveness of the Registration Statement or any part thereof or any amendment thereof, nor suspending or preventing the use of the Time of Sale Disclosure Package, the Prospectus or any issuer free writing prospectus shall have been issued; no proceedings for the issuance of such an order shall have been initiated or threatened; and any request of the Commission for additional information (to be included in the Registration Statement, the Time of Sale Disclosure Package, the Prospectus, any issuer free writing prospectus or otherwise) shall have been complied with to your satisfaction.

(b) *Continued Compliance with Securities Laws.* No Underwriter shall have advised the Company that (i) the Registration Statement or any amendment thereof or supplement thereto contains an untrue statement of a material fact which, in your opinion, is material or omits to state a material fact which, in your opinion, is required to be stated therein or necessary to make the statements therein not misleading, or (ii) the Time of Sale Disclosure Package, the Prospectus or any issuer free writing prospectus, or any amendment thereof or supplement thereto, contains an untrue statement of fact which, in your opinion, is material, or omits to state a fact which, in your opinion, is material and is required to be stated therein, or necessary to make the statements therein, in light of the circumstances under which they are made, not misleading.

(c) *Absence of Certain Events.* Except as contemplated in the Time of Sale Disclosure Package and in the Prospectus, subsequent to the respective dates as of which information is given in the Time of Sale Disclosure Package and the Prospectus, neither the Company nor its subsidiaries shall have incurred any material liabilities or obligations, direct or contingent, or entered into any material transactions, or declared or paid any dividends or made any distribution of any kind with respect to its capital stock; and there shall not have been any change in the capital stock (other than a change in the number of outstanding shares of Common Stock due to the issuance of shares upon the exercise of outstanding options or warrants or conversion of convertible securities or the issuance of shares of Common Stock or securities exercisable for shares of Common Stock to employees, directors or service providers of the Company for compensatory purposes), or any material change in the short-term or long-term debt of the Company (other than as a result of the conversion of convertible securities), or any issuance of options, warrants, convertible securities or other rights to purchase the capital stock of the Company or its subsidiaries, or any Material Adverse Change or any development involving a prospective Material Adverse Change (whether or not arising in the ordinary course of business), that, in your judgment, makes it impractical or inadvisable to offer or deliver the Securities on the terms and in the manner contemplated in the Time of Sale Disclosure Package and in the Prospectus.

(d) *Opinion of Company Counsels.* On each Closing Date, there shall have been furnished to you, as Representatives of the several Underwriters, the opinions and negative assurance letter of Morgan, Lewis & Bockius LLP and the opinion of The Doney Law Firm, counsel for the Company, dated such Closing Date and addressed to you, in form and substance satisfactory to you.

(e) *Opinion of Selling Shareholder's Counsels.* On the First Closing Date, there shall have been furnished to you, as Representatives of the several Underwriters, the opinion of Davis & Gilbert LLP, U.S. counsel for the Selling Shareholder, and Allen & Overy, *société en commandite simple*, registered on list V of the Luxembourg bar, Luxembourg counsel for the Selling Shareholder, each dated as of such Closing and addressed to you, in form and substance satisfactory to you.

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(f) Negative Assurance Letter of Underwriters' Counsel. On each Closing Date, there shall have been furnished to you, as Representatives of the several Underwriters, such negative assurance letter of Goodwin Procter LLP, counsel for the Underwriters, dated such Closing Date and addressed to you, and such counsel shall have received such papers and information as they request to enable them to pass upon such matters.

(g) Comfort Letters. On the date hereof, on the effective date of any post-effective amendment to the Registration Statement filed after the date hereof and on each Closing Date, you, as Representatives of the several Underwriters, shall have received a letter from Sadler, Gibb & Associates, LLC, dated such date and addressed to you, in form and substance satisfactory to you.

(h) Officers' Certificate. On each Closing Date, there shall have been furnished to you, as Representatives of the several Underwriters, a certificate, dated such Closing Date and addressed to you, signed by the chief executive officer and by the chief financial officer of the Company, to the effect that:

(i) The representations and warranties of the Company in this Agreement are true and correct as if made at and as of such Closing Date, and the Company has complied with all the agreements and satisfied all the conditions on its part to be performed or satisfied at or prior to such Closing Date; and

(ii) No stop order or other order suspending the effectiveness of the Registration Statement or any part thereof or any amendment thereof or the qualification of the Securities for offering or sale, nor suspending or preventing the use of the Time of Sale Disclosure Package, the Prospectus or any issuer free writing prospectus, has been issued, and no proceeding for that purpose has been instituted or, to the best of their knowledge, is contemplated by the Commission or any state or regulatory body.

(i) Selling Shareholder's Certificate. On the First Closing Date, there shall have been furnished to you, as Representatives of the several Underwriters, a certificate, dated such Closing Date and addressed to you, signed by, or on behalf of, the Selling Shareholder stating that the representations and warranties of the Selling Shareholder contained herein are true and correct as of the Closing and that the Selling Shareholder has complied with all agreements contained herein to be performed by the Selling Shareholder.

(j) Lock-Up Agreement. The Representatives shall have received all of the Lock-Up Agreements referenced in Section 5 and the Lock-Up Agreements shall remain in full force and effect.



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(k) *Other Documents*. The Company shall have furnished to you, as Representatives of the several Underwriters, and counsel for the Underwriters such additional documents, certificates and evidence as you or they may have reasonably requested.

(l) *FINRA No Objections*. FINRA shall have raised no objection to the fairness and reasonableness of the underwriting terms and arrangements.

(m) *Exchange Listing*. The Securities to be delivered on such Closing Date will have been approved for listing on the Nasdaq Capital Market subject to official notice of issuance.

(n) *Chief Financial Officer's Certificate*. On the date of this Agreement and on each Closing Date, the Chief Financial Officer of the Company shall have furnished to you, as Representatives of the several Underwriters, a certificate, dated the respective dates of delivery thereof and addressed to the Underwriters, in form and substance reasonably satisfactory to the Representatives, with respect to the financial statements and certain financial information contained in the Registration Statement, the Time of Sale Disclosure Package and the Prospectus.

All such opinions, certificates, letters and other documents will be in compliance with the provisions hereof only if they are satisfactory in form and substance to you, as Representatives of the several Underwriters, and counsel for the Underwriters. The Company will furnish you with such conformed copies of such opinions, certificates, letters and other documents as you shall reasonably request.

#### **8. Indemnification and Contribution.**

(a) *Indemnification by the Company*. The Company agrees to indemnify and hold harmless each Underwriter, its affiliates, directors and officers and each person, if any, who controls such Underwriter within the meaning of Section 15 of the Act or Section 20 of the Exchange Act, from and against any losses, claims, damages or liabilities, joint or several, to which such Underwriter may become subject, under the Act or otherwise (including in settlement of any litigation if such settlement is effected with the written consent of the Company), insofar as such losses, claims, damages or liabilities (or actions in respect thereof) (i) arise out of or are based upon an untrue statement or alleged untrue statement of a material fact contained in the Registration Statement, including the 430B Information and any other information deemed to be a part of the Registration Statement at the time of effectiveness and at any subsequent time pursuant to the Rules and Regulations, if applicable, any Preliminary Prospectus, the Time of Sale Disclosure Package, the Prospectus, or any amendment or supplement thereto, any issuer free writing prospectus, any issuer information that the Company has filed or is required to file pursuant to Rule 433(d) of the Rules and Regulations, or any road show, or (ii) arise out of or are based upon the omission or alleged omission to state therein a material fact required to be stated therein or necessary to make the statements therein not misleading, and will reimburse each Underwriter for any legal or other expenses reasonably incurred by it in connection with investigating or defending against such loss, claim, damage, liability or action as such expenses are incurred; *provided, however*, that the Company will not be liable in any such case to the extent that any such loss, claim, damage, liability or action arises out of or is based upon an untrue statement or alleged untrue statement or omission or alleged omission made in reliance upon and in conformity with written information furnished to the Company by you, or by any Underwriter through you, specifically for use in the preparation thereof, it being understood and agreed that the only information furnished by an Underwriter consists of the Underwriters Information.

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(b) *Indemnification by the Selling Shareholder.* The Selling Shareholder agrees to indemnify and hold harmless each Underwriter, its affiliates, directors and officers and each person, if any, who controls such Underwriter within the meaning of Section 15 of the Act or Section 20 of the Exchange Act, from and against any losses, claims, damages or liabilities, joint or several, to which such Underwriter may become subject, under the Act or otherwise (including in settlement of any litigation if such settlement is effected with the written consent of such Selling Shareholder), insofar as such losses, claims, damages or liabilities (or actions in respect thereof) (i) arising out of or based on any untrue statement or alleged untrue statement of a material fact contained in or incorporated by reference in the Registration Statement (or any amendment thereto), including any information deemed to be a part thereof pursuant to Rule 430B, or the omission or alleged omission therefrom of a material fact required to be stated therein or necessary to make the statements therein not misleading or arising out of or based on any untrue statement or alleged untrue statement of a material fact included in or incorporated by reference in any Preliminary Prospectus, any Issuer Free Writing Prospectus, the Time of Sale Disclosure Package or the Prospectus (or any amendment or supplement thereto) or any materials or information provided to investors by, or with the approval of, such Selling Shareholder in connection with the marketing of the offering of the Securities, or the omission or alleged omission therefrom of a material fact necessary in order to make the statements therein, in the light of the circumstances under which they were made, not misleading; (ii) against any and all loss, liability, claim, damage and expense whatsoever, as incurred, to the extent of the aggregate amount paid in settlement of any litigation, or any investigation or proceeding by any governmental agency or body, commenced or threatened, or of any claim whatsoever based upon any such untrue statement or omission, or any such alleged untrue statement or omission; provided that (subject to Section 8(e) below) any such settlement is effected with the written consent of the Selling Shareholder; against any and all expense whatsoever, as incurred (including the reasonable fees and disbursements of counsel chosen by the Representatives), reasonably incurred in investigating, preparing or defending against any litigation, or any investigation or proceeding by any governmental agency or body, commenced or threatened, or any claim whatsoever based upon any such untrue statement or omission, or any such alleged untrue statement or omission, to the extent that any such expense is not paid under (i) though (ii) above; *provided, however,* that each Selling Shareholder shall be subject to such liability only to the extent that the untrue statement or alleged untrue statement or omission or alleged omission was made in reliance upon and in conformity with the Selling Shareholder Information; further provided, however, that the liability of any Selling Shareholder pursuant to this Section 8(b) shall not exceed the gross proceeds (net of any underwriting discounts and commissions but before deducting other expenses) from the sale of the Securities sold by such Selling Shareholder hereunder.

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(c) *Indemnification by the Underwriters.* Each Underwriter will, severally and not jointly, indemnify and hold harmless the Company, its affiliates, directors and officers and each person, if any, who controls the Company within the meaning of Section 15 of the Act and Section 20 of the Exchange Act, and each Selling Shareholder, its affiliates, directors and officers and each person, if any, who controls such Selling Shareholder within the meaning of Section 15 of the Act or Section 20 of the Exchange Act, from and against any losses, claims, damages or liabilities to which the Company may become subject, under the Act or otherwise (including in settlement of any litigation, if such settlement is effected with the written consent of such Underwriter), insofar as such losses, claims, damages or liabilities (or actions in respect thereof) (i) arise out of or are based upon an untrue statement or alleged untrue statement of a material fact contained in the Registration Statement, any Preliminary Prospectus, the Time of Sale Disclosure Package, the Prospectus, or any amendment or supplement thereto, any document incorporated by reference therein, any issuer free writing prospectus, any issuer information that the Company has filed or is required to file pursuant to Rule 433(d) of the Rules and Regulations, or any road show, or (ii) arise out of or are based upon the omission or alleged omission to state therein a material fact required to be stated therein or necessary to make the statements therein not misleading, in each case to the extent, but only to the extent, that such untrue statement or alleged untrue statement or omission or alleged omission was made in conformity with written information furnished to the Company by you, or by such Underwriter through you, specifically for use in the preparation thereof (it being understood and agreed that the only information furnished by an Underwriter consists of the Underwriters Information), and will reimburse the Company and the Selling Shareholder for any legal or other expenses reasonably incurred and documented by the Company and the Selling Shareholder in connection with investigating or defending against any such loss, claim, damage, liability or action as such expenses are incurred.

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(d) *Notice and Procedures.* Promptly after receipt by an indemnified party under subsection (a), (b) or (c) above of notice of the commencement of any action, such indemnified party shall, if a claim in respect thereof is to be made against the indemnifying party under such subsection, notify the indemnifying party in writing of the commencement thereof; but the omission so to notify the indemnifying party shall not relieve the indemnifying party from any liability that it may have to any indemnified party except to the extent such indemnifying party has been materially prejudiced by such failure (through the forfeiture of substantive rights or defenses). In case any such action shall be brought against any indemnified party, and it shall notify the indemnifying party of the commencement thereof, the indemnifying party shall be entitled to participate in, and, to the extent that it shall wish, jointly with any other indemnifying party similarly notified, to assume the defense thereof, with counsel satisfactory to such indemnified party, and after notice from the indemnifying party to such indemnified party of the indemnifying party's election so to assume the defense thereof, the indemnifying party shall not be liable to such indemnified party under such subsection for any legal or other expenses subsequently incurred by such indemnified party in connection with the defense thereof other than reasonable costs of investigation; *provided, however*, that if (i) the indemnified party has reasonably concluded (based on advice of counsel) that there may be legal defenses available to it or other indemnified parties that are different from or in addition to those available to the indemnifying party or (ii) a conflict or potential conflict exists (based on advice of counsel to the indemnified party) between the indemnified party and the indemnifying party, the indemnified party shall have the right to employ a single counsel (in addition to local counsel) to represent all Underwriters who may be subject to liability arising from any claim in respect of which indemnity may be sought by the Underwriters under subsection (a) or (b) above, in which event the reasonable fees and expenses of such separate counsel shall be borne by the indemnifying party or parties and reimbursed to the Underwriters as incurred and the indemnifying party shall not have the right to direct the defense of such action on behalf of the indemnified party. An indemnifying party shall not be obligated under any settlement agreement relating to any action under this Section 8 to which it has not agreed in writing. In addition, no indemnifying party shall, without the prior written consent of the indemnified party (which consent shall not be unreasonably withheld or delayed) effect any settlement of any pending or threatened proceeding unless such settlement includes an unconditional release of such indemnified party for all liability on claims that are the subject matter of such proceeding and does not include a statement as to, or an admission of, fault, culpability or a failure to act by or on behalf of an indemnified party.

(e) *Contribution; Limitations on Liability; Non-Exclusive Remedy.* If the indemnification provided for in this Section 8 is unavailable or insufficient to hold harmless an indemnified party under subsection (a), (b) or (c) above, then each indemnifying party shall contribute to the amount paid or payable by such indemnified party as a result of the losses, claims, damages or liabilities referred to in subsection (a), (b) or (c) above, (i) in such proportion as is appropriate to reflect the relative benefits received by the Company and the Selling Shareholder on the one hand and the Underwriters on the other from the offering of the Securities or (ii) if the allocation provided by clause (i) above is not permitted by applicable law, in such proportion as is appropriate to reflect not only the relative benefits referred to in clause (i) above but also the relative fault of the Company and the Underwriters in connection with the statements or omissions that resulted in such losses, claims, damages or liabilities, as well as any other relevant equitable considerations. The relative benefits received by the Company and the Selling Shareholder on the one hand and the Underwriters on the other shall be deemed to be in the same proportion as the total net proceeds from the offering (before deducting expenses) received by the Company and the Selling Shareholder, as applicable, bear to the total underwriting discounts and commissions received by the Underwriters, in each case as set forth in the table on the cover page of the Prospectus. The relative fault shall be determined by reference to, among other things, whether the untrue or alleged untrue statement of a material fact or the omission or alleged omission to state a material fact relates to information supplied by the Company, the Selling Shareholder or the Underwriters and the parties' relevant intent, knowledge, access to information and opportunity to correct or prevent such untrue statement or omission. The Company, the Selling Shareholder (in such capacity) and the Underwriters agree that it would not be just and equitable if contributions pursuant to this subsection (e) were to be determined by pro rata allocation (even if the Underwriters were treated as one entity for such purpose) or by any other method of allocation which does not take account of the equitable considerations referred to in the first sentence of this subsection (e). The amount paid by an indemnified party as a result of the losses, claims, damages or liabilities referred to in the first sentence of this subsection (e) shall be deemed to include any legal or other expenses reasonably incurred by such indemnified party in connection with investigating or defending against any action or claim which is the subject of this subsection (e). Notwithstanding the provisions of this subsection (e), no Underwriter shall be required to contribute any amount in excess of the amount by which the total underwriting discounts and commissions received by such Underwriter with respect to the Securities exceeds the amount of any damages that such Underwriter has otherwise been required to pay by reason of such untrue or alleged untrue statement or omission or alleged omission. No person guilty of fraudulent misrepresentation (within the meaning of Section 11(f) of the Act) shall be entitled to contribution from any person who was not guilty of such fraudulent misrepresentation. Notwithstanding anything to the contrary in this Agreement, the aggregate liability of the Selling Shareholder under the Selling Shareholder's representations and warranties contained in Section 3 hereof, under any certificate delivered pursuant to this Agreement, under the indemnity and contribution agreements contained in this Section 8, or otherwise pursuant to this Agreement shall not exceed the amount equal to the aggregate gross proceeds received by the Selling Shareholder after underwriting discounts and commissions, but before expenses, to the Selling Shareholder from the sale of Securities sold by the Selling Shareholder hereunder. The Underwriters' obligations in this subsection (e) to contribute are several in proportion to their respective underwriting obligations and not joint. The remedies provided for in this Section 8 are not exclusive and shall not limit any rights or remedies that might otherwise be available to any indemnified party at law or in equity.

(f) *Information Provided by the Underwriters.* The Underwriters severally confirm and the Company and each Selling Shareholder acknowledge that the statements with respect to the public offering of the Securities by the Underwriters set forth in the first and third paragraphs under the caption "Underwriting—Discounts and Commissions" and the estimate of the Underwriters' reasonable out-of-pocket accountable fees and disbursements in connection with the offering of the Securities in the Time of Sale Disclosure Package and in the Prospectus are correct and constitute the only information concerning the Underwriters furnished in writing to the Company by or on behalf of the Underwriters specifically for inclusion in the Registration Statement, any Preliminary Prospectus, the Time of Sale Disclosure Package, the Prospectus or any issuer free writing prospectus.

**9. Representations and Agreements to Survive Delivery.** All representations, warranties, and agreements of the Company and the Selling Shareholder herein or in certificates delivered pursuant hereto, and the agreements of the several Underwriters and the Company and the Selling Shareholder contained in Section 8 hereof, shall remain operative and in full force and effect regardless of any investigation made by or on behalf of any Underwriter or any controlling person thereof, or the Company or any of its officers, directors, or controlling persons, or the Selling Shareholder or any controlling person thereof, and shall survive delivery of, and payment for, the Securities to and by the Underwriters hereunder and any termination of this Agreement.

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10. **Termination.**

(a) Right to Terminate. You, as Representatives of the several Underwriters, shall have the right to terminate this Agreement by giving notice as hereinafter specified at any time at or prior to the First Closing Date, and the option referred to in Section 4(b), if exercised, may be cancelled at any time prior to the Second Closing Date, if (i) there has been, since the time of execution of this Agreement or since the respective dates as of which information is given in the Registration Statement, the Time of Sale Disclosure Package or the Prospectus, any Material Adverse Change, (ii) any other condition of the Underwriters' obligations hereunder is not fulfilled, (iii) trading on The Nasdaq Stock Market or New York Stock Exchange shall have been wholly suspended, (iv) minimum or maximum prices for trading shall have been fixed, or maximum ranges for prices for securities shall have been required, on The Nasdaq Stock Market or New York Stock Exchange, by such Exchange or by order of the Commission or any other Governmental Authority, (v) a banking moratorium shall have been declared by federal or state authorities, or (vi) there shall have occurred any outbreak or escalation of hostilities or any change in financial markets or any calamity or crisis that, in your judgment, is material and adverse and makes it impractical or inadvisable to proceed with the completion of the sale of and payment for the Securities. Any such termination shall be without liability of any party to any other party except that the provisions of Section 5(g) and Section 8 hereof shall at all times be effective.

(b) Notice of Termination. If you elect to terminate this Agreement as provided in this Section, the Company and the Selling Shareholder shall be notified promptly by you by telephone, confirmed by letter.

11. **Default by the Company.**

(a) Default by the Company or the Selling Shareholder. If the Selling Shareholder shall fail at the First Closing Date to sell and deliver the Securities which it is obligated to sell hereunder or the Company shall fail at the Second Closing Date to sell and deliver the Securities which it is obligated to sell hereunder then this Agreement shall terminate without any liability on the part of any Underwriter or, except as provided in Section 5(g) and Section 8 hereof, any non-defaulting party.

(b) No Relief from Liability. No action taken pursuant to this Section shall relieve the Company and Selling Shareholder from liability, if any, in respect of any default hereunder.

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12. **Notices.** Except as otherwise provided herein, all communications hereunder shall be in writing and, (i) if to the Underwriters, shall be mailed via overnight delivery service or hand delivered via courier, to the Representatives c/o William Blair & Company, L.L.C., 150 North Riverside Plaza, Chicago, Illinois 60606, to the attention of Equity Capital Markets (with a copy, which shall not constitute notice, to Goodwin Procter LLP, 620 Eighth Avenue, New York, NY 10018, Attention: Michael Maline); (ii) if to the Company, shall be mailed or delivered to it at 400 Water Street, Suite 200, Rochester, MI 48307, Attention: Chief Executive Officer (with a copy, which shall not constitute notice, to Morgan, Lewis & Bockius LLP, One Federal Street, Boston, MA 02110, Attention: Mark Stein); (iii) if to the Selling Shareholder, at c/o WPP Group USA, Inc. 100 Park Avenue, New York, NY 10017, Attention: Lance Maerov (with a copy, which shall not constitute notice, to Davis & Gilbert LLP, 1740 Broadway, New York, NY 10019, Attention: Curt C. Myers, Esq.); or in each case to such other address as the person to be notified may have requested in writing. Any party to this Agreement may change such address for notices by sending to the parties to this Agreement written notice of a new address for such purpose.

13. **Persons Entitled to Benefit of Agreement.** This Agreement shall inure to the benefit of and be binding upon the parties hereto and their respective successors and assigns and the controlling persons, officers and directors referred to in Section 8. Nothing in this Agreement is intended or shall be construed to give to any other person, firm or corporation any legal or equitable remedy or claim under or in respect of this Agreement or any provision herein contained. The term "successors and assigns" as herein used shall not include any purchaser, as such purchaser, of any of the Securities from any of the several Underwriters.

14. **Absence of Fiduciary Relationship.** The Company and the Selling Shareholder acknowledge and agree that: (a) the Representatives have been retained solely to act as underwriter in connection with the sale of the Securities and that no fiduciary, advisory or agency relationship between the Company or any Selling Shareholder and the Representatives has been created in respect of any of the transactions contemplated by this Agreement, irrespective of whether the Representatives have advised or are advising the Company or any Selling Shareholder on other matters; (b) the price and other terms of the Securities set forth in this Agreement were established by the Company and the Selling Shareholder following discussions and arms-length negotiations with the Representatives and the Company and the Selling Shareholder is capable of evaluating and understanding and understands and accepts the terms, risks and conditions of the transactions contemplated by this Agreement; (c) it has been advised that the Representatives and its affiliates are engaged in a broad range of transactions which may involve interests that differ from those of the Company and the Selling Shareholder and that the Representatives have no obligation to disclose such interest and transactions to the Company or any Selling Shareholder by virtue of any fiduciary, advisory or agency relationship; (d) it has been advised that the Representatives are acting, in respect of the transactions contemplated by this Agreement, solely for the benefit of the Underwriters, and not on behalf of the Company or any Selling Shareholder; (e) it waives to the fullest extent permitted by law, any claims it may have against the Underwriters for breach of fiduciary duty or alleged breach of fiduciary duty in respect of any of the transactions contemplated by this Agreement and agrees that the Underwriters shall have no liability (whether direct or indirect) to the Company or any Selling Shareholder in respect of such a fiduciary duty claim on behalf of or in right of any Selling Shareholder or the Company, including stockholders, employees or creditors of the Company.

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15. **Governing Law; Waiver of Jury Trial.** This Agreement shall be governed by and construed in accordance with the laws of the State of New York. The Company (on its behalf and, to the extent permitted by applicable law, on behalf of its stockholders and affiliates), the Selling Shareholder and each of the Underwriters hereby irrevocably waives, to the fullest extent permitted by applicable law, any and all right to trial by jury in any legal proceeding arising out of or relating to this Agreement or the transactions contemplated hereby.

16. **Counterparts.** This Agreement may be executed in one or more counterparts and, if executed in more than one counterpart, the executed counterparts shall each be deemed to be an original and all such counterparts shall together constitute one and the same instrument.

17. **General Provisions.** This Agreement constitutes the entire agreement of the parties to this Agreement and supersedes all prior written or oral and all contemporaneous oral agreements, understandings and negotiations with respect to the subject matter hereof. This Agreement may not be amended or modified unless in writing by all of the parties hereto, and no condition herein (express or implied) may be waived unless waived in writing by each party whom the condition is meant to benefit. The Section headings herein are for the convenience of the parties only and shall not affect the construction or interpretation of this Agreement. The invalidity or unenforceability of any Section, paragraph or provision of this Agreement shall not affect the validity or enforceability of any other Section, paragraph or provision hereof. If any Section, paragraph or provision of this Agreement is for any reason determined to be invalid or unenforceable, there shall be deemed to be made such minor changes (and only such minor changes) as are necessary to make it valid and enforceable.

**[Signature Page Follows]**



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Please sign and return to the Company the enclosed duplicates of this Underwriting Agreement whereupon this Underwriting Agreement will become a binding agreement between the Company, the Selling Shareholder and the several Underwriters in accordance with its terms.

Very truly yours,

**OPTIMIZERX CORPORATION**

By: \_\_\_\_\_  
Name: \_\_\_\_\_  
Title: \_\_\_\_\_

*[Signature Page to Underwriting Agreement]*

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Very truly yours,

**THE SELLING SHAREHOLDER NAMED IN SCHEDULE I  
HERETO**

By: \_\_\_\_\_  
Name: \_\_\_\_\_  
Attorney-in-Fact

*[Signature Page to Underwriting Agreement]*

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Confirmed as of the date first  
above mentioned, on behalf of  
themselves and the other several  
Underwriters named in Schedule II hereto.

**WILLIAM BLAIR & COMPANY, L.L.C.**

By: \_\_\_\_\_  
Name: \_\_\_\_\_  
Title: \_\_\_\_\_

**B. RILEY FBR, INC.**

By: \_\_\_\_\_  
Name: \_\_\_\_\_  
Title: \_\_\_\_\_

*[Signature Page to Underwriting Agreement]*

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**SCHEDULE I**

**Selling Shareholder**

<b>Selling Shareholder</b>	<b>Number of Firm Shares</b>
WPP Luxembourg Gamma Three S.à r.l. Société à responsabilité limitée Registered office: 124, Boulevard de la Pétrusse, L-2330 Luxembourg, Grand Duchy of Luxembourg R.C.S. Luxembourg: B 108492	<u>2,103,702</u>
<b>Total</b>	<b>2,103,702</b>

Sh. I

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**SCHEDULE II**

**Underwriters**

<u>Underwriter</u>	<u>Number of Firm Shares(1)</u>
William Blair & Company, L.L.C.	1,472,591
B. Riley FBR, Inc.	631,111
<b>Total</b>	<b>2,103,702</b>

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- (1) The Underwriters may purchase up to an additional 315,555 Option Shares, to the extent the option described in Section 4(b) of the Agreement is exercised, in the proportions and in the manner described in the Agreement.

Sh. II

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**SCHEDULE III**

**List of Individuals and Entities Executing Lock-Up Agreements**

- William J. Febbo
- James P. Lang
- Ellen O'Connor Vos
- Gus D. Halas
- Patrick D. Spangler
- Terence J. Hamilton
- Bryan Archambault
- Douglas P. Baker
- Miriam J. Paramore
- WPP Luxembourg Gamma Three S.à.r.l.

Sh. III

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**SCHEDULE IV**

**Certain Permitted Free Writing Prospectuses**

None.

Sh. IV

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**SCHEDULE V**

**Pricing Information**

Firm Shares to be Sold by the Selling Shareholder: 2,103,702

Option Shares to be sold by the Company: 315,555

Price to the public: \$10.00 per share

Price to the Underwriters: \$9.45 per share

Sh. V



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**EXHIBIT A**

**Form of Lock-Up Agreement**

\_\_\_\_\_, 2018

OptimizeRx Corporation  
400 Water Street, Suite 200  
Rochester, MI 48307

William Blair & Company, L.L.C.  
B. Riley FBR, Inc.

As representatives of the several underwriters named  
in Schedule II to the Underwriting Agreement  
referred to below

c/o William Blair & Company, L.L.C.  
150 North Riverside Plaza  
Chicago, IL 60606

c/o B. Riley FBR, Inc.  
1300 17th Street N., Suite 1300  
Arlington, VA 22209

**Re: OptimizeRx Corporation (the “Company”)**

Dear Sir or Madam:

This letter agreement is delivered to you pursuant to the Underwriting Agreement (the “Underwriting Agreement”) to be entered into by the Company, as issuer, and William Blair & Company, L.L.C. (“William Blair”) and B. Riley FBR, Inc., as Representatives (the “Representatives”) of the several underwriters named in Schedule II thereto (the “Underwriters”). Upon the terms and subject to the conditions of the Underwriting Agreement, the Underwriters intend to effect a public offering (the “Offering”) of common stock, par value \$0.001 per share (the “Common Stock”), of the Company (the “Shares”) pursuant to a Registration Statement on Form S-3.

The undersigned recognizes that it is in the best financial interests of the undersigned, as a stockholder, that the Company completes the proposed Offering. For purposes of this letter agreement, the term “Company Securities” shall mean stock, options, warrants or other securities of the Company.

The undersigned further recognizes that the Company Securities held by the undersigned are, or may be, subject to certain restrictions on transferability, including those imposed by United States federal securities laws. Notwithstanding these restrictions, the undersigned has agreed to enter into this letter agreement to further assure the Underwriters that the Company Securities of the undersigned, now held or hereafter acquired, will not enter the public market at a time that might impair the Offering.

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Therefore, as an inducement to the Underwriters to execute the Underwriting Agreement, the undersigned hereby acknowledges and agrees that the undersigned will not (i) offer, sell, contract to sell, announce the intention to sell, pledge, grant any option to purchase or otherwise dispose of (collectively, a “Disposition”) any Company Securities, or any securities convertible into or exercisable or exchangeable for, or any rights to purchase or otherwise acquire, any Company Securities held by the undersigned or acquired by the undersigned after the date hereof (collectively, “Other Securities”), or that may be deemed to be beneficially owned by the undersigned (collectively, the “Lock-Up Shares”), pursuant to the Rules and Regulations promulgated under the Securities Act of 1933, as amended (the “Act”), and the Securities Exchange Act of 1934, as amended (the “Exchange Act”), for a period commencing on the date hereof and ending 90 days after the date of the Company’s final prospectus supplement used to sell the Shares in the Offering pursuant to the Underwriting Agreement is first filed pursuant to Rule 424(b) under the Act (the “Public Offering Date”), inclusive (the “Lock-Up Period”), without the prior written consent of William Blair; (ii) exercise or seek to exercise or effectuate in any manner any rights of any nature that the undersigned has or may have hereafter to require the Company to register under the Act the undersigned’s sale, transfer or other disposition of any of the Lock-Up Shares or other securities of the Company held by the undersigned, or to otherwise participate as a selling securityholder in any manner in any registration effected by the Company under the Act during the Lock-Up Period; or (iii) publicly disclose the intention to do any of the foregoing (except as may be required by applicable law). The foregoing restrictions are expressly agreed to preclude the undersigned from engaging in any hedging, collar (whether or not for any consideration), swap or other transaction that is designed to or reasonably expected to lead to or result in a Disposition of Lock-Up Shares during the Lock-Up Period, even if such Lock-Up Shares would be disposed of by someone other than such holder. Such prohibited hedging or other transactions would include any short sale or any purchase, sale or grant of any right (including any put or call option or reversal or cancellation thereof) with respect to any Lock-Up Shares or with respect to any security (other than a broad-based market basket or index) that includes, relates to or derives any significant part of its value from the Lock-Up Shares.

Notwithstanding the agreement not to make any Disposition during the Lock-Up Period, the Underwriters and the undersigned have agreed that the foregoing restrictions shall not apply to:

- (1) any grant to or exercise by the undersigned of any option or warrant to acquire any shares of Common Stock or options to purchase shares of Common Stock, pursuant to any stock option, stock bonus or other stock plan or arrangement;
- (2) any transfer of Lock-Up Shares to the “immediate family” of the undersigned or to any trust for the direct or indirect benefit of the undersigned or the “immediate family” of the undersigned;
- (3) any bona fide gift;
- (4) any transfer of Lock-Up Shares by will or intestate succession;
- (5) any distribution or other transfer by a partnership to its partners or former partners or by a limited liability company to its members or retired members or by a corporation to its stockholders or former stockholders or to any wholly-owned subsidiary of such corporation;

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- (6) any transfer to the undersigned's affiliates (as defined in Rule 405 promulgated under the Act) or to any investment fund or other entity controlled or managed by the undersigned;
  - (7) any transfer pursuant to a qualified domestic relations order or in connection with a divorce settlement;
  - (8) any Company Securities acquired in open market transactions after completion of the Offering;
  - (9) any transfer to a partnership, limited liability company or other entity of which the undersigned and the immediate family of the undersigned are the legal and beneficial owner of all of the outstanding equity securities or similar interests;
  - (10) any transfer to a nominee or custodian of a person or entity to whom a disposition or transfer would be permissible under (2), (3), (4) or (9) above;
  - (11) any transfer to the Company from an employee of or service provider of the Company upon death, disability or termination of employment, in each case, of such employee or service provider;
  - (12) any transfer (A) to the Company in connection with the vesting, settlement, or exercise of restricted stock units, options, warrants or other rights to purchase shares of Common Stock (including, in each case, by way of "net" or "cashless" exercise), including for the payment of exercise price and tax and remittance payments due as a result of the vesting, settlement, or exercise of such restricted stock units, options, warrants or rights, or (B) necessary (including transfers on the open market) to generate such amount of cash needed for the payment of taxes, including estimated taxes, due as a result of the vesting or settlement of restricted stock units whether by means of a "net settlement" or otherwise, provided that any such transfers described in this subclause (B) may only take place if at least 45 days have elapsed since the Public Offering Date (and, for the sake of clarity, no transfers on the open market are permitted pursuant to this subclause (B) if less than 45 days have elapsed since the Public Offering Date), and in all such cases described in subclauses (A) and (B), provided that any such shares of Common Stock received upon such exercise, vesting or settlement shall be subject to the terms of this letter agreement; or
  - (13) transfers of shares of Common Stock or Other Securities in connection with the conversion, reclassification, exchange or swap of any outstanding preferred stock, other classes of Common Stock or Other Securities into shares of one or more series or classes of Common Stock or Other Securities, provided that any such shares of Common Stock or Other Securities received upon such conversion, reclassification, exchange or swap shall be subject to the terms of this letter agreement;

provided that, in the case of any transfer, gift or other disposition pursuant to (2), (3), (4), (6), (7), (9) or (10), the transferee, trust, donee or other recipient agrees to be bound in writing by the terms of this letter agreement prior to such transfer and no filing by any party (donor, donee, transferor or transferee) under the Exchange Act shall be required or shall be voluntarily made in connection with such transfer (other than required filings under Section 16(a) and Section 13(d) or 13(g) of the Exchange Act and any filings made after the expiration of the Lock-Up Period). For purposes of this letter agreement, "immediate family" shall mean any relationship by blood, marriage or adoption, nor more remote than first cousin.

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Furthermore, no provision in this letter agreement shall be deemed to restrict or prohibit the transfer of Lock-Up Shares upon the completion of a bona fide third-party tender offer, merger, consolidation or other similar transaction made to all holders of the Company Securities involving a change of control of the Company, provided that (1) the per-share consideration for the Company Securities transferred as described above shall be greater than the public offering price per share in the Offering, (2) all Company Securities subject to this letter agreement that are not so transferred, sold, tendered or otherwise disposed of remain subject to this letter agreement, and (3) it shall be a condition of transfer, sale, tender or other disposition that if such tender offer or other transaction is not completed, any Company Securities subject to this letter agreement shall remain subject to the restrictions herein.

Notwithstanding anything herein to the contrary, nothing herein shall prevent the undersigned from establishing a 10b5-1 trading plan that complies with Rule 10b5-1 under the Exchange Act ("10b5-1 trading plan") or from amending an existing 10b5-1 trading plan, so long as there are no sales of Lock-Up Shares under such plans during the Lock-Up Period; and provided that, the establishment of a 10b5-1 trading plan or the amendment of a 10b5-1 trading plan shall only be permitted if (i) the establishment or amendment of such plan is not required to be reported in any public report or filing with the Securities Exchange Commission, or otherwise and (ii) the undersigned does not otherwise voluntarily effect any public filing or report regarding the establishment or amendment of such plan.

If the undersigned is an officer or director of the Company, the undersigned further agrees that the restrictions imposed by this letter agreement shall be equally applicable to any issuer-directed shares of Common Stock the undersigned may purchase in the Offering.

It is understood that this letter agreement shall automatically terminate, and the undersigned shall be released from its obligations hereunder, upon the earliest to occur, if any, of (i) prior to the execution of the Underwriting Agreement, the Company advises the Representatives in writing that it has determined not to proceed with the Offering, (ii) the Underwriting Agreement (other than the provisions thereof that survive termination) is executed but is terminated prior to payment for and delivery of the Shares, or (iii) February 15, 2019, in the event that the Underwriting Agreement has not been executed by such date.

In furtherance of the foregoing, the Company and its transfer agent and registrar are hereby authorized to decline to make any transfer of Lock-Up Shares if such transfer would constitute a violation or breach of this letter agreement. This letter agreement shall be binding on the undersigned and the respective successors, heirs, personal representatives and assigns of the undersigned. Capitalized terms used but not defined herein have the respective meanings assigned to such terms in the Underwriting Agreement.

The undersigned understands that the Underwriters are entering into the Underwriting Agreement and proceeding with the Offering in reliance upon this letter agreement.

This letter agreement shall be governed by, and construed in accordance with, the laws of the State of New York.

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Very truly yours,

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Printed Name of Holder

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Signature

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Printed Name and Title of Person Signing  
*(if signing as custodian, trustee, or on behalf of an entity)*

December , 2018

OptimizeRx Corporation  
400 Water Street, Suite 200  
Rochester, MI 48307

William Blair & Company, L.L.C.  
B. Riley FBR, Inc.

As representatives of the several underwriters named  
in Schedule II to the Underwriting Agreement  
referred to below

c/o William Blair & Company, L.L.C.  
222 West Adams Street, Suite 3300  
Chicago, IL 60606

c/o B. Riley FBR, Inc.  
1001 19th Street North  
Arlington, VA 22209

**Re: OptimizeRx Corporation (the “Company”)**

Dear Sir or Madam:

This letter agreement is delivered to you pursuant to the Underwriting Agreement (the “Underwriting Agreement”) to be entered into by the Company, as issuer, and William Blair & Company, L.L.C. (“William Blair”) and B. Riley FBR, Inc., as Representatives (the “Representatives”) of the several underwriters named in Schedule II thereto (the “Underwriters”). Upon the terms and subject to the conditions of the Underwriting Agreement, the Underwriters intend to effect a public offering (the “Offering”) of common stock, par value \$0.001 per share (the “Common Stock”), of the Company (the “Shares”) pursuant to a Registration Statement on Form S-3.

The undersigned recognizes that it is in the best financial interests of the undersigned, as a stockholder, that the Company completes the proposed Offering. For purposes of this letter agreement, the term “Company Securities” shall mean stock, options, warrants or other securities of the Company.

The undersigned further recognizes that the Company Securities held by the undersigned are, or may be, subject to certain restrictions on transferability, including those imposed by United States federal securities laws. Notwithstanding these restrictions, the undersigned has agreed to enter into this letter agreement to further assure the Underwriters that the Company Securities of the undersigned, now held or hereafter acquired, will not enter the public market at a time that might impair the Offering.

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Therefore, as an inducement to the Underwriters to execute the Underwriting Agreement, the undersigned hereby acknowledges and agrees that the undersigned will not (i) offer, sell, contract to sell, announce the intention to sell, pledge, grant any option to purchase or otherwise dispose of (collectively, a "Disposition") any Company Securities, or any securities convertible into or exercisable or exchangeable for, or any rights to purchase or otherwise acquire, any Company Securities held by the undersigned or acquired by the undersigned after the date hereof (collectively, "Other Securities"), or that may be deemed to be beneficially owned by the undersigned (collectively, the "Lock-Up Shares"), pursuant to the Rules and Regulations promulgated under the Securities Act of 1933, as amended (the "Act"), and the Securities Exchange Act of 1934, as amended (the "Exchange Act"), for a period commencing on the date hereof and ending 90 days after the date of the Company's final prospectus supplement used to sell the Shares in the Offering pursuant to the Underwriting Agreement is first filed pursuant to Rule 424(b) under the Act (the "Public Offering Date"), inclusive (the "Lock-Up Period"), without the prior written consent of William Blair; (ii) exercise or seek to exercise or effectuate in any manner any rights of any nature that the undersigned has or may have hereafter to require the Company to register under the Act the undersigned's sale, transfer or other disposition of any of the Lock-Up Shares or other securities of the Company held by the undersigned, or to otherwise participate as a selling securityholder in any manner in any registration effected by the Company under the Act during the Lock-Up Period; or (iii) publicly disclose the intention to do any of the foregoing (except as may be required by applicable law). The foregoing restrictions are expressly agreed to preclude the undersigned from engaging in any hedging, collar (whether or not for any consideration), swap or other transaction that is designed to or reasonably expected to lead to or result in a Disposition of Lock-Up Shares during the Lock-Up Period, even if such Lock-Up Shares would be disposed of by someone other than such holder. Such prohibited hedging or other transactions would include any short sale or any purchase, sale or grant of any right (including any put or call option or reversal or cancellation thereof) with respect to any Lock-Up Shares or with respect to any security (other than a broad-based market basket or index) that includes, relates to or derives any significant part of its value from the Lock-Up Shares.

Notwithstanding the agreement not to make any Disposition during the Lock-Up Period, the Underwriters and the undersigned have agreed that the foregoing restrictions shall not apply to:

- (1) any grant to or exercise by the undersigned of any option or warrant to acquire any shares of Common Stock or options to purchase shares of Common Stock, pursuant to any stock option, stock bonus or other stock plan or arrangement;
- (2) any transfer of Lock-Up Shares to the "immediate family" of the undersigned or to any trust for the direct or indirect benefit of the undersigned or the "immediate family" of the undersigned;
- (3) any bona fide gift;
- (4) any transfer of Lock-Up Shares by will or intestate succession;
- (5) any distribution or other transfer by a partnership to its partners or former partners or by a limited liability company to its members or retired members or by a corporation to its stockholders or former stockholders or to any wholly-owned subsidiary of such corporation;
- (6) any transfer to the undersigned's affiliates (as defined in Rule 405 promulgated under the Act) or to any investment fund or other entity controlled or managed by the undersigned;
- (7) any transfer pursuant to a qualified domestic relations order or in connection with a divorce settlement;

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- (8) any Company Securities acquired in open market transactions after completion of the Offering;
  - (9) any transfer to a partnership, limited liability company or other entity of which the undersigned and the immediate family of the undersigned are the legal and beneficial owner of all of the outstanding equity securities or similar interests;
  - (10) any transfer to a nominee or custodian of a person or entity to whom a disposition or transfer would be permissible under (2), (3), (4) or (9) above;
  - (11) any transfer to the Company from an employee of or service provider of the Company upon death, disability or termination of employment, in each case, of such employee or service provider;
  - (12) any transfer (A) to the Company in connection with the vesting, settlement, or exercise of restricted stock units, options, warrants or other rights to purchase shares of Common Stock (including, in each case, by way of “net” or “cashless” exercise), including for the payment of exercise price and tax and remittance payments due as a result of the vesting, settlement, or exercise of such restricted stock units, options, warrants or rights, or (B) necessary (including transfers on the open market) to generate such amount of cash needed for the payment of taxes, including estimated taxes, due as a result of the vesting or settlement of restricted stock units whether by means of a “net settlement” or otherwise, provided that any such transfers described in this subclause (B) may only take place if at least 45 days have elapsed since the Public Offering Date (and, for the sake of clarity, no transfers on the open market are permitted pursuant to this subclause (B) if less than 45 days have elapsed since the Public Offering Date), and in all such cases described in subclauses (A) and (B), provided that any such shares of Common Stock received upon such exercise, vesting or settlement shall be subject to the terms of this letter agreement; or
  - (13) transfers of shares of Common Stock or Other Securities in connection with the conversion, reclassification, exchange or swap of any outstanding preferred stock, other classes of Common Stock or Other Securities into shares of one or more series or classes of Common Stock or Other Securities, provided that any such shares of Common Stock or Other Securities received upon such conversion, reclassification, exchange or swap shall be subject to the terms of this letter agreement;

provided that, in the case of any transfer, gift or other disposition pursuant to (2), (3), (4), (6), (7), (9) or (10), the transferee, trust, donee or other recipient agrees to be bound in writing by the terms of this letter agreement prior to such transfer and no filing by any party (donor, donee, transferor or transferee) under the Exchange Act shall be required or shall be voluntarily made in connection with such transfer (other than required filings under Section 16(a) and Section 13(d) or 13(g) of the Exchange Act and any filings made after the expiration of the Lock-Up Period). For purposes of this letter agreement, “immediate family” shall mean any relationship by blood, marriage or adoption, nor more remote than first cousin.



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Furthermore, no provision in this letter agreement shall be deemed to restrict or prohibit the transfer of Lock-Up Shares upon the completion of a bona fide third-party tender offer, merger, consolidation or other similar transaction made to all holders of the Company Securities involving a change of control of the Company, provided that (1) the per-share consideration for the Company Securities transferred as described above shall be greater than the public offering price per share in the Offering, (2) all Company Securities subject to this letter agreement that are not so transferred, sold, tendered or otherwise disposed of remain subject to this letter agreement, and (3) it shall be a condition of transfer, sale, tender or other disposition that if such tender offer or other transaction is not completed, any Company Securities subject to this letter agreement shall remain subject to the restrictions herein.

Notwithstanding anything herein to the contrary, nothing herein shall prevent the undersigned from establishing a 10b5-1 trading plan that complies with Rule 10b5-1 under the Exchange Act ("10b5-1 trading plan") or from amending an existing 10b5-1 trading plan, so long as there are no sales of Lock-Up Shares under such plans during the Lock-Up Period; and provided that, the establishment of a 10b5-1 trading plan or the amendment of a 10b5-1 trading plan shall only be permitted if (i) the establishment or amendment of such plan is not required to be reported in any public report or filing with the Securities Exchange Commission, or otherwise and (ii) the undersigned does not otherwise voluntarily effect any public filing or report regarding the establishment or amendment of such plan.

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It is understood that this letter agreement shall automatically terminate, and the undersigned shall be released from its obligations hereunder, upon the earliest to occur, if any, of (i) prior to the execution of the Underwriting Agreement, the Company advises the Representatives in writing that it has determined not to proceed with the Offering, (ii) the Underwriting Agreement (other than the provisions thereof that survive termination) is executed but is terminated prior to payment for and delivery of the Shares, or (iii) February 15, 2019, in the event that the Underwriting Agreement has not been executed by such date.

In furtherance of the foregoing, the Company and its transfer agent and registrar are hereby authorized to decline to make any transfer of Lock-Up Shares if such transfer would constitute a violation or breach of this letter agreement. This letter agreement shall be binding on the undersigned and the respective successors, heirs, personal representatives and assigns of the undersigned. Capitalized terms used but not defined herein have the respective meanings assigned to such terms in the Underwriting Agreement.

The undersigned understands that the Underwriters are entering into the Underwriting Agreement and proceeding with the Offering in reliance upon this letter agreement.

This letter agreement shall be governed by, and construed in accordance with, the laws of the State of New York.

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Very truly yours,

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Printed Name of Holder

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Signature

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Printed Name and Title of Person Signing  
*(if signing as custodian, trustee, or on behalf of an entity)*

***[Signature page to OptimizeRx Corporation Lock-up Agreement]***