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**UNITED STATES  
SECURITIES AND EXCHANGE COMMISSION**

Washington, D.C. 20549

**FORM 8-K**

**CURRENT REPORT**

Pursuant to Section 13 or 15(d) of The Securities Exchange Act of 1934

Date of Report (Date of earliest event reported): March 26, 2019

**ZOMEDICA PHARMACEUTICALS CORP.**

*(Exact name of registrant as specified in its charter)*

**Alberta, Canada**  
*(State or other jurisdiction  
of incorporation)*

**001-38298**  
*(Commission  
File Number)*

**N/A**  
*(IRS Employer  
Identification No.)*

**100 Phoenix Drive, Suite 190, Ann Arbor, Michigan**  
*(Address of principal executive offices)*

**48108**  
*(Zip Code)*

Registrant's telephone number, including area code: **(734) 369-2555**

*(Former name or former address, if changed since last report.)*

Check the appropriate box below if the Form 8-K filing is intended to simultaneously satisfy the filing obligation of the registrant under any of the following provisions (see General Instruction A.2. below):

- ☐ Written communications pursuant to Rule 425 under the Securities Act (17 CFR 230.425)
- ☐ Soliciting material pursuant to Rule 14a-12 under the Exchange Act (17 CFR 240.14a-12)
- ☐ Pre-commencement communications pursuant to Rule 14d-2(b) under the Exchange Act (17 CFR 240.14d-2(b))
- ☐ Pre-commencement communications pursuant to Rule 13e-4(c) under the Exchange Act (17 CFR 240.13e-4(c))

Indicate by check mark whether the registrant is an emerging growth company as defined in Rule 405 of the Securities Act of 1933 (§230.405 of this chapter) or Rule 12b-2 of the Securities Exchange Act of 1934 (§240.12b-2 of this chapter).

Emerging growth company ☒

If an emerging growth company, indicate by check mark if the registrant has elected not to use the extended transition period for complying with any new or revised financial accounting standards provided pursuant to Section 13(a) of the Exchange Act. ☒

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#### **Item 1.01 Entry into a Material Definitive Agreement.**

On March 26, 2019, Zomedica Pharmaceuticals Corp., a corporation organized under the laws of Alberta, Canada (the “Company”), entered into an Underwriting Agreement (the “Underwriting Agreement”) with H.C. Wainwright & Co. LLC, as the representative (the “Representative”) of the several underwriters named therein (the “Underwriters”), relating to a firm commitment underwritten offering (the “Offering”) of 6,521,740 (the “Firm Shares”) of the Company’s common shares, without par value (the “Common Shares”). The public offering price of the Firm Shares was \$0.46 per share, and the Underwriters have severally agreed to purchase the Firm Shares at a price of \$0.4255 per share. The Company has granted the Underwriters a 30-day option to purchase up to an additional 978,261 Common Shares (together with the “Firm Shares, the “Shares”) on the terms described above.

The closing of the Offering is expected to take place on March 28, 2019, subject to the satisfaction of customary closing conditions. The Company estimates that the net proceeds from the Offering will be approximately \$2.3 million (or approximately \$2.7 million if the Underwriters exercise their option to purchase additional shares in full), after deducting the underwriting discount and commissions and estimated offering expenses payable by the Company. The Company intends to use the net proceeds from the Offering for the continued development of its diagnostic platform and therapeutic candidates, including making milestone payments, as they come due, under the Company’s existing license and collaboration agreements, and other general corporate and working capital purposes.

The Underwriting Agreement contains customary representations, warranties and covenants by the Company, customary conditions to closing, indemnification obligations of the Company and the Underwriters, including for liabilities under the Securities Act of 1933, as amended, other obligations of the parties and termination provisions. The representations, warranties and covenants contained in the Underwriting Agreement were made solely for the benefit of the parties to the Underwriting Agreement, including, in some cases, for the purpose of allocating risk among the parties to such agreements, and should not be deemed to be a representation, warranty or covenant to any holder of the Company’s securities. Moreover, such representations, warranties or covenants were accurate only as of the date when made. Accordingly, such representations, warranties and covenants should not be relied on as accurately representing the current state of the Company’s affairs.

Upon completion of the Offering and for a period of nine months thereafter, in the event that the Company decides (i) to finance or refinance any indebtedness using a manager or agent, or (ii) to raise funds through a public offering or private placement of equity or debt securities using an underwriter or placement agent, the Company has granted H.C. Wainwright & Co., LLC a right of first refusal to act as sole book-running manager, sole underwriter, sole placement agent or sole agent in connection with any such transactions, subject to certain specified exceptions.

Subject to certain exceptions, the Company, its executive officers, directors and certain shareholders have agreed not to sell or transfer any Common Shares or securities convertible into or exchangeable or exercisable for Common Shares, for 60 days after March 26, 2019 without first obtaining the written consent of the Representative. The Company has also agreed not to enter into or effect a “variable rate transaction” for a period of 12 months from the closing of the Offering without the prior written consent of the Representative (which may be withheld in its sole discretion), subject to certain limited exceptions.

The foregoing description of the material terms of the Underwriting Agreement is not complete and is qualified in its entirety by reference to the full text thereof, a copy of which is filed herewith as Exhibit 1.1 to this Current Report on Form 8-K and is incorporated herein by reference.

The legal opinion of Tingle Merrett LLP, counsel to the Company, relating to the Shares is filed as Exhibit 5.1 to this Current Report on Form 8-K.

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**Item 8.01 Other Events.**

On March 25, 2019, the Company filed a prospectus supplement to its prospectus dated January 30, 2019 relating to its at-the-market offering program (the “Program”) reducing the maximum dollar amount of the common shares that may be offered pursuant to the Program from \$50.0 million to \$10.0 million.

On March 25, 2019, the Company issued a press release announcing the Offering. The full text of the press release issued is filed as Exhibit 99.1 to this Current Report on Form 8-K, and the information contained therein is incorporated herein by reference.

On March 26, 2019, the Company issued a press release announcing the pricing of the Offering. The full text of the press release issued is filed as Exhibit 99.2 to this Current Report on Form 8-K, and the information contained therein is incorporated herein by reference.

**Item 9.01 Financial Statements and Exhibits.**

(d) Exhibits

<b><u>Exhibit No.</u></b>	<b><u>Description</u></b>
<a href="#"><u>1.1</u></a>	<a href="#"><u>Underwriting Agreement, dated March 26, 2019, by and among the Company and the Representative on behalf of the several Underwriters</u></a>
<a href="#"><u>5.1</u></a>	<a href="#"><u>Opinion of Tingle Merrett LLP</u></a>
<a href="#"><u>23.1</u></a>	<a href="#"><u>Consent of Tingle Merrett LLP (included in Exhibit 5.1)</u></a>
<a href="#"><u>99.1</u></a>	<a href="#"><u>Press Release issued March 25, 2019</u></a>
<a href="#"><u>99.2</u></a>	<a href="#"><u>Press Release issued March 26, 2019</u></a>

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**SIGNATURE**

Pursuant to the requirements of the Securities Exchange Act of 1934, the registrant has duly caused this report to be signed on its behalf by the undersigned hereunto duly authorized.

**ZOMEDICA PHARMACEUTICALS CORP.**

Date: March 26, 2019

By: /s/ Shameze Rampertab  
Name: Shameze Rampertab  
Title: Chief Financial Officer

**Zomedica Pharmaceuticals Corp.**  
6,521,740 Common Shares  
(no par value)

**Underwriting Agreement**

March 26, 2019

H.C. Wainwright & Co., LLC As  
Representative of the several  
Underwriters listed in Schedule A  
hereto

c/o H.C. Wainwright & Co., LLC  
430 Park Avenue, 3rd Floor  
New York, New York 10022

Ladies and Gentlemen:

Zomedica Pharmaceuticals Corp., a corporation organized under the laws of Alberta, Canada (the “**Company**”), proposes to issue and sell to the several underwriters named in Schedule A (the “**Underwriters**”) an aggregate of 6,521,740 of its common shares (the “**Firm Shares**”), no par value (the “**Common Shares**”). In addition, the Company has granted to the Underwriters an option to purchase up to an additional 978,261 Common Shares pursuant to such option (the “**Option Shares**”). The Firm Shares and, if and to the extent such option is exercised, the Option Shares, are collectively called the “**Offered Shares**.” H.C. Wainwright & Co., LLC (“**HCW**”) has agreed to act as representative of the several Underwriters (in such capacity, the “**Representative**”) in connection with the offering and sale of the Offered Shares. To the extent there are no additional underwriters listed on Schedule A, the term “Representative” as used herein shall mean H.C. Wainwright & Co., LLC, as Underwriter, and the term “Underwriters” shall mean either the singular or the plural, as the context requires.

The Company has prepared and filed with the Securities and Exchange Commission (the “**Commission**”) a shelf registration statement on Form S-3, File No. 333-228926, including a base prospectus (the “**Base Prospectus**”) to be used in connection with the public offering and sale of the Offered Shares. Such registration statement, as amended, including the financial statements, exhibits and schedules thereto, in the form in which it became effective under the Securities Act of 1933, and the rules and regulations promulgated thereunder (collectively, the “**Securities Act**”), including all documents incorporated or deemed to be incorporated by reference therein and any information deemed to be a part thereof at the time of effectiveness pursuant to 430B under the Securities Act, is called the “**Registration Statement**.” Any registration statement filed by the Company pursuant to Rule 462(b) under the Securities Act in connection with the offer and sale of the Offered Shares is called the “**Rule 462(b) Registration Statement**,” and from and after the date and time of filing of any such Rule 462(b) Registration Statement the term “Registration Statement” shall include the Rule 462(b) Registration Statement. The preliminary prospectus supplement dated March 25, 2019 describing the Offered Shares and the offering thereof (the “**Preliminary Prospectus Supplement**”), together with the Base Prospectus, is called the “**Preliminary Prospectus**,” and the Preliminary Prospectus and any other prospectus supplement to the Base Prospectus in preliminary form that describes the Offered Shares and the offering thereof and is used prior to the filing of the Prospectus (as defined below), together with the Base Prospectus, is called a “**preliminary prospectus**.” As used herein, the term “**Prospectus**” shall mean the final prospectus supplement to the Base Prospectus that describes the Offered Shares and the offering thereof (the “**Final Prospectus Supplement**”), together with the Base Prospectus, in the form first used by the Underwriters to confirm sales of the Offered Shares or in the form first made available to the Underwriters by the Company to meet requests of purchasers pursuant to Rule 173 under the Securities Act.

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As used herein, “**Applicable Time**” is 6:00 a.m. New York time on March 26, 2019. As used herein, “**free writing prospectus**” has the meaning set forth in Rule 405 under the Securities Act, and “**Time of Sale Prospectus**” means the Preliminary Prospectus, as amended or supplemented immediately prior to the Applicable Time and the pricing information set forth on Schedule C hereto. As used herein, “**Road Show**” means a “road show” (as defined in Rule 433 under the Securities Act) relating to the offering of the Offered Shares contemplated hereby that is a “written communication” (as defined in Rule 405 under the Securities Act).

All references in this Agreement to financial statements and schedules and other information which are “contained,” “included” or “stated” in, or “part of” the Registration Statement, the Rule 462(b) Registration Statement, the Preliminary Prospectus, any preliminary prospectus, the Base Prospectus, the Time of Sale Prospectus or the Prospectus, and all other references of like import, shall be deemed to mean and include all such financial statements and schedules and other information which is or is deemed to be incorporated by reference in the Registration Statement, the Rule 462(b) Registration Statement, the Preliminary Prospectus, any preliminary prospectus, the Base Prospectus, the Time of Sale Prospectus or the Prospectus, as the case may be.

All references in this Agreement to amendments or supplements to the Registration Statement, the Rule 462(b) Registration Statement, the Preliminary Prospectus, any preliminary prospectus, the Base Prospectus, the Time of Sale Prospectus or the Prospectus shall be deemed to mean and include the filing of any document under the Securities Exchange Act of 1934, and the rules and regulations promulgated thereunder (collectively, the “**Exchange Act**”) that is or is deemed to be incorporated by reference in the Registration Statement, the Rule 462(b) Registration Statement, the Preliminary Prospectus, any preliminary prospectus, the Base Prospectus, or the Prospectus, as the case may be.

All references in this Agreement to (i) the Registration Statement, the Rule 462(b) Registration Statement, the Preliminary Prospectus, any preliminary prospectus, the Base Prospectus or the Prospectus, or any amendments or supplements to any of the foregoing, or any free writing prospectus, shall include any copy thereof filed with the Commission pursuant to its Electronic Data Gathering, Analysis and Retrieval System (“**EDGAR**”) and (ii) the Prospectus shall be deemed to include any “electronic Prospectus” provided for use in connection with the offering of the Offered Shares as contemplated by Section 3(n). In the event that the Company has only one subsidiary, then all references herein to “subsidiaries” of the Company shall be deemed to refer to such single subsidiary, *mutatis mutandis*.

The Company hereby confirms its agreements with the Underwriters as follows:

1. Representations and Warranties of the Company. The Company represents and warrants to each Underwriter as of the date of this Agreement, the Applicable Time, the First Closing Date (as hereinafter defined) and each Option Closing Date (as hereinafter defined), if any, unless such representation, warranty or agreement speaks as of a different time, as follows:

( a ) Compliance with Registration Requirements. The Registration Statement has become effective under the Securities Act. The Company has complied, to the Commission's satisfaction, with all requests of the Commission for additional or supplemental information, if any. The Company has not received, and has no notice of, any order of the Commission preventing or suspending the use of the Registration Statement, or threatening or instituting proceedings for that purpose. At the time the Company's Annual Report on Form 10-K for the year ended December 31, 2018, as amended (the "Annual Report") was filed with the Commission, or, if later, at the time the Registration Statement was originally filed with the Commission, the Company met the then-applicable requirements for use of Form S-3 under the Securities Act. The documents incorporated or deemed to be incorporated by reference in the Registration Statement, the Time of Sale Prospectus and the Prospectus, at the time they were or hereafter are filed with the Commission, or became effective under the Exchange Act, as the case may be, complied, or will comply, as the case may be, in all material respects with the requirements of the Exchange Act. The Common Shares are registered pursuant to Section 12(b) of the Exchange Act and are currently listed on the NYSE American Exchange (the "Exchange") under the trading symbol "ZOM." The Company has taken no action designed to, or likely to have the effect of, terminating the registration of the Common Shares under the Exchange Act or delisting the Common Shares from the Exchange, nor has the Company received any notification that the Commission or the Exchange is contemplating terminating such registration or listing. To the Company's knowledge, it is in compliance with all applicable listing requirements of the Exchange.

(b) Distribution of Offering Material By the Company. Prior to the later of (i) the expiration or termination of the option granted to the several Underwriters in Section 2(c) and (ii) the completion of the Underwriters' distribution of the Offered Shares, the Company has not distributed and will not distribute any offering material in connection with the offering and sale of the Offered Shares other than the Registration Statement, a preliminary prospectus, the Time of Sale Prospectus or the Prospectus.

(c) Disclosure. The Time of Sale Prospectus, as of the Applicable Time, and the Prospectus, as of its date, filed complied in all material respects with the Securities Act and, if filed by electronic transmission pursuant to EDGAR, was identical (except as may be permitted by Regulation S-T under the Securities Act) to the copy thereof delivered to the Underwriters for use in connection with the offer and sale of the Offered Shares. Each of the Registration Statement and any post-effective amendment thereto, at the time it became effective with respect to the Underwriters pursuant to Rule 430B(f)(2) under the Securities Act or becomes effective and at all subsequent times thereto, complied and will comply in all material respects with the Securities Act and at such times did not and will not contain any 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 not misleading. As of the Applicable Time, the Time of Sale Prospectus (including any preliminary prospectus wrapper) did 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. The Prospectus (including any Prospectus wrapper), as of its date and (as then amended or supplemented) as of the First Closing Date, did not and will not contain any untrue statement of a material fact or omit to state a material fact necessary in order to make the statements therein, in the light of the circumstances under which they were made, not misleading. The representations and warranties set forth in the three immediately preceding sentences do not apply to statements in or omissions from the Registration Statement or any post-effective amendment thereto, or the Prospectus or the Time of Sale Prospectus, or any amendments or supplements thereto, made in reliance upon and in conformity with written information relating to any Underwriter furnished to the Company in writing by the Representative expressly for use therein, it being understood and agreed that the only such information consists of the information described in Section 9(b). There are no contracts or other documents required to be described in the Time of Sale Prospectus or the Prospectus or to be filed as an exhibit to the Registration Statement which have not been described or filed as required.

(d) Free Writing Prospectuses; Road Show. Each free writing prospectus that the Company is required to file pursuant to Rule 433(d) under the Securities Act has been, or will be, filed with the Commission in accordance with the requirements of the Securities Act. Each free writing prospectus that the Company has filed, or is required to file, pursuant to Rule 433(d) under the Securities Act or that was prepared by or on behalf of or used or referred to by the Company complies or will comply in all material respects with the requirements of Rule 433 under the Securities Act, including timely filing with the Commission or retention where required and legending, and each such free writing prospectus, as of its issue date and at all subsequent times through the completion of the public offer and sale of the Offered Shares did not, does not and will not include any information that conflicted, conflicts or will conflict with the information contained in the Registration Statement, the Prospectus or any preliminary prospectus and not superseded or modified. Except for the free writing prospectuses, if any, identified on Schedule B, and electronic road shows, if any, furnished to the Representative before first use, the Company has not prepared, used or referred to, and will not, without the Representative's prior written consent, prepare, use or refer to, any free writing prospectuses. Each Road Show, when considered together with the Time of Sale Prospectus, does 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.

(e) Financial Information. The consolidated financial statements of the Company included or incorporated by reference in the Registration Statement, the Time of Sale Prospectus and the Prospectus, together with the related notes and schedules, present fairly, in all material respects, the consolidated financial position of the Company and the Subsidiaries (as defined below) as of the dates indicated and the consolidated results of operations, cash flows and changes in shareholders' equity of the Company for the periods specified and have been prepared in compliance with the requirements of the Securities Act and Exchange Act and in conformity with GAAP (as defined below) applied on a consistent basis during the periods involved (subject, in the case of quarterly financial statements, to normal, recurring year-end adjustments; the other financial and statistical data with respect to the Company and the Subsidiaries (as defined below) contained or incorporated by reference in the Registration Statement, the Time of Sale Prospectus and the Prospectus are accurately and fairly presented, in all material respects, and prepared on a basis consistent with the financial statements and books and records of the Company; there are no financial statements (historical or pro forma) that are required to be included or incorporated by reference in the Registration Statement, the Time of Sale Prospectus or the Prospectus that are not included or incorporated by reference as required; the Company and the Subsidiaries (as defined below) do not have any material liabilities or obligations, direct or contingent (including any off-balance sheet obligations), not described in the Registration Statement (including the Incorporated Documents but excluding the exhibits thereto), to the extent that such description is required by the Securities Act and the Securities Act Rules and Regulations, the Time of Sale Prospectus and the Prospectus; and all disclosures contained or incorporated by reference in the Registration Statement, the Time of Sale Prospectus and the Prospectus regarding "non-GAAP financial measures" (as such term is defined by the rules and regulations of the Commission) comply with Regulation G of the Exchange Act and Item 10 of Regulation S-K under the Securities Act, to the extent applicable. The financial data set forth in each of the Registration Statement, the Time of Sale Prospectus and the Prospectus fairly present, in all material respects, the information set forth therein on a basis consistent with that of the audited financial statements contained in the Registration Statement, the Time of Sale Prospectus and the Prospectus (subject, in the case of interim financial data, to normal, recurring year-end adjustments). The interactive data in eXtensible Business Reporting Language included or incorporated by reference in the Registration Statement and the Prospectus fairly presents, in all material respects, the information called for in all material respects and has been prepared in accordance with the Commission's rules and guidelines applicable thereto.



(f) Conformity with EDGAR Filing. The Preliminary Prospectus and Prospectus delivered to the Underwriter for use in connection with the sale of the Offered Shares pursuant to this Agreement will be identical to the versions of the Preliminary Prospectus and Final Prospectus created to be transmitted to the Commission for filing via EDGAR, except to the extent permitted by Regulation S-T.

(g) Organization. The Company and its Subsidiary are duly organized, validly existing as a corporation and in good standing under the Laws of their respective jurisdictions of organization. The Company and its Subsidiary are duly licensed or qualified as a foreign corporation for transaction of business and in good standing under the Laws of each other jurisdiction in which their respective ownership or lease of property or the conduct of their respective businesses requires such license or qualification, and have all corporate power and authority necessary to own or hold their respective properties and to conduct their respective businesses as described in the Registration Statement, the Time of Sale Prospectus and the Prospectus, except where the failure to be so qualified or in good standing or have such power or authority would not, individually or in the aggregate, have a material adverse effect or would reasonably be expected to have a material adverse effect on or affecting the assets, business, operations, earnings, properties, condition (financial or otherwise), prospects, stockholders' equity or results of operations of the Company and the Subsidiaries taken as a whole, or prevent or materially interfere with the consummation of the transactions contemplated hereby (a "**Material Adverse Effect**").

(h) Subsidiary. The subsidiary set forth on Schedule D is the Company's only significant subsidiary (as such term is defined in Rule 1-02 of Regulation S-X promulgated by the Commission). Except as set forth in the Registration Statement, the Time of Sale Prospectus and the Prospectus, the Company owns, directly or indirectly, all of the equity interests of the Subsidiary free and clear of any lien, charge, security interest, encumbrance, right of first refusal or other restriction, and all the equity interests of the Subsidiary are validly issued and are fully paid, nonassessable and free of preemptive and similar rights. The Subsidiary is not currently prohibited, directly or indirectly, from paying any dividends to the Company, from making any other distribution on such Subsidiary's capital stock, from repaying to the Company any loans or advances to such Subsidiary from the Company or from transferring any of such Subsidiary's property or assets to the Company.

(i) No Violation or Default. Neither the Company nor its Subsidiary is (i) in violation of its charter or by-laws or similar organizational documents; (ii) in default, and no event has occurred that, with notice or lapse of time or both, would constitute such a default, in the due performance or observance of any term, covenant or condition contained in any indenture, mortgage, deed of trust, loan agreement or other agreement or instrument to which the Company or its Subsidiary is a party or by which the Company or its Subsidiary is bound or to which any of the property or assets of the Company or its Subsidiary are subject; or (iii) in violation of any Law of any Governmental Authority, except, in the case of each of clauses (ii) and (iii) above, for any such violation or default that could not, individually or in the aggregate, reasonably be expected to have a Material Adverse Effect. To the Company's knowledge, no other party under any material contract or other agreement to which it or its Subsidiary is a party is in default in any respect thereunder where such default could reasonably be expected to have a Material Adverse Effect.

(j) No Material Adverse Change. Subsequent to the respective dates as of which information is given in the Registration Statement, the Time of Sale Prospectus and the Prospectus (including any document deemed incorporated by reference therein), there has not been (i) any Material Adverse Effect or the occurrence of any development that the Company reasonably expects will result in a Material Adverse Effect, (ii) any transaction which is material to the Company and the Subsidiary taken as a whole, (iii) any obligation or liability, direct or contingent (including any off-balance sheet obligations), incurred by the Company or its Subsidiary, which is material to the Company and the Subsidiary taken as a whole, (iv) any material change in the capital stock or outstanding long-term indebtedness of the Company or its Subsidiary or (v) any dividend or distribution of any kind declared, paid or made on the capital stock of the Company or its Subsidiary, other than in each case above in the ordinary course of business or as otherwise disclosed in the Registration Statement or Prospectus (including any document deemed incorporated by reference therein).

(k) Capitalization. The issued and outstanding shares of capital stock of the Company have been validly issued, are fully paid and nonassessable and, other than as disclosed in the Registration Statement, the Time of Sale Prospectus or the Prospectus, are not subject to any preemptive rights, rights of first refusal or similar rights. The Company has an authorized, issued and outstanding capitalization as set forth in the Registration Statement and the Prospectus as of the dates referred to therein (other than the grant of additional options under the Company's existing stock option plans, or changes in the number of outstanding shares of Common Shares of the Company due to the issuance of shares upon the exercise or conversion of securities exercisable for, or convertible into, Common Shares outstanding on the date hereof) and such authorized capital stock conforms to the description thereof set forth in the Registration Statement, the Time of Sale Prospectus and the Prospectus. The description of the securities of the Company in the Registration Statement, the Time of Sale Prospectus and the Prospectus is complete and accurate in all material respects. Except as disclosed in or contemplated by the Registration Statement, the Time of Sale Prospectus or the Prospectus, as of the date referred to therein, the Company does not have outstanding any options to purchase, or any rights or warrants to subscribe for, or any securities or obligations convertible into, or exchangeable for, or any contracts or commitments to issue or sell, any shares of capital stock or other securities.

(l) Authorization. The Company has the corporate power to enter into this Agreement and perform the transactions contemplated hereby. This Agreement has been duly authorized, executed and delivered by the Company and is a legal, valid and binding agreement of the Company enforceable in accordance with its terms, except to the extent that enforceability may be limited by bankruptcy, insolvency, reorganization, moratorium or similar Laws affecting creditors' rights generally and by general equitable principles.

(m) Authorization of the Offered Shares. The Offered Shares have been duly authorized for issuance and sale pursuant to this Agreement and, when issued and delivered pursuant to the terms approved by the board of directors of the Company or a duly authorized committee thereof, or a duly authorized executive committee, against payment therefor as provided herein, will be duly and validly authorized and issued and fully paid and nonassessable, free and clear of any pledge, lien, encumbrance, security interest or other claim, including any statutory or contractual preemptive rights, resale rights, rights of first refusal or other similar rights, and will be registered pursuant to Section 12 of the Exchange Act. The Offered Shares, when issued, will conform to the description thereof set forth in or incorporated into the Registration Statement, the Time of Sale Prospectus and the Prospectus.

(n) No Consents Required. No consent, approval, authorization, order, registration or qualification of or with any Governmental Authority is required for the execution, delivery and performance by the Company of this Agreement and the issuance and sale by the Company of the Offered Shares, except for such consents, approvals, authorizations, orders and registrations or qualifications as may be required under applicable state securities Laws or Laws of the Financial Industry Regulatory Authority Inc. ("FINRA") or the Exchange in connection with the sale of the Offered Shares.

(o) No Preferential Rights. Except as set forth in the Registration Statement, the Time of Sale Prospectus and the Prospectus, (i) no person, as such term is defined in Rule 1-02 of Regulation S-X promulgated under the Securities Act (each, a "Person"), has the right, contractual or otherwise, to cause the Company to issue or sell to such Person any Common Shares or shares of any other capital stock or other securities of the Company, (ii) no Person has any preemptive rights, resale rights, rights of first refusal, rights of co-sale, or any other rights (whether pursuant to a "poison pill" provision or otherwise) to purchase any Common Shares or shares of any other capital stock or other securities of the Company, (iii) no Person has the right to act as an underwriter or as a financial advisor to the Company in connection with the offer and sale of the Common Shares, and (iv) no Person has the right, contractual or otherwise, to require the Company to register under the Securities Act any Common Shares or shares of any other capital stock or other securities of the Company, or to include any such shares or other securities in the Registration Statement or the offering contemplated thereby, whether as a result of the filing or effectiveness of the Registration Statement or the sale of the Offered Shares as contemplated thereby or otherwise, except for rights with which the Company has complied.

(p) Independent Public Accounting Firm. MNP LLP (the “**Accountant**”), whose report on the consolidated financial statements of the Company is filed with the Commission as part of the Company’s most recent Annual Report on Form 10-K filed with the Commission and incorporated by reference into the Registration Statement and the Prospectus, are and, during the periods covered by their report, were an independent registered public accounting firm within the meaning of the Securities Act and the Public Company Accounting Oversight Board (United States). To the Company’s knowledge, the Accountant is not in violation of the auditor independence requirements of the Sarbanes-Oxley Act of 2002 (the “**Sarbanes-Oxley Act**”) with respect to the Company.

(q) Enforceability of Agreements. All agreements between the Company and third parties expressly referenced in the Prospectus are legal, valid and binding obligations of the Company enforceable in accordance with their respective terms, except to the extent that (i) enforceability may be limited by bankruptcy, insolvency, reorganization, moratorium or similar Laws affecting creditors’ rights generally and by general equitable principles and (ii) the indemnification provisions of certain agreements may be limited by federal or state securities Laws or public policy considerations in respect thereof.

(r) No Litigation. Except as set forth in the Registration Statement, the Time of Sale Prospectus or the Prospectus, there are no actions, suits or proceedings by or before any Governmental Authority pending, nor, to the Company’s knowledge, any audits or investigations by or before any Governmental Authority, to which the Company or its Subsidiary is a party or to which any property of the Company or any of its Subsidiaries is the subject that, individually or in the aggregate, if determined adversely to the Company or its Subsidiary would have a Material Adverse Effect and, to the Company’s knowledge, no such actions, suits, proceedings, audits or investigations are threatened or contemplated by any Governmental Authority or threatened by others; and (i) there are no current or pending audits, investigations, actions, suits or proceedings by or before any Governmental Authority that are required under the Securities Act to be described in the Time of Sale Prospectus or Prospectus that are not so described; and (ii) there are no contracts or other documents that are required under the Securities Act to be filed as exhibits to the Registration Statement that are not so filed.

(s) Consents and Permits. Except as disclosed in the Registration Statement, the Time of Sale Prospectus and the Prospectus, the Company and its Subsidiaries have made all filings, applications and submissions required by, and possesses, all approvals, licenses, certificates, certifications, clearances, consents, grants, exemptions, marks, notifications, orders, permits and other authorizations issued by, the appropriate federal, state or foreign governmental or regulatory authorities (including, without limitation, the United States Food and Drug Administration (the “**FDA**”), the United States Department of Agriculture (the “**USDA**”), the United States Drug Enforcement Administration or any other foreign, federal, state, provincial, court or local government or regulatory authorities including self-regulatory organizations engaged in the regulation of clinical trials, pharmaceuticals, biologics or biohazardous substances or materials) necessary for the ownership or lease of their respective properties or to conduct its businesses as described in the Registration Statement, the Time of Sale Prospectus and the Prospectus (collectively, “**Permits**”), except for such Permits the failure of which to possess, obtain or make the same would not have a Material Adverse Effect; the Company and its Subsidiary are in compliance with the terms and conditions of all such Permits, except where the failure to be in compliance would not have a Material Adverse Effect; all of the Permits are valid and in full force and effect, except where any invalidity, individually or in the aggregate, would not be reasonably expected to have a Material Adverse Effect; and neither the Company nor any of its Subsidiaries has received any written notice relating to the limitation, revocation, cancellation, suspension, modification or non-renewal of any such Permit which, singly or in the aggregate, if the subject of an unfavorable decision, ruling or finding, would have a Material Adverse Effect, or has any reason to believe that any such license, certificate, permit or authorization will not be renewed in the ordinary course. To the extent required by applicable laws and regulations of the FDA or USDA, the Company or the applicable Subsidiary has submitted to the FDA or USDA, as applicable, an Investigational New Animal Drug Application (or other relevant application) or amendment or supplement thereto for each clinical trial it has conducted or sponsored or is conducting or sponsoring; all such submissions were in material compliance with applicable laws and rules and regulations when submitted and no material deficiencies have been asserted by the FDA or USDA with respect to any such submissions. The Company and its Subsidiary possess such valid and current certificates, authorizations or permits issued by the appropriate state, federal or foreign regulatory agencies or bodies necessary to conduct their respective businesses, and neither the Company nor any Subsidiary has received, or has any reason to believe that it will receive, any notice of proceedings relating to the revocation or modification of, or non-compliance with, any such certificate, authorization or permit which, singly or in the aggregate, if the subject of an unfavorable decision, ruling or finding, could result in a Material Adverse Effect.

(f) Regulatory Matters. The Company and each of its Subsidiaries are in compliance with all applicable laws, regulations and statutes (including all environmental laws and regulations) in the jurisdictions in which it carries on business; the Company has not received a notice of non-compliance, nor knows of, nor has reasonable grounds to know of, any facts that could give rise to a notice of non-compliance with any such laws, regulations and statutes, and is not aware of any pending change or contemplated change to any applicable law or regulation or governmental position; in each case that would have a Material Adverse Effect on the business of the Company or the business or legal environment under which the Company operates. Except as disclosed in the Registration Statement, the Time of Sale Prospectus and the Prospectus, and except as would not, individually or in the aggregate, have or reasonably be expected to have a Material Adverse Effect: (i) neither the Company nor any of its subsidiaries has received any notice of adverse filing, warning letter, untitled letter or other correspondence or notice from the Center for Veterinary Medicine of the U.S. Food and Drug Administration or the Center for Veterinary Biologics of the U.S. Department of Agriculture, or any other court or arbitrator or federal, state, local or foreign governmental or regulatory authority, alleging or asserting noncompliance with the Federal Food, Drug, and Cosmetic Act (21 U.S.C. § 301 et seq.) (the “**FFDCA**”), the Animal Drug User Fee Act (“**ADUFA**”) or similar law; (ii) the Company and its subsidiaries are and have been in compliance with applicable health care laws, including without limitation, the FFDCA, the ADUFA and the federal Anti-Kickback Statute (42 U.S.C. § 1320a-7b(b)), and the regulations promulgated pursuant to such laws, and comparable state laws, and all other local, state, federal, national, supranational and foreign laws, manual provisions, policies and administrative guidance relating to the regulation of the Company and its subsidiaries (collectively, “**Health Care Laws**”); (iii) the Company and its subsidiaries possess all licenses, certificates, approvals, clearances, authorizations, permits and supplements or amendments thereto required by any such Health Care Laws and/or to carry on its businesses as now or proposed to be conducted (“**Authorizations**”) and such Authorizations are valid and in full force and effect and the Company and its subsidiaries are not in violation of any term of any such Authorizations; (iv) the Company and its subsidiaries have not received notice of any ongoing claim, action, suit, proceeding, hearing, enforcement, investigation, arbitration or other action from any U.S. or non-U.S. federal, state, local or other governmental or regulatory authority, governmental or regulatory agency or body, court, arbitrator or self-regulatory organization (each, a “**Governmental Authority**”) or third party alleging that any product operation or activity is in violation of any Health Care Laws or Authorizations or has any knowledge that any such Governmental Authority or third party is considering any such claim, litigation, arbitration, action, suit, investigation or proceeding; (v) the Company and its subsidiaries have not received notice that any Governmental Authority has taken, is taking or intends to take action to limit, suspend, modify or revoke any Authorizations or has any knowledge that any such Governmental Authority is considering such action; (vi) the Company and its subsidiaries have filed, obtained, maintained or submitted all reports, documents, forms, notices, applications, records, claims, submissions and supplements or amendments as required by any Health Care Laws or Authorizations and that all such reports, documents, forms, notices, applications, records, claims, submissions and supplements or amendments were complete, correct and not misleading on the date filed (or were corrected or supplemented by a subsequent submission); (vii) the Company and its subsidiaries have not, either voluntarily or involuntarily, initiated, conducted, or issued or caused to be initiated, conducted or issued, any recall, market withdrawal or replacement, safety alert, post-sale warning, “dear doctor” letter, or other notice or action relating to the alleged lack of safety or efficacy of any product or any alleged product defect or violation and, to the Company’s knowledge, no third party has initiated or conducted any such notice or action and (viii) the Company is and at all times has been in compliance with all statutes, rules, or regulations applicable to the ownership, testing, development, manufacture, packaging, processing, use, distribution, marketing, labeling, promotion, sale, offer for sale, storage, import, export or disposal of any product manufactured or distributed by the Company or its Subsidiary, except as could not, individually or in the aggregate, reasonably be expected to result in a Material Adverse Effect.

(u) Intellectual Property. Except as disclosed in the Registration Statement, the Time of Sale Prospectus and the Prospectus, the Company and its Subsidiary own, possess, license or have other rights to use all foreign and domestic patents, patent applications, trade and service marks, trade and service mark registrations, trade names, copyrights, licenses, inventions, trade secrets, technology, Internet domain names, know-how and other intellectual property (collectively, the “**Intellectual Property**”), necessary for the conduct of their respective businesses as now conducted except to the extent that the failure to own, possess, license or otherwise hold adequate rights to use such Intellectual Property would not, individually or in the aggregate, have a Material Adverse Effect. Except as disclosed in the Registration Statement, the Time of Sale Prospectus and the Prospectus (i) there are no rights of third parties to any such Intellectual Property owned by the Company and its Subsidiary; (ii) to the Company’s knowledge, there is no infringement by third parties of any Intellectual Property owned by the Company and its Subsidiary; (iii) there is no pending or, to the Company’s knowledge, threatened action, suit, proceeding or claim by others challenging the Company’s and its Subsidiary’s rights in or to any such Intellectual Property, and the Company is unaware of any facts which could form a reasonable basis for any such action, suit, proceeding or claim; (iv) there is no pending or, to the Company’s knowledge, threatened action, suit, proceeding or claim by others challenging the validity or scope of any such Intellectual Property; (v) there is no pending or, to the Company’s knowledge, threatened action, suit, proceeding or claim by others that the Company and its Subsidiary infringe or otherwise violate any patent, trademark, copyright, trade secret or other proprietary rights of others; (vi) to the Company’s knowledge, there is no third-party U.S. patent or published U.S. patent application which contains claims for which an Interference Proceeding (as defined in 35 U.S.C. § 135) has been commenced against any patent or patent application described in the Registration Statement, the Time of Sale Prospectus and the Prospectus as being owned by or licensed to the Company; and (vii) the Company and its Subsidiary have complied in all material respects with the terms of each agreement pursuant to which Intellectual Property has been licensed to the Company or such Subsidiary, and, to the Company’s knowledge all such agreements are in full force and effect, except, in the case of any of clauses (i)-(vii) above, for any such infringement by third parties or any such pending or threatened suit, action, proceeding or claim as would not, individually or in the aggregate, result in a Material Adverse Effect.

(v) Clinical Studies. Except as would not, individually or in the aggregate, have or reasonably be expected to have a Material Adverse Effect, (i) the material research, studies and tests conducted by or on behalf of the Company and its Subsidiaries have been and, if still pending, are being conducted with reasonable care and in accordance with experimental protocols, procedures and controls pursuant to all Health Care Laws and Authorizations; (ii) the descriptions of the results of such research, studies and tests contained in the Registration Statement, the Time of Sale Prospectus and the Prospectus are accurate and complete in all material respects and fairly present in all material respects the data derived from such research, studies, and tests; (iii) except to the extent disclosed in the Registration Statement, the Time of Sale Prospectus and the Prospectus, the Company is not aware of any research, studies or tests, the results of which the Company believes reasonably call into question in any material respect the material research, study or test results described or referred to in the Registration Statement, the Time of Sale Prospectus and the Prospectus when viewed in the context in which such results are described; and (iv) except to the extent disclosed in the Registration Statement, the Time of Sale Prospectus and the Prospectus, neither the Company nor its subsidiary has received any notices or correspondence from any Governmental Authority requiring the termination, suspension or material modification of any material research, study or test conducted by or on behalf of the Company or any of its subsidiaries. To the knowledge of the Company, there have been no adverse events or complications resulting from any material research, study or test conducted by or on behalf of the Company or any of its subsidiaries, except as would not reasonably be expected to have a Material Adverse Effect and except to the extent disclosed in the Registration Statement, the Time of Sale Prospectus and the Prospectus.

(w) Market Capitalization. The Company is eligible to use Form S-3 under the Securities Act and it meets the transaction requirements with respect to the aggregate market value of securities being sold pursuant to this offering and during the twelve (12) months prior to this offering, as set forth in General Instruction I.B.6 of Form S-3. The Company is not a shell company (as defined in Rule 405 under the Securities Act) and has not been a shell company for at least 12 calendar months previously and if it has been a shell company at any time previously, has filed current Form 10 information (as defined in Instruction I.B.6 of Form S-3) with the Commission at least 12 calendar months previously reflecting its status as an entity that is not a shell company.

(x) No Material Defaults. Neither the Company nor its Subsidiary has defaulted on any installment on indebtedness for borrowed money or on any rental on one or more long-term leases, which defaults, individually or in the aggregate, would have a Material Adverse Effect. The Company has not filed a report pursuant to Section 13(a) or 15(d) of the Exchange Act since the filing of its last Annual Report on Form 10-K, indicating that it (i) has failed to pay any dividend or sinking fund installment on preferred stock or (ii) has defaulted on any installment on indebtedness for borrowed money or on any rental on one or more long-term leases, which defaults, individually or in the aggregate, would have a Material Adverse Effect.

(y) Certain Market Activities. Neither the Company, nor its Subsidiary, nor any of their respective directors, officers or controlling persons has taken, directly or indirectly, any action designed to, or that has constituted or might reasonably be expected to cause or result in, under the securities laws applicable to the Company, the stabilization or manipulation of the price of any security of the Company to facilitate the sale or resale of the Offered Shares.

(z) Broker/Dealer Relationships. Neither the Company nor its Subsidiary (i) is required to register with the Commission as a “broker” or “dealer” in accordance with the provisions of the Exchange Act or (ii) directly or indirectly through one or more intermediaries, controls or is a “person associated with a member” or “associated person of a member” (within the meaning set forth in the FINRA Manual).

(aa) No Reliance. The Company has not relied upon the Underwriter or legal counsel for the Underwriter for any legal, tax or accounting advice in connection with the offering and sale of the Offered Shares.

(bb) Taxes. The Company and its Subsidiary have filed all federal, state, local and foreign tax returns which have been required to be filed and paid all taxes shown thereon through the date hereof, to the extent that such taxes have become due and are not being contested in good faith, except where the failure to so file or pay would not have a Material Adverse Effect. Except as otherwise disclosed in or contemplated by the Registration Statement, the Time of Sale Prospectus or the Prospectus, no tax deficiency has been determined adversely to the Company or any of its Subsidiaries which has had, or would have, individually or in the aggregate, a Material Adverse Effect. The Company has no knowledge of any federal, state or other governmental tax deficiency, penalty or assessment which has been or would reasonably be expected to be asserted against it which would have a Material Adverse Effect.

(cc) Title to Real and Personal Property. The Company owns no real property and the Company and its Subsidiary have valid rights to lease or otherwise use, all items of real and personal property that are material to the respective businesses of the Company and its Subsidiaries, in each case free and clear of all liens, encumbrances, claims and defects and imperfections of title except those that (i) do not materially interfere with the use made and proposed to be made of such property by the Company and any of its Subsidiaries or (ii) would not, individually or in the aggregate, reasonably be expected to have a Material Adverse Effect.

(dd) Environmental Laws. Except as set forth in the Registration Statement, the Time of Sale Prospectus or the Prospectus, the Company and its Subsidiary (i) are in compliance with any and all applicable federal, state, local and foreign Laws relating to the protection of human health and safety, the environment or hazardous or toxic substances or wastes, pollutants or contaminants (collectively, “**Environmental Laws**”); (ii) have received and are in compliance with all permits, licenses or other approvals required of them under applicable Environmental Laws to conduct their respective businesses as described in the Registration Statement, the Time of Sale Prospectus or the Prospectus; and (iii) have not received notice of any actual or potential liability for the investigation or remediation of any disposal or release of hazardous or toxic substances or wastes, pollutants or contaminants, except, in the case of any of clauses (i), (ii) or (iii) above, for any such failure to comply or failure to receive required permits, licenses, other approvals or liability as would not, individually or in the aggregate, have a Material Adverse Effect.



(ee) Disclosure Controls. The Company and its Subsidiary maintain systems of internal accounting controls sufficient to provide reasonable assurance that (i) transactions are executed in accordance with management's general or specific authorizations; (ii) transactions are recorded as necessary to permit preparation of financial statements in conformity with generally accepted accounting principles and to maintain asset accountability; (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 the existing assets at reasonable intervals and appropriate action is taken with respect to any differences. The Company's internal control over financial reporting is effective and the Company is not aware of any material weaknesses in its internal control over financial reporting (other than as set forth in the Registration Statement, the Time of Sale Prospectus or the Prospectus). Since the date of the latest audited financial statements of the Company included in the Prospectus, there has been no change in the Company's internal control over financial reporting that has materially and adversely affected, or is reasonably likely to materially and adversely affect, the Company's internal control over financial reporting (other than as set forth in the Registration Statement, Time of Sale Prospectus or Prospectus). The Company has established disclosure controls and procedures (as defined in Exchange Act Rules 13a-15 and 15d-15) for the Company and designed such disclosure controls and procedures to ensure that material information relating to the Company and its Subsidiary is made known to the certifying officers by others within those entities, particularly during the period in which the Company's Annual Report on Form 10-K or Quarterly Report on Form 10-Q, as the case may be, is being prepared. The Company's certifying officers have evaluated the effectiveness of the Company's disclosure controls and procedures as of a date within 90 days prior to the filing date of the Form 10-K for the fiscal year most recently ended (such date, the "**Evaluation Date**"). The Company presented in its Form 10-K for the fiscal year most recently ended the conclusions of the certifying officers about the effectiveness of the disclosure controls and procedures based on their evaluations as of the Evaluation Date and the disclosure controls and procedures are effective. Since the Evaluation Date, there have been no significant changes in the Company's internal controls (as such term is defined in Item 307(b) of Regulation S-K under the Securities Act) or, to the Company's knowledge, in other factors that could significantly affect the Company's internal controls.

(ff) Sarbanes-Oxley. There is and has been no failure on the part of the Company or any of the Company's directors or officers, in their capacities as such, to comply in all material respects with any applicable provisions of the Sarbanes-Oxley Act and the rules and regulations promulgated thereunder. Each of the principal executive officer and the principal financial officer of the Company (or each former principal executive officer of the Company and each former principal financial officer of the Company as applicable) has made all certifications required by Sections 302 and 906 of the Sarbanes-Oxley Act with respect to all reports, schedules, forms, statements and other documents required to be filed by it or furnished by it to the Commission. For purposes of the preceding sentence, "principal executive officer" and "principal financial officer" shall have the meanings given to such terms in the Sarbanes-Oxley Act.

(gg) Finder's Fees. Neither the Company nor its Subsidiary has incurred any liability for any finder's fees, brokerage commissions or similar payments in connection with the transactions herein contemplated, except as may otherwise exist with respect to or pursuant to this Agreement.

(hh) Labor Disputes. No labor disturbance by or dispute with employees of the Company or its Subsidiary exists or, to the knowledge of the Company, is threatened which would result in a Material Adverse Effect.

(ii) Investment Company Act. Neither the Company nor its Subsidiary is or, either after receipt of payment for the Offered Shares or after the application of the proceeds therefrom as described under "Use of Proceeds" in the Registration Statement, the Time of Sale Prospectus or the Prospectus, will be an "investment company" or an entity "controlled" by an "investment company," as such terms are defined in the Investment Company Act of 1940, as amended (the "**Investment Company Act**").

(jj) Operations. The operations of the Company and its Subsidiary are and have been conducted at all times in compliance with applicable financial record keeping and reporting requirements of the Currency and Foreign Transactions Reporting Act of 1970, the money laundering Laws of all jurisdictions to which the Company or its Subsidiaries are subject, the rules and regulations thereunder and any related or similar rules, regulations or guidelines, issued, administered or enforced by any Governmental Authority (collectively, the "**Money Laundering Laws**") except as would not result in a Material Adverse Effect; and no action, suit or proceeding by or before any court or governmental agency, authority or body or any arbitrator involving the Company or any of its Subsidiaries with respect to the Money Laundering Laws is pending or, to the knowledge of the Company, threatened.

(kk) Off-Balance Sheet Arrangements. There are no transactions, arrangements and other relationships between and/or among the Company, and/or any of its affiliates and any unconsolidated entity, including, but not limited to, any structural finance, special purpose or limited purpose entity (each, an "**Off-Balance Sheet Transaction**") that could reasonably be expected to affect materially the Company's liquidity or the availability of or requirements for its capital resources, including those Off-Balance Sheet Transactions described in the Commission's Statement about Management's Discussion and Analysis of Financial Conditions and Results of Operations (Release Nos. 33-8056; 34-45321; FR-61), required to be described in the Prospectus which have not been described as required.

(ll) ERISA. To the knowledge of the Company, each material employee benefit plan, within the meaning of Section 3(3) of the Employee Retirement Income Security Act of 1974, as amended ("**ERISA**"), that is maintained, administered or contributed to by the Company or any of its affiliates for employees or former employees of the Company and its Subsidiary has been maintained in material compliance with its terms and the requirements of any applicable statutes, orders, rules and regulations, including, but not limited to, ERISA and the Internal Revenue Code of 1986, as amended (the "**Code**"); no prohibited transaction, within the meaning of Section 406 of ERISA or Section 4975 of the Code, has occurred which would result in a material liability to the Company with respect to any such plan excluding transactions effected pursuant to a statutory or administrative exemption; and for each such plan that is subject to the funding rules of Section 412 of the Code or Section 302 of ERISA, no "accumulated funding deficiency" as defined in Section 412 of the Code has been incurred, whether or not waived, and the fair market value of the assets of each such plan (excluding for these purposes accrued but unpaid contributions) exceeds the present value of all benefits accrued under such plan determined using reasonable actuarial assumptions.

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

(nn) Margin Rules. Neither the issuance, sale and delivery of the Offered Shares nor the application of the proceeds thereof by the Company as described in the Registration Statement and the Prospectus will violate Regulation T, U or X of the Board of Governors of the Federal Reserve System or any other regulation of such Board of Governors.

(oo) Insurance. The Company and its Subsidiary carry, or are covered by, insurance in such amounts and covering such risks as the Company and its Subsidiary reasonably believe are adequate for the conduct of their properties.

(pp) No Improper Practices. (i) Neither the Company nor the Subsidiary nor to the Company’s knowledge, any director, officer, agent, employee or affiliate of the Company or its Subsidiary nor any other person acting on behalf of the Company or its Subsidiary has, directly or indirectly, in the past five years, made any unlawful contributions to any candidate for any political office (or failed fully to disclose any contribution in violation of applicable Law) or made any contribution or other payment to any official of, or candidate for, any federal, state, municipal, or foreign office or other person charged with similar public or quasi-public duty in violation of any applicable Law or of the character required to be disclosed in the Prospectus; (ii) no relationship, direct or indirect, exists between or among the Company or its Subsidiary or any affiliate of any of them, on the one hand, and the directors, officers and shareholders of the Company or its Subsidiary, on the other hand, that is required by the Securities Act to be described in the Registration Statement, the Time of Sale Prospectus and the Prospectus that is not so described; (iii) no relationship, direct or indirect, exists between or among the Company or its Subsidiary or any affiliate of them, on the one hand, and the directors, officers, or shareholders of the Company or its Subsidiary, on the other hand, that is required by the rules of FINRA to be described in the Registration Statement, the Time of Sale Prospectus and the Prospectus that is not so described; (iv) except as described in the Registration Statement, the Time of Sale Prospectus and the Prospectus, there are no material outstanding loans or advances or material guarantees of indebtedness by the Company or its Subsidiary to or for the benefit of any of their respective officers or directors or any of the members of the families of any of them; and (v) the Company has not offered, or caused any placement agent to offer, Common Shares to any person with the intent to influence unlawfully (A) a customer or supplier of the Company or its Subsidiary to alter the customer’s or supplier’s level or type of business with the Company or its Subsidiary or (B) a trade journalist or publication to write or publish favorable information about the Company or its Subsidiary or any of their respective products or services, and, (vi) neither the Company nor the Subsidiary nor, to the Company’s knowledge, any director, officer, agent, employee or affiliate of the Company or its Subsidiary nor any other person acting on behalf of the Company or its Subsidiary has, directly or indirectly (A) violated or is in violation of any applicable provision of the U.S. Foreign Corrupt Practices Act of 1977, or any other applicable anti-bribery or anti-corruption Law (collectively, “**Anti-Corruption Laws**”), (B) promised, offered, provided, attempted to provide or authorized the provision of anything of value, directly or indirectly, to any person for the purpose of obtaining or retaining business, influencing any act or decision of the recipient or securing any improper advantage, or (C) made any payment of funds of the Company or its Subsidiary or received or retained any funds in violation of any Anti-Corruption Laws.

(qq) Status Under the Securities Act. The Company is an ineligible issuer as defined in Rule 405 under the Securities as of the date hereof.

(rr) No Conflicts. Neither the execution of this Agreement, nor the issuance, offering or sale of the Offered Shares, nor the consummation of any of the transactions contemplated herein, nor the compliance by the Company with the terms and provisions hereof will conflict with, or will result in a breach of, any of the terms and provisions of, or has constituted or will constitute a default under, or has resulted in or will result in the creation or imposition of any lien, charge or encumbrance upon any property or assets of the Company pursuant to the terms of any contract or other agreement to which the Company may be bound or to which any of the property or assets of the Company is subject, except (i) such conflicts, breaches or defaults as may have been waived and (ii) such conflicts, breaches and defaults that could not reasonably be expected to have a Material Adverse Effect; nor will such action result (x) in any violation of the provisions of the organizational or governing documents of the Company, or (y) in any material violation of the provisions of any statute or any order, rule or regulation applicable to the Company or of any Governmental Authority having jurisdiction over the Company.

(ss) Sanctions.

( i ) The Company represents that, neither the Company nor its Subsidiary (collectively, the “**Entity**”) or any director, officer, or, to the knowledge of the Company, any employee, agent, affiliate or representative of the Entity, is a government, individual, or entity (in this paragraph (ss), “**Person**”) that is, or is owned or controlled by a Person that is:

(A) the subject of any sanctions administered or enforced by the U.S. Department of Treasury’s Office of Foreign Assets Control (“**OFAC**”), the United Nations Security Council, the European Union, Her Majesty’s Treasury, or other relevant sanctions authorities (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, North Korea, Sudan and Syria) (the “**Sanctioned Countries**”).

( i i ) The Entity represents and covenants that it will not, 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 Person:

(A) to fund or facilitate any activities or business of or with any Person 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 Person (including any Person participating in the offering, whether as underwriter, advisor, investor or otherwise).

(iii) The Entity represents and covenants that, except as described in the Registration Statement and the Prospectus, for the past 5 years, it has not engaged in, is not now engaging in, and will not engage in, any dealings or transactions with any Person, or in any country or territory, that at the time of the dealing or transaction is or was the subject of Sanctions.

(tt) Stock Transfer Taxes. On each of the First Closing Date (as hereinafter defined) and each Option Closing Date (as hereinafter defined), if any, all stock transfer or other taxes (other than income taxes) which are required to be paid in connection with the sale and transfer of the Offered Shares to be sold hereunder will be, or will have been, fully paid or provided for by the Company and all laws imposing such taxes will be or will have been fully complied with.

(uu) Statistical and Market-Related Data. The statistical, demographic and market-related data included in the Registration Statement, the Time of Sale Prospectus or the Prospectus are based on or derived from sources that the Company believes to be reliable and accurate or represent the Company's good faith estimates that are made on the basis of data derived from such sources.

(vv) Emerging Growth Company Status. From the time of the initial filing of the Company's first registration statement with the Commission through the date hereof, the Company has been and is an "emerging growth company," as defined in Section 2(a) of the Securities Act (an "**Emerging Growth Company**").

(ww) FINRA Matters. All of the information provided to the Underwriters or to counsel for the Underwriters by the Company and, to the Company's knowledge, its counsel and its officers and directors for use in clearing the underwriting terms and arrangements in connection with the offering of the Offered Shares pursuant to FINRA Rules is true, complete, correct in all material respects and any letters, filings or other supplemental information provided to the Underwriters or to counsel for the Underwriters by the Company and, to the Company's knowledge, its counsel and its officers and directors for use in clearing the underwriting terms and arrangements in connection with the offering of the Offered Shares pursuant to FINRA Rules is true, complete and correct in all material respects.

(xx) Parties to Lock-Up Agreements. The Company has furnished to the Underwriters a letter agreement in the form attached hereto as Exhibit A (the "**Lock-up Agreement**") from each of the persons listed on Exhibit B. Such Exhibit B lists under an appropriate caption the Company's directors, executive officers and certain shareholders. If any additional persons shall become directors or executive officers of the Company prior to the end of the Company Lock-up Period (as defined below), the Company shall cause each such person, prior to or contemporaneously with their appointment or election as a director or executive officer of the Company, to execute and deliver to the Representative a Lock-up Agreement.

( y y ) No Contract Terminations. Neither the Company nor its Subsidiary has sent or received any communication regarding termination of, or intent not to renew, any of material contract or agreement referred to or described in the Registration Statement, the Time of Sale Prospectus or the Prospectus, and no such termination or non-renewal has been threatened by the Company or its Subsidiary or, to the Company's knowledge, any other party to any such contract or agreement, which threat of termination or non-renewal has not been rescinded as of the date hereof.

Any certificate signed by any officer of the Company or its Subsidiary and delivered to any Underwriter or to counsel for the Underwriters in connection with the offering, or the purchase and sale, of the Offered Shares shall be deemed a representation and warranty by the Company to each Underwriter as to the matters covered thereby.

The Company has a reasonable basis for making each of the representations set forth in this Section 1. The Company acknowledges that the Underwriters and, for purposes of the opinions to be delivered pursuant to Section 6, counsel to the Company and counsel to the Underwriters, will rely upon the accuracy and truthfulness of the foregoing representations and hereby consents to such reliance.

2. Purchase, Sale and Delivery of the Offered Shares.

(a) The Firm Shares. Upon the terms herein set forth, the Company agrees to issue and sell to the several Underwriters an aggregate of 6,521,740 Firm Shares. On the basis of the representations, warranties and agreements herein contained, and upon the terms but subject to the conditions herein set forth, the Underwriters agree, severally and not jointly, to purchase from the Company the respective number of Firm Shares set forth opposite their names on Schedule A. The purchase price per Firm Share to be paid by the several Underwriters to the Company shall be \$0.4255 per share.

(b) The First Closing Date. Delivery of certificates for the Firm Shares to be purchased by the Underwriters and payment therefor shall be made at the offices of Covington & Burling LLP, 620 Eighth Ave., New York, New York 10018 (or such other place as may be agreed to by the Company and the Representative) at 10:00 a.m. New York time, on March 28, 2019, or such other time and date not later than 5:00 p.m. Eastern time, on April 4, 2019 as the Representative shall designate by notice to the Company (the time and date of such closing are called the "**First Closing Date**"). The Company hereby acknowledges that circumstances under which the Representative may provide notice to postpone the First Closing Date as originally scheduled include, but are not limited to, any determination by the Company or the Representative to recirculate to the public copies of an amended or supplemented Prospectus or a delay as contemplated by the provisions of Section 11.

(c) The Option Shares; Option Closing Date. In addition, on the basis of the representations, warranties and agreements herein contained, and upon the terms but subject to the conditions herein set forth, the Company hereby grants an option to the several Underwriters to purchase, severally and not jointly, up to an aggregate of 978,261 Option Shares from the Company at the purchase price per share to be paid by the Underwriters for the Firm Shares. The option granted hereunder may be exercised at any time and from time to time in whole or in part upon notice by the Representative to the Company, which notice may be given at any time within 30 days from the date of this Agreement. Such notice shall set forth (i) the aggregate number of Option Shares as to which the Underwriters are exercising the option and (ii) the time, date and place at which certificates for the Option Shares will be delivered (which time and date may be simultaneous with, but not earlier than, the First Closing Date; and in the event that such time and date are simultaneous with the First Closing Date, the term "**First Closing Date**" shall refer to the time and date of delivery of certificates for the Firm Shares and such Option Shares). Any such time and date of delivery, if subsequent to the First Closing Date, is called an "**Option Closing Date**," shall be determined by the Representative and shall not be earlier than three or later than five full Business Days after delivery of such notice of exercise. If any Option Shares are to be purchased, (a) each Underwriter agrees, severally and not jointly, to purchase the number of Option Shares (subject to such adjustments to eliminate fractional shares as the Representative may determine) that bears the same proportion to the total number of Option Shares to be purchased as the number of Firm Shares set forth on Schedule A opposite the name of such Underwriter bears to the total number of Firm Shares and (b) the Company agrees to sell the number of Option Shares set forth in the Representative's exercise notice (subject to such adjustments to eliminate fractional shares as the Representative may determine). The Representative may cancel the option at any time prior to its expiration by giving written notice of such cancellation to the Company.

(d) Public Offering of the Offered Shares. The Representative hereby advises the Company that the Underwriters intend to offer for sale to the public, initially on the terms set forth in the Registration Statement, the Time of Sale Prospectus and the Prospectus, their respective portions of the Offered Shares as soon after this Agreement has been executed as the Representative, in its sole judgment, have determined is advisable and practicable.

(e) Payment for the Offered Shares. (i) Payment for the Offered Shares shall be made at the First Closing Date (and, if applicable, at each Option Closing Date) by wire transfer of immediately available funds to the order of the Company. (ii) It is understood that the Representative has been authorized, for its own account and the accounts of the several Underwriters, to accept delivery of and receipt for, and make payment of the purchase price for, the Firm Shares and any Option Shares the Underwriters have agreed to purchase. H.C. Wainwright & Co., LLC, individually and not as the Representative of the Underwriters, may (but shall not be obligated to) make payment for any Offered Shares to be purchased by any Underwriter whose funds shall not have been received by the Representative by the First Closing Date or the applicable Option Closing Date, as the case may be, for the account of such Underwriter, but any such payment shall not relieve such Underwriter from any of its obligations under this Agreement.

(f) Delivery of the Offered Shares. The Company shall deliver, or cause to be delivered through the facilities of The Depository Trust Company ("DTC") to the Representative for the accounts of the several Underwriters, certificates for the Firm Shares at the First Closing Date, against the irrevocable release of a wire transfer of immediately available funds for the amount of the purchase price therefor. The Company shall also deliver, or cause to be delivered through the facilities of DTC unless the Representative shall otherwise instruct, to the Representative for the accounts of the several Underwriters, certificates for the Option Shares the Underwriters have agreed to purchase at the First Closing Date or the applicable Option Closing Date, as the case may be, against the release of a wire transfer of immediately available funds for the amount of the purchase price therefor. If the Representative so elects, delivery of the Offered Shares may be made by credit to the accounts designated by the Representative through DTC's full fast transfer or DWAC programs. The certificates for the Offered Shares shall be registered in such names and denominations as the Representative shall have requested at least two full Business Days prior to the First Closing Date (or the applicable Option Closing Date, as the case may be). Time shall be of the essence, and delivery at the time and place specified in this Agreement is a further condition to the obligations of the Underwriters.

3. Additional Covenants of the Company.

The Company further covenants and agrees with each Underwriter as follows:

(a) Representative's Review of Proposed Amendments and Supplements. During the period when a prospectus relating to the Offered Shares is required to be delivered by the Underwriters under the Securities Act (including in circumstances where such requirement may be satisfied pursuant to Rule 172 under the Securities Act or similar rule), (i) the Company will notify the Representative promptly of the time when any subsequent amendment to the Registration Statement, other than documents incorporated by reference, has been filed with the Commission and/or has become effective or any subsequent supplement to the Prospectus has been filed and of any request by the Commission for any amendment or supplement to the Registration Statement or Prospectus or for additional information; (ii) the Company will prepare and file with the Commission, promptly upon the Representative's request, any amendments or supplements to the Registration Statement or Prospectus that, in the Representative's reasonable opinion, may be necessary or advisable in connection with the distribution of the Offered Shares by the Representative (*provided, however*, that the failure of the Representative to make such request shall not relieve the Company of any obligation or liability hereunder, or affect the Representative's right to rely on the representations and warranties made by the Company in this Agreement); (iii) the Company will not file any amendment or supplement to the Registration Statement or Prospectus relating to the Offered Shares unless a copy thereof has been submitted to Representative within a reasonable period of time before the filing and the Representative has not reasonably objected thereto (*provided, however*, that the failure of the Representative to make such objection shall not relieve the Company of any obligation or liability hereunder, or affect the Representative's right to rely on the representations and warranties made by the Company in this Agreement) and the Company will furnish to the Representative at the time of filing thereof a copy of any document that upon filing is deemed to be incorporated by reference into the Registration Statement, any preliminary prospectus or Prospectus, except for those documents available via EDGAR; and (iv) the Company will cause each amendment or supplement to the Prospectus to be filed with the Commission as required pursuant to the applicable paragraph of Rule 424(b) of the Securities Act or, in the case of any document to be incorporated therein by reference, to be filed with the Commission as required pursuant to the Exchange Act, within the time period prescribed (the determination to file or not file any amendment or supplement with the Commission under this Section 3(a), based on the Company's reasonable opinion or reasonable objections, shall be made exclusively by the Company).

(b) Delivery of Registration Statement, Time of Sale Prospectus and Prospectus. The Company shall promptly furnish to the Representative and its counsel (at the expense of the Company) and during the period when a prospectus relating to the Offered Shares is required by the Securities Act to be delivered (whether physically or through compliance with Rule 172 under the Securities Act or any similar rule) in connection with sales of the Offered Shares, the Time of Sale Prospectus, the Prospectus and any supplements and amendments thereto or to the Registration Statement, in each case as soon as reasonably practicable and in such quantities as the Representative may reasonably request; *provided, however*, that the Company shall not be required to furnish any document (other than the Prospectus) to the Representative and its counsel to the extent such document is available on EDGAR.



(c) Reserved.

(d) Free Writing Prospectuses. The Company shall furnish to the Representative for review, a reasonable amount of time prior to the proposed time of filing or use thereof, a copy of each proposed free writing prospectus or any amendment or supplement thereto prepared by or on behalf of, used by, or referred to by the Company, and the Company shall not file, use or refer to any proposed free writing prospectus or any amendment or supplement thereto without the Representative's prior written consent. The Company shall furnish to each Underwriter, without charge, as many copies of any free writing prospectus prepared by or on behalf of, used by or referred to by the Company as such Underwriter may reasonably request. If at any time when a prospectus is required by the Securities Act to be delivered (whether physically or through compliance with Rule 172 under the Securities Act or any similar rule) in connection with sales of the Offered Shares (but in any event if at any time through and including the First Closing Date) there occurred or occurs an event or development as a result of which any free writing prospectus prepared by or on behalf of, used by, or referred to by the Company conflicted or would conflict with the information contained in the Registration Statement 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 such time, not misleading, the Company shall promptly amend or supplement such free writing prospectus to eliminate or correct such conflict so that the statements in such free writing prospectus as so amended or supplemented will not include an untrue statement of a material fact or omit to state a material fact necessary in order to make the statements therein, in the light of the circumstances prevailing at such time, not misleading, as the case may be; *provided, however*, that prior to amending or supplementing any such free writing prospectus, the Company shall furnish to the Representative for review, a reasonable amount of time prior to the proposed time of filing or use thereof, a copy of such proposed amended or supplemented free writing prospectus, and the Company shall not file, use or refer to any such amended or supplemented free writing prospectus without the Representative's prior written consent.

(e) Filing of Underwriter Free Writing Prospectuses. The Company shall not take any action that would result in an Underwriter or the Company being required to file with the Commission pursuant to Rule 433(d) under the Securities Act a free writing prospectus prepared by or on behalf of such Underwriter that such Underwriter otherwise would not have been required to file thereunder.

(f) Amendments and Supplements to Time of Sale Prospectus. If the Time of Sale Prospectus is being used to solicit offers to buy the Offered Shares at a time when the Prospectus is not yet available to prospective purchasers, and any event shall occur or condition exist as a result of which it is necessary to amend or supplement the Time of Sale Prospectus so that the Time of Sale Prospectus does not include an untrue statement of a material fact or omit to state a material fact necessary in order to make the statements therein, in the light of the circumstances under which they were made, not misleading when delivered to a prospective purchaser, or if any event shall occur or condition exist at such time as a result of which the Time of Sale Prospectus conflicts with the information contained in the Registration Statement, or if, in the opinion of counsel for the Underwriters, it is necessary to amend or supplement the Time of Sale Prospectus to comply with applicable Law, the Company shall (subject to Section 3(a)) promptly prepare, file with the Commission and furnish, at its own expense, to the Underwriters and to any dealer upon request, either amendments or supplements to the Time of Sale Prospectus so that the statements in the Time of Sale Prospectus as so amended or supplemented will not include an untrue statement of a material fact or omit to state a material fact necessary in order to make the statements therein, in the light of the circumstances under which they were made, not misleading when delivered to a prospective purchaser or so that the Time of Sale Prospectus, as amended or supplemented, will no longer conflict with the information contained in the Registration Statement, or so that the Time of Sale Prospectus, as amended or supplemented, will comply with applicable Law.

(g) Certain Notifications and Required Actions. After the date of this Agreement and during the period when a prospectus relating to the Offered Shares is required to be delivered by the Underwriters under the Securities Act (including in circumstances where such requirement may be satisfied pursuant to Rule 172 under the Securities Act or similar rule), the Company shall promptly advise the Representative in writing of: (i) the receipt of any comments of, or requests for additional or supplemental information from, the Commission; (ii) the time and date of any filing of any post-effective amendment to the Registration Statement or any amendment or supplement to any preliminary prospectus, the Time of Sale Prospectus, any free writing prospectus or the Prospectus; (iii) the time and date that any post-effective amendment to the Registration Statement becomes effective; and (iv) the issuance by the Commission of any stop order suspending the effectiveness of the Registration Statement or any post-effective amendment thereto or any amendment or supplement to any preliminary prospectus, the Time of Sale Prospectus or the Prospectus or of any order preventing or suspending the use of any preliminary prospectus, the Time of Sale Prospectus or the Prospectus, or of any proceedings to remove, suspend or terminate from listing or quotation the Common Shares from any securities exchange upon which they are listed for trading or included or designated for quotation, or of the threatening or initiation of any proceedings for any of such purposes. If the Commission shall enter any such stop order at any time, the Company will use its reasonable best efforts to obtain the lifting of such order at the earliest possible moment. Additionally, the Company agrees that it shall comply with all applicable provisions of Rule 424(b), Rule 433 and Rule 430B under the Securities Act and will use its reasonable efforts to confirm that any filings made by the Company under Rule 424(b) were received in a timely manner by the Commission.

(h) Listing. The Company will use its reasonable best efforts to list, subject to notice of issuance, the Offered Shares on the Exchange.

(i) Amendments and Supplements to the Prospectus and Other Securities Act Matters. If during the period when a prospectus relating to the Offered Shares is required to be delivered by the Underwriters under the Securities Act (including in circumstances where such requirement may be satisfied pursuant to Rule 172 under the Securities Act or similar rule), any event shall occur or condition exist as a result of which it is necessary to amend or supplement the Prospectus so that the Prospectus does not include an untrue statement of a material fact or omit to state a material fact necessary in order to make the statements therein, in the light of the circumstances under which they were made, not misleading when the Prospectus is delivered (whether physically or through compliance with Rule 172 under the Securities Act or any similar rule) to a purchaser, or if in the opinion of the Representative or counsel for the Underwriters it is otherwise necessary to amend or supplement the Prospectus to comply with applicable Law, the Company agrees (subject to Section 3(a)) to promptly prepare, file with the Commission and furnish, at its own expense, to the Underwriters and to any dealer upon request, amendments or supplements to the Prospectus so that the statements in the Prospectus as so amended or supplemented will not include an untrue statement of a material fact or omit to state a material fact necessary in order to make the statements therein, in the light of the circumstances under which they were made, not misleading when the Prospectus is delivered (whether physically or through compliance with Rule 172 under the Securities Act or any similar rule) to a purchaser or so that the Prospectus, as amended or supplemented, will comply with applicable Law. Neither the Representative's consent to, nor delivery of, any such amendment or supplement shall constitute a waiver of any of the Company's obligations under Section 3(a).

(j) Earning Statement. The Company will make generally available to its security holders as soon as practicable, but in any event not later than 15 months after the end of the Company's current fiscal quarter, an earning statement covering a 12-month period that satisfies the provisions of Section 11(a) and Rule 158 of the Securities Act.

(k) Use of Proceeds. The Company shall apply the net proceeds from the sale of the Offered Shares sold by it in the manner described under the caption "Use of Proceeds" in the Registration Statement, the Time of Sale Prospectus and the Prospectus.

(l) Transfer Agent. The Company shall engage and maintain, at its expense, a registrar and transfer agent for the Common Shares.

(m) Continued Compliance with Securities Laws. The Company will comply with the Securities Act and the Exchange Act so as to permit the completion of the distribution of the Offered Shares as contemplated by this Agreement, the Registration Statement, the Time of Sale Prospectus and the Prospectus. Without limiting the generality of the foregoing, the Company will, during the period when a prospectus relating to the Offered Shares is required by the Securities Act to be delivered (whether physically or through compliance with Rule 172 under the Securities Act or any similar rule), file on a timely basis with the Commission and the Exchange all reports and documents required to be filed under the Exchange Act.

(n) Company to Provide Copy of the Prospectus in Form That May be Downloaded from the Internet. If requested by the Representative, the Company shall cause to be prepared and delivered, at its expense, within one Business Day from the effective date of this Agreement, to the Representative, an "**electronic Prospectus**" to be used by the Underwriters in connection with the offering and sale of the Offered Shares. As used herein, the term "**electronic Prospectus**" means a form of Time of Sale Prospectus, and any amendment or supplement thereto, that meets each of the following conditions: (i) it shall be encoded in an electronic format, satisfactory to the Representative, that may be transmitted electronically by the Representative and the other Underwriters to offerees and purchasers of the Offered Shares; (ii) it shall disclose the same information as the paper Time of Sale Prospectus, except to the extent that graphic and image material cannot be disseminated electronically, in which case such graphic and image material shall be replaced in the electronic Prospectus with a fair and accurate narrative description or tabular representation of such material, as appropriate; and (iii) it shall be in or convertible into a paper format or an electronic format, satisfactory to the Representative, that will allow investors to store and have continuously ready access to the Time of Sale Prospectus at any future time, without charge to investors (other than any fee charged for subscription to the Internet as a whole and for on-line time).

(o) Agreement Not to Offer or Sell Additional Shares.

(i) During the period commencing on and including the date hereof and continuing through and including the 60th day following the date of the Prospectus (such period, as extended as described below, being referred to herein as the “**Lock-up Period**”), the Company will not, without the prior written consent of the Representative (which consent may be withheld in their sole discretion), directly or indirectly: (i) sell, offer to sell, contract to sell or lend any Common Shares or Related Securities (as defined below); (ii) effect any short sale, or establish or increase any “put equivalent position” (as defined in Rule 16a-1(h) under the Exchange Act) or liquidate or decrease any “call equivalent position” (as defined in Rule 16a-1(b) under the Exchange Act) of any Common Shares or Related Securities; (iii) pledge, hypothecate or grant any security interest in; (iv) in any other way transfer or dispose of any Common Shares or Related Securities; (v) enter into any swap, hedge or similar arrangement or agreement that transfers, in whole or in part, the economic risk of ownership of any Common Shares or Related Securities, regardless of whether any such transaction is to be settled in securities, in cash or otherwise; (vi) announce the offering of any Common Shares or Related Securities; (vii) file any registration statement under the Securities Act in respect of any Common Shares or Related Securities (other than as contemplated by this Agreement with respect to the Offered Shares); or (viii) publicly announce the intention to do any of the foregoing. For purposes of the foregoing, “**Related Securities**” shall mean any options or warrants or other rights to acquire Common Shares or any securities exchangeable or exercisable for or convertible into Common Shares, or to acquire other securities or rights ultimately exchangeable or exercisable for, or convertible into, Common Shares.

(ii) From the date hereof until twelve (12) months following the First Closing Date, the Company shall be prohibited, without the prior written consent of the Representative (which consent may be withheld in its sole discretion), from effecting or entering into an agreement to effect any issuance by the Company or any of its Subsidiaries of Common Shares or Related Securities (or a combination of units thereof) involving a Variable Rate Transaction. “Variable Rate Transaction” means a transaction in which the Company (i) issues or sells any debt or equity securities that are convertible into, exchangeable or exercisable for, or include the right to receive, additional Common Shares either (A) at a conversion price, exercise price or exchange rate or other price that is based upon, and/or varies with, the trading prices of or quotations for the Common Shares at any time after the initial issuance of such debt or equity securities or (B) with a conversion, exercise or exchange price that is subject to being reset at some future date after the initial issuance of such debt or equity security (other than pursuant to customary antidilution provisions) or upon the occurrence of specified or contingent events directly or indirectly related to the business of the Company or the market for the Common Shares or (ii) enters into, or effects a transaction under, any agreement, including, but not limited to, an equity line of credit or an at-the-market offering, whereby the Company may issue securities at a future determined price. The Representative shall be entitled to obtain injunctive relief against the Company to preclude any such issuance, which remedy shall be in addition to any right to collect damages. For the avoidance of doubt, no issuance of securities pursuant to clause (c) or, following, Lock-up Period, milestones or consideration payable by the Company pursuant to a transaction described in clause (d) of the definition of “Exempt Issuance” below shall be deemed to be a “Variable Rate Transaction” or otherwise subject to the restrictions of this Section 3(o)(ii).

(iii) Notwithstanding the foregoing, this Section 3(o)(i) shall not apply in respect of an Exempt Issuance.

“Exempt Issuance” means the issuance of (a) Common Shares or options pursuant to any stock or option plan described in the Registration Statement, the Time of Sale Prospectus and the Prospectus, (b) securities upon the exercise or exchange of or conversion of any securities issued hereunder and/or other securities exercisable or exchangeable for or convertible into Common Shares issued and outstanding on the date of this Agreement, provided that such securities have not been amended since the date of this Agreement to increase the number of such securities or to decrease the exercise price, exchange price or conversion price of such securities (other than in connection with stock splits or combinations) or to extend the term of such securities, (c) issue Common Shares as milestone payments pursuant to existing license, collaboration and similar agreements disclosed in the Registration Statement, the Time of Sale Prospectus and the Prospectus; and (d) securities issued pursuant to acquisitions or strategic transactions approved by a majority of the disinterested directors of the Company, provided that any such issuance shall only be to a person (or to the equityholders of a person) which is, itself or through its Subsidiaries, an operating company or an owner of an asset in a business synergistic with the business of the Company, but shall not include a transaction in which the Company is issuing securities primarily for the purpose of raising capital or to an entity whose primary business is investing in securities.

(p) Future Reports to the Representative. During the period ending on the earlier of (i) such time as the Company is no longer subject to the reporting requirements of the Exchange Act, or (ii) three years hereafter, the Company will furnish to the Representative: (i) as soon as practicable after the filing thereof, copies of each proxy statement, Annual Report on Form 10-K, Quarterly Report on Form 10-Q, Current Report on Form 8-K or other report filed by the Company with the Commission; *provided, however*, that the requirements of this Section 3(o) shall be satisfied to the extent that such materials are available on EDGAR.

(q) Market Activities. The Company will not, directly or indirectly, (i) take any action designed to cause or result in, or that constitutes or would reasonably be expected to constitute, the stabilization or manipulation of the price of any security of the Company to facilitate the sale or resale of the Offered Shares or (ii) sell, bid for, or purchase Common Shares in violation of Regulation M, or pay anyone any compensation for soliciting purchases of the Offered Shares other than the Representative.

(r) Investment Company Act. The Company shall not invest or otherwise use the proceeds received by the Company from its sale of the Offered Shares in such a manner as would require the Company or its Subsidiary to register as an investment company under the Investment Company Act.

(s) Enforce Lock-Up Agreements. During the Lock-up Period, the Company will enforce all Lock-up Agreements entered into pursuant to Section 6(j) of this Agreement. In addition, the Company will direct the transfer agent to place stop transfer restrictions upon any such securities of the Company that are bound by such Lock-up Agreements.

(t) Company to Provide Interim Financial Statements. Prior to the First Closing Date and each applicable Option Closing Date, the Company will furnish the Underwriters, as soon as they have been prepared by or are available to the Company, a copy of any unaudited interim financial statements of the Company for any period subsequent to the period covered by the most recent financial statements appearing in the Registration Statement and the Prospectus.

(u) Blue Sky and Other Qualifications. The Company will use its commercially reasonable efforts, in cooperation with the Representative and counsel for the Underwriters, to qualify or register the Offered Shares for sale under (or obtain exemptions from the application of) the state securities or blue sky Laws of those United States jurisdictions designated by the Representative; *provided, however*, that the Company shall not be obligated to file any general consent to service of process, qualify as a foreign corporation or as a dealer in securities or become subject to taxation in any jurisdiction in which it is not otherwise so subject; *provided further* that no Offered Shares shall be sold on any Canadian exchange.

(v) Sarbanes-Oxley Act. The Company and its Subsidiary will comply in all material respects with the applicable provisions of the Sarbanes-Oxley Act of 2002.

(w) Emerging Growth Company Status. The Company will promptly notify the Representative if the Company ceases to be an Emerging Growth Company at any time during the term of this Agreement.

4. Payment of Expenses. The Company will pay all expenses incident to the performance of its obligations under this Agreement and in connection with the transactions contemplated hereby, including (i) all expenses incident to the issuance and delivery of the Offered Shares (including all printing and engraving costs), (ii) all fees and expenses of the registrar and transfer agent of the Common Shares, (iii) all necessary issue, transfer and other stamp taxes in connection with the issuance and sale of the Offered Shares to the Underwriters, (iv) all fees and expenses of the Company's counsel, independent public or certified public accountants and other advisors, (v) all costs and expenses incurred in connection with the preparation, printing, filing, shipping and distribution of the Registration Statement (including financial statements, exhibits, schedules, consents and certificates of experts), the Time of Sale Prospectus, the Prospectus, each free writing prospectus prepared by or on behalf of, used by, or referred to by the Company and each preliminary prospectus, and all amendments and supplements thereto, and this Agreement, (vi) all fees and expenses of the Representative including the fees and expenses of the counsel to the Underwriters in an amount not to exceed \$50,000 with respect to fees incurred by the Underwriters and \$180,000 with respect to prior fees payable to counsel to prior underwriters, (vii) the Representative's non-accountable expenses in the amount \$25,000, (viii) settlement costs in an amount up to \$10,000, (ix) the costs and expenses of the Company relating to investor presentations on any "road show", including 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 Representative, employees and officers of the Company and any such consultants, and 50% of the cost of any aircraft chartered in connection with the road show, the remaining 50% of the cost of such aircraft to be paid by the Underwriters, (x) the fees and expenses associated with listing the Offered Shares on the Exchange, and (xi) all other fees, costs and expenses of the nature referred to in Item 14 of Part II of the Registration Statement. Any such amount payable to the Underwriters may be deducted from the purchase price for the Offered Shares. Except as provided in this Section 4 or in Section 7, Section 9 or Section 10, the Underwriters shall pay their own expenses, including the fees and disbursements of their counsel.

5. Covenant of the Underwriters. Each Underwriter severally and not jointly covenants with the Company not to take any action that would result in the Company being required to file with the Commission pursuant to Rule 433(d) under the Securities Act a free writing prospectus prepared by or on behalf of such Underwriter that otherwise would not, but for such actions, be required to be filed by the Company under Rule 433(d).

6. Conditions of the Obligations of the Underwriters. The respective obligations of the several Underwriters hereunder to purchase and pay for the Offered Shares as provided herein on the First Closing Date and, with respect to the Option Shares, each Option Closing Date, shall be subject to the accuracy in all material respects of the representations and warranties on the part of the Company set forth in Section 1 as of the date hereof and as of the First Closing Date as though then made and, with respect to the Option Shares, as of each Option Closing Date as though then made (except for any representation and warranty on the part of the Company set forth in Section 1 that speaks as of a specific date, in which case such representation and warranty shall be accurate in all material respects as of such date), to the timely performance in all material respects by the Company of its covenants and other obligations hereunder, and to each of the following additional conditions:

(a) Compliance with Registration Requirements; No Stop Order; No Objection from FINRA. For a period from and after the date of this Agreement and through and including the First Closing Date and, with respect to any Option Shares purchased after the First Closing Date, each Option Closing Date:

(i) The Company shall have filed the Prospectus with the Commission (including the information required by Rule 430B under the Securities Act) in the manner and within the time period required by Rule 424(b) under the Securities Act.

(ii) No stop order suspending the effectiveness of the Registration Statement or any post-effective amendment to the Registration Statement shall be in effect, and no proceedings for such purpose shall have been instituted or threatened by the Commission.

(iii) FINRA shall have raised no objection to the fairness and reasonableness of the underwriting terms and arrangements.

(b) Material Changes. For the period from and after the date of this Agreement and through and including the First Closing Date and, with respect to any Option Shares purchased after the First Closing Date, each Option Closing Date, and except as contemplated in the Registration Statement, the Time of Sale Prospectus or the Prospectus, or disclosed in the Company's reports filed with the Commission, there shall not have been any Material Adverse Effect or any development that could, individually or in the aggregate, reasonably be expected to have a Material Adverse Effect, or a downgrading in or withdrawal of the rating assigned to any of the Company's securities (other than asset backed securities) by any rating organization or a public announcement by any rating organization that it has under surveillance or review its rating of any of the Company's securities (other than asset backed securities), the effect of which, in the case of any such action by a rating organization described above, in the reasonable judgment of the Representative (without relieving the Company of any obligation or liability it may otherwise have), is so material as to make it impracticable or inadvisable to proceed with the offering of the Offered Shares on the terms and in the manner contemplated in the Prospectus.

(c) Opinion of Counsel for the Company. On each of the First Closing Date and each Option Closing Date the Representative shall have received the opinion and negative assurance letter of Lowenstein Sandler LLP, United States counsel for the Company, dated as of such date, in form and substance satisfactory to the Representative and to such further effect as the Representative shall reasonably request.

(d) Opinion of Canadian Counsel for the Company. On each of the First Closing Date and each Option Closing Date the Representative shall have received the opinion and negative assurance letter of Tingle Merrett LLP, Canadian counsel for the Company, dated as of such date, in form and substance satisfactory to the Representative and to such further effect as the Representative shall reasonably request.

(e) Opinion of Intellectual Property Counsel. On each of the First Closing Date and each Option Closing Date, the Representative shall have received the opinion of Casimir Jones S.C., counsel for the Company with respect to intellectual property matters, dated as of such date, in form and substance satisfactory to the Representative and to such further effect as the Representative shall reasonably request.

(f) Opinion of Counsel for the Underwriters. On each of the First Closing Date and each Option Closing Date the Representative shall have received the opinion of Covington & Burling LLP, counsel for the Underwriters in connection with the offer and sale of the Offered Shares, dated as of such date, in form and substance satisfactory to the Representative and to such further effect as the Representative shall reasonably request.

(g) Comfort Letter. On the date hereof, the Representative shall have received from MNP LLP, independent registered public accountants for the Company, a letter dated the date hereof addressed to the Underwriters, in form and substance satisfactory to the Representative, containing statements and information of the type ordinarily included in accountant's "comfort letters" to underwriters, delivered according to Statement of Auditing Standards No. 72 (or any successor bulletin), with respect to the audited and unaudited financial statements and certain financial information contained in the Registration Statement and the Time of Sale Prospectus.



(h) Officers' Certificate. On each of the First Closing Date and each Option Closing Date, the Representative shall have received a certificate executed by the Chief Executive Officer or President of the Company and the Chief Financial Officer of the Company, dated as of such date, to the effect set forth in Section 6(a)(ii) and further to the effect that:

(i) for the period from and including the date of this Agreement through and including such date, there has not occurred any Material Adverse Effect;

(ii) the representations, warranties and covenants of the Company set forth in Section 1 are true and correct in all material respects with the same force and effect as though expressly made on and as of such date (except for any representation and warranty of the Company set forth in Section 1 that speaks as of a specific date, in which case such representation and warranty shall be true and correct in all material respects as of such date); and

(iii) the Company has complied in all material respects with all the agreements hereunder and satisfied all the conditions on its part to be performed or satisfied hereunder at or prior to such date.

(i) Bring-down Comfort Letter. On each of the First Closing Date and each Option Closing Date the Representative shall have received from MNP LLP, independent registered public accountants for the Company, a letter dated such date, in form and substance satisfactory to the Representative, which letter shall: (i) reaffirm the statements made in the letter furnished by them pursuant to Section 6(g), except that the specified date referred to therein for the carrying out of procedures shall be no more than three Business Days prior to the First Closing Date or the applicable Option Closing Date, as the case may be; and (ii) cover certain financial information contained in the Prospectus.

(j) Lock-Up Agreements. On or prior to the date hereof, the Company shall have furnished to the Representative an agreement in the form of Exhibit A hereto from each of the persons listed on Exhibit B and each such agreement shall be in full force and effect on each of the First Closing Date and each Option Closing Date.

(k) Rule 462(b) Registration Statement. In the event that a Rule 462(b) Registration Statement is filed in connection with the offering contemplated by this Agreement, such Rule 462(b) Registration Statement shall have been filed with the Commission on the date of this Agreement and shall have become effective automatically upon such filing.

(l) NYSE American. The Company shall have submitted a listing of additional shares notification form to the Exchange with respect to the Offered Shares and shall have received no objection thereto from the Exchange.

(m) Additional Documents. On or before each of the First Closing Date and each Option Closing Date, the Representative and counsel for the Underwriters shall have received such information, documents and opinions as they may reasonably request.

If any condition specified in this Section 6 is not satisfied when and as required to be satisfied or waived, this Agreement may be terminated by the Representative by notice from the Representative to the Company at any time on or prior to the First Closing Date and, with respect to the Option Shares, at any time on or prior to the applicable Option Closing Date, which termination shall be without liability on the part of any party to any other party, except that Section 4, Section 7, Section 9 and Section 10 shall at all times be effective and shall survive such termination.

7. Reimbursement of Underwriters' Expenses. If this Agreement is terminated by the Representative pursuant to Section 6, Section 11 or Section 12, or if the sale to the Underwriters of the Offered Shares on the First Closing Date is not consummated because of any refusal, inability or failure on the part of the Company to perform any agreement herein or to comply with any provision hereof, the Company agrees to reimburse the Representative and the other Underwriters (or such Underwriters as have terminated this Agreement with respect to themselves), severally, upon demand for all out-of-pocket expenses that shall have been reasonably incurred by the Representative and the Underwriters in connection with the proposed purchase and the offering and sale of the Offered Shares, including fees and disbursements of counsel, printing expenses, travel expenses, postage, facsimile and telephone charges.

8. Effectiveness of this Agreement. This Agreement shall become effective upon the execution and delivery hereof by the parties hereto.

9. Indemnification.

(a) Indemnification of the Underwriters. The Company agrees to indemnify and hold harmless each Underwriter, its affiliates and their respective partners, members, directors, officers, employees and agents, and each person, if any, who controls each Underwriter or any affiliate within the meaning of Section 15 of the Securities Act or Section 20 of the Exchange Act as follows:

(i) against any and all loss, liability, claim, damage and expense whatsoever, as incurred, joint or several, arising out of or based upon any untrue statement or alleged untrue statement of a material fact contained in the Registration Statement (or any amendment thereto), 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 any untrue statement or alleged untrue statement of a material fact included in any preliminary prospectus, Time of Sale Prospectus or the Prospectus, 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, joint or several, to the extent of the aggregate amount paid in settlement of any litigation, or any investigation or proceeding by any Governmental Authority, 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 9(d)) any such settlement is effected with the written consent of the Company, which consent shall not unreasonably be delayed, conditioned or withheld; and

(iii) against any and all expense whatsoever, as incurred (including the fees and disbursements of counsel), reasonably incurred in investigating, preparing or defending against any litigation, or any investigation or proceeding by any Governmental Authority, commenced or threatened, or any claim whatsoever based upon any such untrue statement or omission, or any such alleged untrue statement or omission (whether or not a party), to the extent that any such expense is not paid under (i) or (ii) above; and

(iv) against any and all loss, liability, claim, damage and expense whatsoever, as incurred, joint or several, arising out of or based upon any breach of a representation, warranty or covenant made by the Company in this Agreement.

*provided, however*, that this indemnity agreement shall not apply to any loss, liability, claim, damage or expense to the extent arising out of any untrue statement or omission or alleged untrue statement or omission made solely in reliance upon and in conformity with the Underwriter Information (as defined below).

(b) Indemnification of the Company, its Directors and Officers. Each Underwriter agrees, severally and not jointly, to indemnify and hold harmless the Company, and its directors, each officer of the Company who signed the Registration Statement and each person, if any, who controls the Company within the meaning of Section 15 of the Securities Act or Section 20 of the Exchange Act, against any and all loss, liability, claim, damage and expense described in the indemnity contained in Section 9(a), as incurred, but only with respect to untrue statements or omissions, or alleged untrue statements or omissions, made in the Registration Statement, any preliminary prospectus, the Time of Sale Prospectus or the Prospectus (or any amendment or supplement thereto) in reliance upon and in conformity with information relating to such Underwriter and furnished to the Company in writing by such Underwriter or Underwriters expressly for use therein. The Company hereby acknowledges that the only information that the Representative or the Underwriters have furnished to the Company expressly for use in the Registration Statement, any preliminary prospectus, the Time of Sale Prospectus or the Prospectus (or any amendment or supplement thereto) are the statements set forth in the third paragraph, the fifth paragraph and the information contained in the first paragraph (including the bullet points) under the subheading "Short Positions and Penalty Bids", in each case under the caption "Underwriting" in the Time of Sale Prospectus and Prospectus (the "**Underwriter Information**").

(c) Procedure. Any party that proposes to assert the right to be indemnified under this Section 9 will, promptly after receipt of notice of commencement of any action against such party in respect of which a claim is to be made against an indemnifying party or parties under this Section 9, notify each such indemnifying party of the commencement of such action, enclosing a copy of all papers served, but the omission so to notify such indemnifying party will not relieve the indemnifying party from (i) any liability that it might have to any indemnified party otherwise than under this Section 9 and (ii) any liability that it may have to any indemnified party under the foregoing provision of this Section 9 unless, and only to the extent that, such omission results in the forfeiture of substantive rights or defenses by the indemnifying party. If any such action is brought against any indemnified party and it notifies the indemnifying party of its commencement, the indemnifying party will be entitled to participate in and, to the extent that it elects by delivering written notice to the indemnified party promptly after receiving notice of the commencement of the action from the indemnified party, jointly with any other indemnifying party similarly notified, to assume the defense of the action, with counsel reasonably satisfactory to the indemnified party, and after notice from the indemnifying party to the indemnified party of its election to assume the defense, the indemnifying party will not be liable to the indemnified party for any other legal expenses except as provided below and except for the reasonable costs of investigation

subsequently incurred by the indemnified party in connection with the defense. The indemnified party will have the right to employ its own counsel in any such action, but the fees, expenses and other charges of such counsel will be at the expense of such indemnified party unless (1) the employment of counsel by the indemnified party has been authorized in writing by the indemnifying party, (2) the indemnified party has reasonably concluded (based on advice of counsel to the indemnified party) 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, (3) a conflict or potential conflict exists (based on advice of counsel to the indemnified party) between the indemnified party and the indemnifying party (in which case the indemnifying party will not have the right to direct the defense of such action on behalf of the indemnified party) or (4) the indemnifying party has not in fact employed counsel to assume the defense of such action or counsel reasonably satisfactory to the indemnified party, in each case, within a reasonable time after receiving notice of the commencement of the action; in each of which cases the reasonable fees, disbursements and other charges of counsel will be at the expense of the indemnifying party or parties. It is understood that the indemnifying party or parties shall not, in connection with any proceeding or related proceedings in the same jurisdiction, be liable for the reasonable fees, disbursements and other charges of more than one separate firm admitted to practice in such jurisdiction (plus local counsel) at any one time for all such indemnified party or parties. All such fees, disbursements and other charges will be reimbursed by the indemnifying party promptly after the indemnifying party receives a written invoice relating to fees, disbursements and other charges in reasonable detail. An indemnifying party will not, in any event, be liable for any settlement of any action or claim effected without its written consent. No indemnifying party shall, without the prior written consent of each indemnified party, settle or compromise or consent to the entry of any judgment in any pending or threatened claim, action or proceeding relating to the matters contemplated by this Section 9 (whether or not any indemnified party is a party thereto), unless such settlement, compromise or consent (1) includes an express and unconditional release of each indemnified party, in form and substance reasonably satisfactory to such indemnified party, from all liability arising out of such litigation, investigation, proceeding or claim and (2) does not include a statement as to or an admission of fault, culpability or a failure to act by or on behalf of any indemnified party.

(d) Settlement Without Consent if Failure to Reimburse. If an indemnified party shall have requested an indemnifying party to reimburse the indemnified party for reasonable fees and expenses of counsel, such indemnifying party agrees that it shall be liable for any settlement of the nature contemplated by Section 9(a)(ii) effected without its written consent if (1) such settlement is entered into more than 45 days after receipt by such indemnifying party of the aforesaid request, (2) such indemnifying party shall have received notice of the terms of such settlement at least 30 days prior to such settlement being entered into and (3) such indemnifying party shall not have reimbursed such indemnified party in accordance with such request prior to the date of such settlement.

10. Contribution. In order to provide for just and equitable contribution in circumstances in which the indemnification provided for in the foregoing paragraphs of Section 9 is applicable in accordance with its terms but for any reason is held to be unavailable or insufficient from the Company or the Underwriters, the Company and the Underwriters will contribute to the total losses, claims, liabilities, expenses and damages (including any investigative, legal and other expenses reasonably incurred in connection with, and any amount paid in settlement of, any action,

suit or proceeding or any claim asserted) to which any indemnified party may be subject in such proportion as shall be appropriate to reflect the relative benefits received by the Company on the one hand and the Underwriters on the other hand. The relative benefits received by the Company on the one hand and the Underwriters on the other hand shall be deemed to be in the same proportion as the total net proceeds from the sale of the Offered Shares (before deducting expenses) received by the Company bear to the total compensation received by the Underwriters (before deducting expenses) from the sale of Offered Shares on behalf of the Company. If, but only if, the allocation provided by the foregoing sentence is not permitted by applicable Law, the allocation of contribution shall be made in such proportion as is appropriate to reflect not only the relative benefits referred to in the foregoing sentence but also the relative fault of the Company, on the one hand, and the Underwriters, on the other hand, with respect to the statements or omission that resulted in such loss, claim, liability, expense or damage, or action in respect thereof, as well as any other relevant equitable considerations with respect to such offering. Such relative fault shall be determined by reference to, among other things, whether the untrue or alleged untrue statement of a material fact or omission or alleged omission to state a material fact relates to information supplied by the Company or the Underwriters, the intent of the parties and their relative knowledge, access to information and opportunity to correct or prevent such statement or omission. The Company and the Underwriters agree that it would not be just and equitable if contributions pursuant to this Section 10 were to be determined by pro rata allocation or by any other method of allocation that does not take into account the equitable considerations referred to herein. The amount paid or payable by an indemnified party as a result of the loss, claim, liability, expense, or damage, or action in respect thereof, referred to above in this Section 10 shall be deemed to include, for the purpose of this Section 10, any legal or other expenses reasonably incurred by such indemnified party in connection with investigating or defending any such action or claim to the extent consistent with Section 9(c). Notwithstanding the foregoing provisions of Section 9 and this Section 10, the Underwriters shall not be required to contribute any amount in excess of the commissions actually received by it under this Agreement and no person found guilty of fraudulent misrepresentation (within the meaning of Section 11(f) of the Securities Act) will be entitled to contribution from any person who was not guilty of such fraudulent misrepresentation. For purposes of this Section 10, any person who controls a party to this Agreement within the meaning of the Securities Act, any affiliates of the respective Underwriters and any officers, directors, partners, employees or agents of the Underwriters or their respective affiliates, will have the same rights to contribution as that party, and each director of the Company and each officer of the Company who signed the Registration Statement will have the same rights to contribution as the Company, subject in each case to the provisions hereof. Any party entitled to contribution, promptly after receipt of notice of commencement of any action against such party in respect of which a claim for contribution may be made under this Section 10, will notify any such party or parties from whom contribution may be sought, but the omission to so notify will not relieve that party or parties from whom contribution may be sought from any other obligation it or they may have under this Section 10 except to the extent that the failure to so notify such other party materially prejudiced the substantive rights or defenses of the party from whom contribution is sought. Except for a settlement entered into pursuant to the last sentence of Section 9(c), no party will be liable for contribution with respect to any action or claim settled without its written consent if such consent is required pursuant to Section 9(c).

11. Default of One or More of the Several Underwriters. If any one or more of the several Underwriters shall fail or refuse to purchase Offered Shares that it or they have agreed to

purchase hereunder on the First Closing Date or any Option Closing Date, and the aggregate number of Offered Shares which such defaulting Underwriter or Underwriters agreed but failed or refused to purchase does not exceed 10% of the aggregate number of the Offered Shares to be purchased on such date, the Representative may make arrangements satisfactory to the Company for the purchase of such Offered Shares by other persons, including any of the Underwriters, but if no such arrangements are made by such date, the other Underwriters shall be obligated, severally and not jointly, in the proportions that the number of Firm Shares set forth opposite their respective names on Schedule A bears to the aggregate number of Firm Shares set forth opposite the names of all such non-defaulting Underwriters, or in such other proportions as may be specified by the Representative with the consent of the non-defaulting Underwriters, to purchase the Offered Shares which such defaulting Underwriter or Underwriters agreed but failed or refused to purchase. If any one or more of the several Underwriters shall fail or refuse to purchase Offered Shares that it or they have agreed to purchase hereunder on the First Closing Date or any Option Closing Date, and the aggregate number of Offered Shares which such defaulting Underwriter or Underwriters agreed but failed or refused to purchase exceeds 10% of the aggregate number of Offered Shares to be purchased on such date, and arrangements satisfactory to the Representative and the Company for the purchase of such Offered Shares are not made within 48 hours after such default, this Agreement shall terminate without liability of any party to any other party except that the provisions of Section 4, Section 7, Section 9 and Section 10 shall at all times be effective and shall survive such termination. In any such case either the Representative or the Company shall have the right to postpone the First Closing Date or the applicable Option Closing Date, as the case may be, but in no event for longer than seven days in order that the required changes, if any, to the Registration Statement and the Prospectus or any other documents or arrangements may be effected.

As used in this Agreement, the term “**Underwriter**” shall be deemed to include any person substituted for a defaulting Underwriter under this Section 11. Any action taken under this Section 11 shall not relieve any defaulting Underwriter from liability in respect of any default of such Underwriter under this Agreement.

12. Termination of this Agreement. Prior to the purchase of the Firm Shares by the Underwriters on the First Closing Date, this Agreement may be terminated by the Representative by notice given to the Company if at any time: (1) there has been, since the time of execution of this Agreement or since the date as of which information is given in the Prospectus, any change, or any development or event or condition of the type described in Section 6(b), whether or not arising in the ordinary course of business, which individually or in the aggregate, in the sole judgment of the Representative is material and adverse and makes it impractical or inadvisable to market the Offered Shares or to enforce contracts for the sale of the Offered Shares, (2) if there has occurred any material adverse change in the financial markets in the United States or the international financial markets, any outbreak of hostilities or escalation thereof or other calamity or crisis or any change or development involving a prospective change in national or international political, financial or economic conditions, in each case the effect of which is such as to make it, in the judgment of the Representative, impracticable or inadvisable to market the Offered Shares or to enforce contracts for the sale of the Offered Shares, (3) if trading in the Common Shares has been suspended or limited by the Commission or the Exchange, or if trading generally on the Exchange has been suspended or limited, or minimum prices for trading have been fixed on the Exchange, (4) if any suspension of trading of any securities of the Company on any exchange or in the over-the-counter market shall have occurred and be continuing (other than a voluntary suspension of trading or withdrawal of the Company’s listing on the TSX Venture Exchange), (5) if a major disruption of securities settlements or clearance services in the United States shall have occurred and be continuing, or (6) if a banking moratorium has been declared by either U.S. Federal or New York authorities. Any termination pursuant to this Section 12 shall be without liability on the part of (a) the Company to any Underwriter, except that the Company shall be obligated to reimburse the expenses of the Representative and the Underwriters pursuant to Section 7 hereof or (b) any Underwriter to the Company; *provided, however*, that the provisions of Section 9 and Section 10 shall at all times be effective and shall survive such termination.

13. No Advisory or Fiduciary Relationship. The Company acknowledges and agrees that (a) the purchase and sale of the Offered Shares pursuant to this Agreement, including the determination of the public offering price of the Offered Shares and any related discounts and commissions, is an arm's-length commercial transaction between the Company, on the one hand, and the several Underwriters, on the other hand, (b) in connection with the offering contemplated hereby and the process leading to such transaction, each Underwriter is and has been acting solely as a principal and is not the agent or fiduciary of the Company, or its shareholders, or its creditors, employees or any other party, (c) no Underwriter has assumed or will assume an advisory or fiduciary responsibility in favor of the Company with respect to the offering contemplated hereby or the process leading thereto (irrespective of whether such Underwriter has advised or is currently advising the Company on other matters) and no Underwriter has any obligation to the Company with respect to the offering contemplated hereby except the obligations expressly set forth in this Agreement, (d) the Underwriters and their respective affiliates may be engaged in a broad range of transactions that involve interests that differ from those of the Company, and (e) the Underwriters have not provided any legal, accounting, regulatory or tax advice with respect to the offering contemplated hereby and the Company has consulted its own legal, accounting, regulatory and tax advisors to the extent it deemed appropriate.

14. Representations and Agreements to Survive Delivery. The respective indemnities, agreements, representations, warranties and other statements of the Company, its officers and the several Underwriters contained herein or in certificates delivered pursuant hereto shall survive, as of their respective dates, regardless of (i) any investigation made by or on behalf of the Representative, any controlling persons, or the Company (or any of their respective officers, directors or controlling persons), (ii) delivery and acceptance of the Offered Shares and payment therefor or (iii) any termination of this Agreement

15. Notices. All notices or other communications required or permitted to be given by any party to any other party pursuant to the terms of this Agreement shall be in writing, unless otherwise specified, and if sent to the Representative, shall be delivered to:

H.C. Wainwright & Co., LLC  
430 Park Avenue, 3rd Floor  
Attention: Head of Investment Banking Facsimile: (212) 214-0803

with a copy to:

Covington & Burling LLP  
620 Eighth Avenue  
Attention: Brian K. Rosenzweig  
Facsimile: (646) 441-9108

and if to the Company, shall be delivered to:

Zomedica Pharmaceuticals Corp.  
100 Phoenix Drive  
Suite 190  
Ann Arbor, Michigan 48108  
Attention: Gerald A. Solensky, Jr.  
Facsimile: (734) 436-8680

with a copy to:

Lowenstein Sandler LLP  
1251 Avenue of the Americas  
New York, NY 10020  
Attention: John Hogoboom  
Facsimile: (973) 597-2383

Each 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. Each such notice or other communication shall be deemed given (i) when delivered personally or by verifiable facsimile transmission (with an original to follow) on or before 6:00 p.m., New York City time, on a Business Day or, if such day is not a Business Day, on the next succeeding Business Day, (ii) on the next Business Day after timely delivery to a nationally-recognized overnight courier and (iii) on the Business Day actually received if deposited in the U.S. mail (certified or registered mail, return receipt requested, postage prepaid). For purposes of this Agreement, "**Business Day**" shall mean any day on which the Exchange and commercial banks in the City of New York are open for business.

16. Electronic Notice. An electronic communication ("**Electronic Notice**") shall be deemed written notice for purposes of this Section 16 if sent to the electronic mail address specified by the receiving party under separate cover. Electronic Notice shall be deemed received at the time the party sending Electronic Notice receives verification of receipt by the receiving party. Any party receiving Electronic Notice may request and shall be entitled to receive the notice on paper, in a nonelectronic form ("**Nonelectronic Notice**") which shall be sent to the requesting party within ten (10) days of receipt of the written request for Nonelectronic Notice.

17. Successors and Assigns. This Agreement shall inure to the benefit of and be binding upon the Company and the Underwriters and their respective successors and the parties referred to in Section 11. References to any of the parties contained in this Agreement shall be deemed to include the successors and permitted assigns of such party. Nothing in this Agreement, express or implied, is intended to confer upon any party other than the parties hereto or their respective successors and permitted assigns any rights, remedies, obligations or liabilities under or by reason of this Agreement, except as expressly provided in this Agreement. Neither party may assign its rights or obligations under this Agreement without the prior written consent of the other party; *provided, however*, that the Representative may assign their rights and obligations hereunder to an affiliate thereof without obtaining the Company's consent.



18. **Partial Unenforceability.** 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.

19. **Entire Agreement; Amendment; Severability; Waiver.** This Agreement (including all schedules and exhibits attached hereto issued pursuant hereto) constitutes the entire agreement and supersedes all other prior and contemporaneous agreements and undertakings, both written and oral, among the parties hereto with regard to the subject matter hereof, other than the Surviving Provisions (as defined below) of that certain engagement agreement, dated as of March 18, 2019, by and between the Company and H.C. Wainwright & Co., LLC (the “**Engagement Agreement**”). Sections A.3., A.4., E., F. (with respect to acts or omissions occurring prior to the execution and delivery of this Agreement), I., J., K. and L. of the Engagement Agreement (collectively, the “**Surviving Provisions**”) shall survive the execution and delivery of this Agreement. Neither this Agreement nor any term hereof may be amended except pursuant to a written instrument executed by the Company and the Representative. In the event that any one or more of the provisions contained herein, or the application thereof in any circumstance, is held invalid, illegal or unenforceable as written by a court of competent jurisdiction, then such provision shall be given full force and effect to the fullest possible extent that it is valid, legal and enforceable, and the remainder of the terms and provisions herein shall be construed as if such invalid, illegal or unenforceable term or provision was not contained herein, but only to the extent that giving effect to such provision and the remainder of the terms and provisions hereof shall be in accordance with the intent of the parties as reflected in this Agreement. No implied waiver by a party shall arise in the absence of a waiver in writing signed by such party. No failure or delay in exercising any right, power, or privilege hereunder shall operate as a waiver thereof, nor shall any single or partial exercise thereof preclude any other or further exercise thereof or the exercise of any right, power, or privilege hereunder.

20. **GOVERNING LAW AND TIME; WAIVER OF JURY TRIAL.** THIS AGREEMENT SHALL BE GOVERNED BY AND CONSTRUED IN ACCORDANCE WITH THE LAWS OF THE STATE OF NEW YORK WITHOUT REGARD TO THE PRINCIPLES OF CONFLICTS OF LAWS. SPECIFIED TIMES OF DAY REFER TO NEW YORK CITY TIME. EACH PARTY 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.

21. **CONSENT TO JURISDICTION.** EACH PARTY HEREBY IRREVOCABLY SUBMITS TO THE EXCLUSIVE JURISDICTION OF THE STATE AND FEDERAL COURTS SITTING IN THE CITY OF NEW YORK, BOROUGH OF MANHATTAN, FOR THE ADJUDICATION OF ANY DISPUTE HEREUNDER OR IN CONNECTION WITH ANY TRANSACTION CONTEMPLATED HEREBY, AND HEREBY IRREVOCABLY WAIVES, AND AGREES NOT TO ASSERT IN ANY SUIT, ACTION OR PROCEEDING, ANY CLAIM THAT IT IS NOT PERSONALLY SUBJECT TO THE JURISDICTION OF ANY SUCH COURT, THAT SUCH SUIT, ACTION OR PROCEEDING IS BROUGHT IN AN INCONVENIENT FORUM OR THAT THE VENUE OF SUCH SUIT, ACTION OR PROCEEDING IS IMPROPER. EACH PARTY HEREBY IRREVOCABLY WAIVES PERSONAL SERVICE OF PROCESS AND CONSENTS TO PROCESS BEING SERVED IN ANY SUCH SUIT, ACTION OR PROCEEDING BY MAILING A COPY THEREOF (CERTIFIED OR REGISTERED MAIL, RETURN RECEIPT REQUESTED) TO SUCH PARTY AT THE ADDRESS IN EFFECT FOR NOTICES TO IT UNDER THIS AGREEMENT AND AGREES THAT SUCH SERVICE SHALL CONSTITUTE GOOD AND SUFFICIENT SERVICE OF PROCESS AND NOTICE THEREOF. NOTHING CONTAINED HEREIN SHALL BE DEEMED TO LIMIT IN ANY WAY ANY RIGHT TO SERVE PROCESS IN ANY MANNER PERMITTED BY LAW.

22. Counterparts. This Agreement may be executed in two or more counterparts, each of which shall be deemed an original, but all of which together shall constitute one and the same instrument. Delivery of an executed Agreement by one party to the other may be made by facsimile or electronic transmission.

23. Construction. The section and exhibit headings herein are for convenience only and shall not affect the construction hereof. References herein to any law, statute, ordinance, code, regulation, rule or other requirement of any Governmental Authority shall be deemed to refer to such law, statute, ordinance, code, regulation, rule or other requirement of any Governmental Authority as amended, reenacted, supplemented or superseded in whole or in part and in effect from time to time and also to all rules and regulations promulgated thereunder.

24. No Free Writing Prospectuses. The Company represents, warrants and agrees that, and the Representative represents, warrants and agrees that, it has not made and will not make any offer relating to the Offered Shares that would constitute a “free writing prospectus,” as defined in Rule 405, required to be filed with the Commission.

25. Definitions. As used in this Agreement, the following terms have the respective meanings set forth below:

“**Business Day**” means any day on which the Exchange and commercial banks in the City of New York are open for business.

“**Governmental Authority**” means (i) any federal, provincial, state, local, municipal, national or international government or governmental authority, regulatory or administrative agency, governmental commission, department, board, bureau, agency or instrumentality, court, tribunal, arbitrator or arbitral body (public or private); (ii) any self-regulatory organization; or (iii) any political subdivision of any of the foregoing.

“**Law**” means any and all laws, including all federal, state, local, municipal, national or foreign statutes, codes, ordinances, guidelines, decrees, rules, regulations and by-laws and all judicial, arbitral, administrative, ministerial, departmental or regulatory judgments, orders, directives, decisions, rulings or awards or other requirements of any Governmental Authority, binding on or affecting the person referred to in the context in which the term is used and rules, regulations and policies of any stock exchange on which securities of the Company are listed for trading.

All references in this Agreement to the Registration Statement, the Prospectus or any amendment or supplement to any of the foregoing shall be deemed to include the copy filed with the Commission pursuant to EDGAR.

26. General Provisions.

Each of the parties hereto acknowledges that it is a sophisticated business person who was adequately represented by counsel during negotiations regarding the provisions hereof, including the indemnification provisions of Section 9 and the contribution provisions of Section 10, and is fully informed regarding said provisions. Each of the parties hereto further acknowledges that the provisions of Section 9 and Section 10 hereof fairly allocate the risks in light of the ability of the parties to investigate the Company, its affairs and its business in order to assure that adequate disclosure has been made in the Registration Statement, any preliminary prospectus, the Time of Sale Prospectus and the Prospectus (and any amendments and supplements to the foregoing), as contemplated by the Securities Act and the Exchange Act.

*[Signature Page Follows]*

If the foregoing correctly sets forth the understanding between the Company and the Underwriters, please so indicate in the space provided below for that purpose, whereupon this letter shall constitute a binding agreement between the Company and the Underwriters.

Very truly yours,

ZOMEDICA PHARMACEUTICALS CORP.

By: /s/ Gerald Solensky Jr.

Name: Gerald Solensky Jr.

Title: President and Chief Executive Officer

ACCEPTED as of the date first-above written:

H.C. WAINWRIGHT & CO., LLC

By: /s/ Edward D. Silvera

Name: Edward D. Silvera

Title: Chief Operating Officer

For itself and the other several Underwriters named in Schedule A to this Agreement.

[SIGNATURE PAGE TO UNDERWRITING AGREEMENT]

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Schedule A

Underwriters

Number of Firm Shares to be Purchased
6,521,740
6,521,740

H.C. Wainwright & Co., LLC  
Total



**Free Writing Prospectuses Included in the Time of Sale Prospectus**

None.

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**Pricing Information**

Firm Shares: 6,521,740  
Option Shares: 978,261  
Price to Public: \$0.46  
Underwriters' Discount: \$0.0345

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Subsidiary

Zomedica Pharmaceuticals, Inc.

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**Form of Lock-up Agreement**

**Exhibit A**

[Sent under separate cover]

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**Executive Officers:**

Gerald Solensky, Jr.  
Stephanie Morley  
Shameze Rampertab  
Bruk Herbst

**Directors:**

James LeBar  
Jeff Rowe  
Rodney Williams

**Others:**

Gerald Solensky Sr.  
Jeffrey Starman  
Brad Hayosh  
Helen Starman  
Clint Starrs  
Dan Carrol  
Jeffrey and Aubry Pinkston  
Equidebt LLC

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March 26, 2019

ZoMedica Pharmaceuticals Corp.  
100 Phoenix Dr. Suite 190  
Ann Arbor, MI 48108, USA

Dear Sirs/Mesdames:

We have acted as Canadian legal counsel to Zomedica Pharmaceuticals Corp., a corporation formed under the laws of the Province of Alberta (the "Company"), in connection with the preparation and filing with the United States Securities and Exchange Commission (the "Commission") under the Securities Act of 1933, as amended (the "Securities Act") of (i) the Registration Statement on Form S-3 (Registration No.: 333-228926) on Form S-3 (the "Registration Statement") and the related prospectus included in the Registration Statement (the "Base Prospectus") and (ii) the prospectus supplement, dated March 26, 2019 (the "Prospectus Supplement", relating to the issuance and sale by the Company of up to 7,500,001 of its common shares, without par value (the "Common Shares") (the "Shares"), including 978,261 Common Shares issuable by the Company upon exercise of an over-allotment option granted by the Company to the Underwriters (as defined below).

The Shares are to be issued and sold by the Company pursuant to the Underwriting Agreement, dated as of March 26, 2019 (the "Underwriting Agreement"), by and between the Company and H.C. Wainwright & Co., LLC, as representative of the several underwriters named therein (the "Underwriters"), the form of which is being filed with the Commission as Exhibit 1.1 to the Company's Current Report on Form 8-K, filed on the date hereof.

In so acting we have examined originals or copies (certified or otherwise identified to our satisfaction) of such corporate records, agreements, documents and other instruments, and such certificates or comparable documents of public officials and of officers and representatives of the Company, and have made such inquiries of such officers and representatives, as we have deemed relevant and necessary as a basis for the opinion hereafter set forth.

In such examination, we have assumed the genuineness of all signatures, the legal capacity of all natural persons, the authenticity of all documents submitted to us as originals, the conformity to original documents of all documents submitted to us as certified, conformed or photostatic copies, and the authenticity of the originals of such latter documents. As to all questions of fact material to this opinion that have not been independently established, we have relied upon certificates or comparable documents of officers and representatives of the Company.

Based on the foregoing and subject to the qualifications, assumptions and limitations stated herein, we are of the opinion that the Shares have been duly authorized for issuance, and when issued and paid for in accordance with the terms and conditions of the Underwriting Agreement, the Shares will be validly issued, fully paid and non-assessable.

We are solicitors qualified to practice law in the Province of Alberta and we express no opinion as to the laws of any jurisdiction, or as to any matters governed by the laws of any jurisdiction, other than the laws of the Province of Alberta and the laws of Canada applicable therein. The opinions herein are based on the laws of the Province of Alberta and the laws of Canada applicable therein in effect on the date hereof and we disclaim any obligation to advise you of any change after the date hereof in any matter set forth herein.

Subject to the qualifications set out above, the opinions set forth herein relate exclusively to the matters stated herein, and no opinion or belief is implied or may be inferred beyond the matters expressly stated herein.

We hereby consent to the filing of this opinion as Exhibit 5.1 to the Current Report on Form 8-K filed by the Company on the date hereof and which is incorporated by reference into the Registration Statement and to the reference to our firm in the Prospectus Supplement and the Base Prospectus under the heading "Legal Matters". In giving such consent, we do not thereby admit that we are in the category of persons whose consent is required under Section 7 of the Act or the rules and regulations of the Commission.

Yours very truly,

**TINGLE MERRETT LLP**

## Zomedica Pharmaceuticals Corp. Announces Proposed Public Offering of Common Shares

ANN ARBOR, Mich., March 25, 2019 (GLOBE NEWSWIRE) – Zomedica Pharmaceuticals Corp. (NYSE American: ZOM) (TSX-V: ZOM) ("Zomedica" or the "Company"), a veterinary diagnostic and pharmaceutical company, today announced it has commenced an underwritten public offering of its common shares. The Company intends to grant the underwriters of the offering a 30-day option to purchase up to an additional 15 percent of the number of common shares sold in connection with the offering. The proposed offering is subject to market and other conditions, and there can be no assurance as to whether or when the offering may be completed, or as to the actual size or terms of the offering.

H.C. Wainwright & Co. is acting as sole book-running manager for the proposed offering.

The Company intends to use the net proceeds from the offering for the continued development of its diagnostic platform and therapeutic candidates, including making milestone payments, as they come due, under the Company's existing license and collaboration agreements, and other general corporate and working capital purposes.

The shares described above are being offered by the Company pursuant to a "shelf" registration statement on Form S-3 (File No. 333-228926) previously filed with and declared effective by the Securities and Exchange Commission ("SEC") on January 30, 2019. A preliminary prospectus supplement and an accompanying prospectus relating to the offering will be filed with the SEC and will be available on the SEC's website at [www.sec.gov](http://www.sec.gov). Electronic copies of the preliminary prospectus supplement and the accompanying prospectus relating to the offering may be obtained, when available, from H.C. Wainwright & Co., LLC, 430 Park Avenue, 3rd Floor, New York, NY 10022, or by calling (646) 975-6996 or by emailing [placements@hcwco.com](mailto:placements@hcwco.com).

Before investing in the offering, you should read in their entirety the preliminary prospectus supplement and the accompanying prospectus to be filed with the SEC, and the other documents that the Company has filed with the SEC that will be incorporated by reference in the prospectus supplement and the accompanying prospectus, which will provide more information about the Company and the offering.

This press release shall not constitute an offer to sell or the solicitation of an offer to buy any securities described herein, nor shall there be any sale of these securities in any state or jurisdiction in which such offer, solicitation or sale would be unlawful prior to registration or qualification under the securities laws of any such state or jurisdiction.

### About Zomedica

Based in Ann Arbor, Michigan, Zomedica (NYSE American: ZOM) (TSX-V: ZOM) is a veterinary diagnostic and pharmaceutical company creating products for companion animals (canine, feline and equine) by focusing on the unmet needs of clinical veterinarians. Zomedica's product portfolio will include novel diagnostics and innovative therapeutics that emphasize patient health and practice health. With a team that includes clinical veterinary professionals, it is Zomedica's mission to give veterinarians the opportunity to lower costs, increase productivity, and grow revenue while better serving the animals in their care.

### Forward-looking Statements

Except for statements of historical fact, this news release contains certain "forward-looking information" within the meaning of applicable securities law. Forward-looking information is frequently characterized by words such as "plan", "expect", "project", "intend", "believe", "anticipate", "estimate" and other similar words, or statements that certain events or conditions "may" or "will" occur. Although we believe that the expectations reflected in the forward-looking information are reasonable, there can be no assurance that such expectations will prove to be correct. We cannot guarantee future results, performance or achievements. Consequently, there is no representation that the actual results achieved will be the same, in whole or in part, as those set out in the forward-looking information.

Forward-looking information is based on the opinions and estimates of management at the date the statements are made, and are subject to a variety of risks and uncertainties and other factors that could cause actual events or results to differ materially from those anticipated in the forward-looking information. Some of the risks and other factors that could cause the results to differ materially from those expressed in the forward-looking information include, but are not limited to: the offering being subject to market conditions that may affect the timing, terms and conditions of the offering, the ability of the Company to satisfy the conditions to the closing of the offering and other matters that may affect our ability to consummate the offering on terms satisfactory to us, uncertainty as to whether our strategies and business plans will yield the expected benefits; uncertainty as to the timing and results of development work and pilot and pivotal studies, uncertainty as to the likelihood and timing of regulatory approvals, availability and cost of capital; the ability to identify and develop and achieve commercial success for new products and technologies; the level of expenditures necessary to maintain and improve the quality of products and services; changes in technology and changes in laws and regulations; our ability to secure and maintain strategic relationships; risks pertaining to permits and licensing, intellectual property infringement risks, risks relating to future clinical trials, regulatory approvals, safety and efficacy of our products, the use of our product, intellectual property protection and the other risk factors disclosed in our filings with the Securities and Exchange Commission. Readers are cautioned that this list of risk factors should not be construed as exhaustive.

The forward-looking information contained in this news release is expressly qualified by this cautionary statement. We undertake no duty to update any of the forward-looking information to conform such information to actual results or to changes in our expectations except as otherwise required by applicable securities legislation. Readers are cautioned not to place undue reliance on forward-looking information.

## **Zomedica Pharmaceuticals Corp. Announces Pricing of \$3 Million Underwritten Public Offering of Common Shares**

ANN ARBOR, Mich., March 26, 2019 (GLOBE NEWSWIRE) -- Zomedica Pharmaceuticals Corp. (NYSE American: ZOM) (TSX-V: ZOM) ("Zomedica" or the "Company"), a veterinary diagnostic and pharmaceutical company, today announced the pricing of its previously announced underwritten public offering of 6,521,740 common shares, at a price to the public of \$0.46 per share. The Company expects to receive gross proceeds of approximately \$3 million from the offering. The offering is expected to close on or about March 28, 2019, subject to customary closing conditions.

H.C. Wainwright & Co. is acting as sole book-running manager for the offering.

The Company has granted the underwriters a 30-day option to purchase up to an additional 978,261 common shares at the public offering price, less underwriting discounts and commissions.

The Company intends to use the net proceeds from the offering for the continued development of its diagnostic platform and therapeutic candidates, including making milestone payments, as they come due, under the Company's existing license and collaboration agreements, and other general corporate and working capital purposes.

The shares described above are being offered pursuant to a shelf registration statement on Form S-3 (File No. 333-228926), which was declared effective by the Securities and Exchange Commission ("SEC") on January 30, 2019. A preliminary prospectus supplement and an accompanying prospectus relating to the offering has been filed with the SEC and is available on the SEC's website at [www.sec.gov](http://www.sec.gov). Copies of the final prospectus supplement and the accompanying prospectus relating to the offering may be obtained, when available, from H.C. Wainwright & Co., LLC, 430 Park Avenue, 3rd Floor, New York, NY 10022, or by calling (646) 975-6996 or by emailing [placements@hcwco.com](mailto:placements@hcwco.com) or at the SEC's website at <http://www.sec.gov>.

This press release shall not constitute an offer to sell or the solicitation of an offer to buy any of the Company's securities, nor shall there be any sale of these securities in any state or other jurisdiction in which such offer, solicitation or sale would be unlawful prior to registration or qualification under the securities laws of any such state or jurisdiction.

### **About Zomedica**

Based in Ann Arbor, Michigan, Zomedica (NYSE American: ZOM) (TSX-V: ZOM) is a veterinary diagnostic and pharmaceutical company creating products for companion animals (canine, feline and equine) by focusing on the unmet needs of clinical veterinarians. Zomedica's product portfolio will include novel diagnostics and innovative therapeutics that emphasize patient health and practice health. With a team that includes clinical veterinary professionals, it is Zomedica's mission to give veterinarians the opportunity to lower costs, increase productivity, and grow revenue while better serving the animals in their care.

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Forward-looking information is based on the opinions and estimates of management at the date the statements are made, and are subject to a variety of risks and uncertainties and other factors that could cause actual events or results to differ materially from those anticipated in the forward-looking information. Some of the risks and other factors that could cause the results to differ materially from those expressed in the forward-looking information include, but are not limited to: market and other conditions, the satisfaction of customary closing conditions related to the offering described above, uncertainty as to whether our strategies and business plans will yield the expected benefits; uncertainty as to the timing and results of development work and pilot and pivotal studies, uncertainty as to the likelihood and timing of regulatory approvals, availability and cost of capital; the ability to identify and develop and achieve commercial success for new products and technologies; the level of expenditures necessary to maintain and improve the quality of products and services; changes in technology and changes in laws and regulations; our ability to secure and maintain strategic relationships; risks pertaining to permits and licensing, intellectual property infringement risks, risks relating to future clinical trials, regulatory approvals, safety and efficacy of our products, the use of our product, intellectual property protection and the other risk factors disclosed in our filings with the Securities and Exchange Commission. Readers are cautioned that this list of risk factors should not be construed as exhaustive.

The forward-looking information contained in this news release is expressly qualified by this cautionary statement. We undertake no duty to update any of the forward-looking information to conform such information to actual results or to changes in our expectations except as otherwise required by applicable securities legislation. Readers are cautioned not to place undue reliance on forward-looking information.