

AGENCY AGREEMENT

October 31, 2019

Titan Medical Inc.
170 University Avenue, Suite 1000
Toronto, Ontario M5H 3B3

Attention: David J. McNally, President and Chief Executive Officer

Dear Sir:

Bloom Burton Securities Inc. (the “**Agent**”) understands that Titan Medical Inc. (the “**Corporation**”) proposes to issue and sell a minimum of 33,333,333 units of the Corporation (the “**Offered Units**”) and up to a maximum of 55,555,556 Offered Units at a price of US \$0.45 per Offered Unit (the “**Offering Price**”) for aggregate gross proceeds of a minimum of US \$15,000,000 (the “**Minimum Offering**”) up to a maximum of US \$25,000,000 (the “**Maximum Offering**”). Each Offered Unit shall consist of (i) one Common Share (as defined herein) (a “**Unit Share**”) and (ii) one Common Share purchase warrant (a “**Warrant**”). Each Warrant shall be issued pursuant to and subject to the terms of the Warrant Indenture (as defined herein). Each Warrant shall entitle the holder thereof to purchase one Common Share (a “**Warrant Share**”) at an exercise price of US \$0.55 per Warrant Share, subject to adjustment, at any time until 5:00 p.m. (Toronto time) on the date that is 60 months after the Initial Closing Date (as defined herein), provided that in the event of an issuance of Common Shares, securities convertible into Common Shares or certain other issuances at a price below the then existing exercise price, the exercise price shall be adjusted to equal to the price at which such securities are issued, subject to a floor of US \$0.50 per share, all as shall be provided in the Warrant Indenture. The offering of the Offered Units by the Corporation is hereinafter referred to as the “**Offering**”.

The Corporation wishes to appoint the Agent to act as its sole and exclusive agent, and to effect the sale of the Offered Units on a best efforts basis. The Agent shall be entitled to appoint a soliciting dealer group consisting of other registered dealers acceptable to the Corporation (each, a “**Selling Firm**”) for the purpose of arranging for purchases of the Offered Units. With respect to the offer or sale of any Offered Units in the United States or to, or for the account or benefit of, U.S. Persons (as defined herein), the parties to this Agreement (as defined herein) acknowledge and agree that the Agent may appoint duly registered U.S. broker-dealers (each such Selling Firm, a “**U.S. Selling Group Member**”) to act as sub-agents to conduct offers and sales of the Offered Units in the United States or to, or for the account or benefit of, persons in the United States or U.S. Persons.

The Corporation has granted the Agent an option (the “**Over-Allotment Option**”), exercisable in whole or in part at any time and from time to time until that date which is 30 days following the Initial Closing Date (as herein defined) (the “**Over-Allotment Expiry Date**”), to offer for sale such number of additional Units (the “**Over-Allotment Units**”) and/or Warrants (the “**Over-Allotment Warrants**”) and together with the Over-Allotment Units, the “**Over-Allotment Securities**”) as is equal to 15% of the number of Units issued under the Offering, solely to cover over-allotments, if any, and for market stabilization purposes. The Over-Allotment Option may be exercised by the Agent in respect of: (i) Over-Allotment Units at the Offering Price; (ii) Over-Allotment Warrants at a price of US \$0.36 per Over-Allotment Warrant; or (iii) any combination of Over-Allotment Units and/or Over-Allotment Warrants, provided that the aggregate number of Over-Allotment Securities does not exceed 15% of the number of Units issued under the Offering (excluding any Over-Allotment Securities). The Offered Units and the Over-Allotment Securities are sometimes collectively referred to herein as the “**Qualified Securities**”. The Common Shares that are

included in the Over-Allotment Units are referred to herein as the “**Over-Allotment Shares**” and the Common Shares issuable upon exercise of the Over-Allotment Warrants (including Warrants issuable as part of the Over-Allotment Units) are referred to herein as the “**Over-Allotment Warrant Shares**”.

In consideration of the Agent’s services hereunder, the Corporation agrees to pay to the Agent on each Closing Date a fee (the “**Agency Fee**”) equal to 7.0% of the gross proceeds realized by the Corporation in respect of the sale of the Offered Units on such Closing Date (or US \$0.0315 per Unit) including any proceeds raised through the sale of Over-Allotment Securities pursuant to the exercise of the Over-Allotment Option. As additional consideration for its services performed under this Agreement, the Corporation shall issue to the Agent, on each Closing Date (in such name or names as the Agent may direct in writing) compensation warrants (the “**Compensation Warrants**”) exercisable to acquire that number of Common Shares (the “**Compensation Shares**”) as is equal to 7.0% of the Qualified Securities sold under the Offering on such Closing Date. Each Compensation Warrant shall be exercisable, in whole or in part, at an exercise price per Compensation Share equal to the Offering Price, subject to adjustment, at any time before 5:00 p.m. (Toronto time) on the date that is 24 months following the Initial Closing Date.

The obligation of the Corporation to pay the Agency Fee and to issue the Compensation Warrants shall arise at the Closing Time (as defined herein) against payment for the Units and the Agency Fee and Compensation Warrants shall be fully earned by the Agent at such time.

The completion of the Offering may occur in one or more separate closings on one or more dates (each, a “**Closing Date**”) as the Corporation and the Agent may agree. Provided that the Minimum Offering is subscribed for, it is expected that the first Closing Date will occur on the Initial Closing Date.

If subscriptions for the Minimum Offering have not been received within 10 days following the date of the Final Receipt (as defined herein), the Offering will not continue and the subscription proceeds will be returned to subscribers, without interest or deduction. In any event, the total period of the distribution will not end more than 45 days from the date of the Final Receipt. Should a Closing occur in respect of the Minimum Offering, one or more additional Closings, if necessary, may occur until the earlier of the Maximum Offering being subscribed and the expiry of the 45-day period.

It is understood that the Offered Units will be offered to Purchasers (as defined herein) resident in: (i) each of the provinces of British Columbia, Alberta and Ontario and such other jurisdictions in Canada as mutually agreed upon by the Corporation and the Agent (collectively, the “**Canadian Selling Jurisdictions**”); (ii) the United States (as defined herein) in a public offering registered on Form F-10; and (iii) jurisdictions other than the Canadian Selling Jurisdictions and the United States as may mutually be agreed to by the Corporation and the Agent (collectively with the Canadian Selling Jurisdictions and the United States, the “**Selling Jurisdictions**”), on a private placement basis, provided that the Corporation is not required to file a prospectus, registration statement or other disclosure document or become subject to continuing obligations in such other jurisdictions, in each case in accordance with the provisions of this Agreement.

DEFINITIONS

Unless expressly provided otherwise, where used in this Agreement, the following terms shall have the following meanings:

“**affiliate**”, “**associate**”, “**material change**”, “**material fact**” and “**misrepresentation**” shall have the respective meanings ascribed thereto under Applicable Securities Laws of the Canadian Selling Jurisdictions;

“**Agency Fee**” has the meaning ascribed thereto in the fourth paragraph of this Agreement;

“**Agent**” has the meaning ascribed thereto in the first paragraph of this Agreement;

“**Agreement**” means the agreement resulting from the acceptance by the Corporation of the offer made hereby;

“**Annual Financial Statements**” means the audited financial statements of the Corporation as at and for its fiscal years ended December 31, 2018 and 2017;

“**Applicable IP Laws**” means, with respect to a specific Intellectual Property, all applicable federal, provincial, state and local laws and regulations applicable to that Intellectual Property in the countries where rights in such Intellectual Property arise, the countries including, but not limited to, China, Canada, the United States, those of the European Union and the jurisdictions in which the Corporation has registered Intellectual Property;

“**Applicable Laws**” means all applicable federal, provincial, state and local laws and regulations of authorities having jurisdiction over the Corporation or the Agent, as applicable;

“**Applicable Securities Laws**” means, collectively, the applicable securities laws of the Selling Jurisdictions, the regulations, rules, rulings and orders made thereunder, the applicable published policy statements issued by the applicable securities commissions thereunder, and the rules and policies of the Exchanges;

“**Applied for Corporation IP**” means all Corporation IP that is the subject of an application with a national intellectual property office (including the CIPO and the USPTO);

“**Aspire Agreement**” means the Common Share Purchase Agreement dated August 29, 2019, between the Corporation and Aspire Capital Fund, LLC;

“**Business Day**” means a day which is not a Saturday, Sunday or statutory or civic holiday in the City of Toronto, Ontario;

“**Canadian Securities Regulators**” means, collectively, the applicable securities commission or securities regulatory authority in each of the Canadian Selling Jurisdictions;

“**Canadian Selling Jurisdictions**” has the meaning ascribed thereto in the eighth paragraph of this Agreement;

“**CDS**” means CDS Clearing and Depository Services Inc.;

“**CIPO**” means the Canadian Intellectual Property Office;

“**Claims**” has the meaning ascribed thereto in Section 13;

“**Closing**” means the Initial Closing or any Subsequent Closing, as the case may be;

“**Closing Date**” has the meaning ascribed thereto in the sixth paragraph of this Agreement;

“**Closing Time**” means 8:00 a.m. (Toronto time) on the Closing Date or such other time on the Closing Date as the Corporation and the Agent may agree;

“**Common Shares**” means the common shares in the capital of the Corporation, which the Corporation is authorized to issue, as constituted on the date hereof;

“**comparables**” has the meaning ascribed thereto in NI 41-101;

“**Compensation Warrants**” has the meaning ascribed thereto in the third paragraph of this Agreement;

“**Compensation Shares**” has the meaning ascribed thereto in the third paragraph of this Agreement;

“**Compensation Warrant Certificates**” means the certificates representing the Compensation Warrants;

“**Corporation**” has the meaning ascribed thereto in the first paragraph of this Agreement;

“**Corporation’s Auditors**” means BDO Canada LLP, Chartered Accountants;

“**Corporation IP**” means the Intellectual Property identified in Schedule “B” and Schedule “C” to this Agreement;

“**Disclosure Record**” means all information contained in any press releases, material change reports, financial statements, prospectuses, annual and quarterly reports or other document of the Corporation which has been publicly filed on SEDAR by, or on behalf of, the Corporation pursuant to Applicable Securities Laws of the Canadian Selling Jurisdictions;

“**Distribution**” means “distribution” or “distribution to the public” as those terms are defined under Applicable Securities Laws of the Canadian Selling Jurisdictions and the United States;

“**Documents Incorporated by Reference**” means all financial statements, management’s discussion and analysis, management information circulars, annual information forms, material change reports or other documents issued by the Corporation, whether before or after the date of this Agreement, that are required by NI 44-101 to be incorporated by reference into the Prospectus or any Prospectus Amendment;

“**Due Diligence Session**” has the meaning ascribed thereto in subsection 6(c);

“**EDGAR**” means the system for Electronic Data Gathering, Analysis and Retrieval maintained by the SEC;

“**Effective Notice**” means notification from the SEC that the Final Prospectus is effective;

“**Eligible Issuer**” means an issuer that meets the criteria and has complied with the requirements of NI 44-101 so as to allow it to offer its securities using a short form prospectus;

“**Engagement Letter**” means the engagement letter dated September 18, 2019 between the Corporation and the Agent relating to the Offering;

“**Environmental Laws**” has the meaning ascribed thereto in subsection 7(jj);

“**Exchanges**” means, collectively, the TSX and NASDAQ;

“**FDA**” means the U.S. Food and Drug Administration of the U.S. Department of Health & Human Services;

“**Final Prospectus**” means, as applicable, (i) the (final) short form prospectus of the Corporation, including all of the Documents Incorporated by Reference, to be dated on or about the date hereof relating to the

Distribution of the Offered Units and for which a receipt will have been issued by the Ontario Securities Commission, as principal regulator, the British Columbia Securities Commission and the Alberta Securities Commission pursuant to the Passport System and/or (ii) the corresponding final prospectus (with such deletions therefrom and additions thereto as are permitted or required by Form F-10 and the applicable rules and regulations of the SEC) filed by the Corporation with the SEC as a pre-effective amendment to the Corporation's registration statement on Form F-10;

"Final Receipt" means a receipt or deemed receipt for the Final Prospectus issued by the Canadian Securities Regulators;

"Financial Statements" means the Annual Financial Statements and the Interim Financial Statements;

"Form F-10" means the registration statement filed with the SEC on Form F-10 (No. 333-230072) in respect of the Offered Units;

"Indemnified Party" or **"Indemnified Parties"** has the meaning ascribed thereto in Section 13;

"Initial Closing" means the completion of the initial issue and sale by the Corporation of the Offered Units pursuant to this Agreement;

"Initial Closing Date" means November 6, 2019 or such other date as may be agreed upon between the Corporation and the Agent for the Initial Closing that is not later than 45 days after the Final Receipt is issued;

"Institutional Accredited Investor" means an institutional "accredited investor" within the meaning of Rule 501(a)(1), (2), (3) or (7) of Regulation D under the U.S. Securities Act;

"Intellectual Property" means all copyrights, patents, patent rights, industrial designs, know-how (including trade secrets and other unpatented or unpatentable proprietary or confidential information, systems or procedures);

"Interim Financial Statements" means the unaudited interim financial statements of the Corporation for the six month period ended June 30, 2019;

"knowledge" means, as it pertains to the Corporation, the actual knowledge, after due inquiry, of the President and Chief Executive Officer, the Chief Financial Officer and, in the case of matters relating to Corporation IP and Licensed IP, the employee of the Corporation that is the most responsible for directing such matters;

"Leased Premises" has the meaning ascribed thereto in subsection 7(mm);

"Licensed IP" means the Intellectual Property owned by any person other than the Corporation and to which the Corporation has a license which has not expired or been terminated;

"marketing materials" has the meaning ascribed thereto in NI 41-101;

"Material Adverse Effect" means any change, event, violation, inaccuracy, circumstance or effect that is materially adverse to the business, assets (including intangible assets), capitalization, financial condition or results of operations of the Corporation, whether or not arising in the ordinary course of business;

“**Material Agreement**” means any “material contract” required to be filed on SEDAR by the Corporation pursuant to NI 51-102;

“**Material Permits**” has the meaning ascribed thereto in subsection 7(rr);

“**Maximum Offering**” has the meaning ascribed thereto in the first paragraph of this Agreement;

“**MI 11-102**” means Multilateral Instrument 11-102 – *Passport System*;

“**Minimum Offering**” has the meaning ascribed thereto in the first paragraph of this Agreement;

“**NASDAQ**” means the NASDAQ Capital Market;

“**NI 41-101**” means National Instrument 41-101 – *General Prospectus Requirements*;

“**NI 44-101**” means National Instrument 44-101 – *Short Form Prospectus Distributions*;

“**NI 51-102**” means National Instrument 51-102 – *Continuous Disclosure Obligations*;

“**NP 11-202**” means National Policy 11-202 – *Process for Prospectus Reviews in Multiple Jurisdictions*;

“**Notice**” has the meaning ascribed thereto in Section 18;

“**Offered Units**” has the meaning ascribed thereto in the first paragraph of this Agreement;

“**Offering**” has the meaning ascribed thereto in the first paragraph of this Agreement;

“**Offering Documents**” has the meaning ascribed to such term in subsection 5(a)(iii);

“**Offering Price**” has the meaning ascribed thereto in the first paragraph of this Agreement;

“**Over-Allotment Option**” has the meaning ascribed thereto in the third paragraph of this Agreement;

“**Over-Allotment Closing**” has the meaning ascribed thereto in Section 10;

“**Over-Allotment Closing Date**” means the date, which shall be a Business Day, as set out in the Over-Allotment Option Notice or such other date that the Corporation and the Agent may agree;

“**Over-Allotment Closing Time**” means 8:00 a.m. (Toronto time) on the Over-Allotment Closing Date or such other time on the Over-Allotment Closing Date as the Corporation and the Agent may agree;

“**Over-Allotment Expiry Date**” has the meaning ascribed thereto in the third paragraph of this Agreement;

“**Over-Allotment Option Notice**” has the meaning ascribed thereto in Section 10;

“**Over-Allotment Securities**” has the meaning ascribed thereto in the third paragraph of this Agreement;

“**Over-Allotment Shares**” has the meaning ascribed thereto in the third paragraph of this Agreement;

“**Over-Allotment Units**” has the meaning ascribed thereto in the third paragraph of this Agreement;

“**Over-Allotment Warrant Shares**” has the meaning ascribed thereto in the third paragraph of this Agreement;

“**Over-Allotment Warrants**” has the meaning ascribed thereto in the third paragraph of this Agreement;

“**Passport System**” means the system and process for prospectus reviews provided for under MI 11-102 and NP 11-202;

“**person**” shall be interpreted broadly and shall include any individual, corporation, partnership, joint venture, association, trust or other legal entity;

“**Preliminary Prospectus**” means (i) the preliminary short form prospectus of the Corporation, including all of the Documents Incorporated by Reference, dated September 23, 2019 relating to the Distribution of the Qualified Securities and for which a receipt has been issued by the Ontario Securities Commission, as principal regulator, and the Canadian Securities Regulators in the other Canadian Selling Jurisdictions pursuant to the Passport System and (ii) the corresponding preliminary short form prospectus (with such deletions therefrom and additions thereto as are permitted or required by Form F-10 and the applicable rules and regulations of the SEC) filed by the Corporation with the SEC on the Corporation’s registration statement on Form F-10;

“**Primary Trading Market**” means, for the purposes of subsection 6(k) hereof, the TSX, unless the volume of trading of the Common Stock on the TSX for the relevant 10 Trading Days period is less the volume of trading of the Common Stock on NASDAQ, then it means NASDAQ;

“**Prospectus**” means, as the context requires, the Preliminary Prospectus and/or the Final Prospectus, including any Prospectus Amendment;

“**Prospectus Amendment**” means any amendment or supplement to the Prospectus;

“**Purchasers**” means any persons who acquire Qualified Securities at the Closing Time or Over-Allotment Closing Time;

“**Qualified Securities**” has the meaning ascribed thereto in the third paragraph of this Agreement;

“**Registered Corporation IP**” means all Corporation IP that is the subject of a registration with a national intellectual property office (including the CIPO and the USPTO);

“**Regulatory Authority**” means the statutory or governmental bodies authorized under Applicable Laws to protect and promote public health through regulation and supervision of therapeutic drug candidates intended for use in humans, including the FDA and Health Canada and any other regulatory or governmental agency having jurisdiction over the Corporation or its activities;

“**SEC**” means the United States Securities and Exchange Commission;

“**Securities Regulators**” means the applicable securities regulatory authorities in the Selling Jurisdictions, including the Canadian Securities Regulators and the Exchanges;

“**SEDAR**” means the system for electronic document analysis and retrieval operated by the Canadian Securities Administrators;

“**Selling Firm**” has the meaning ascribed thereto in the second paragraph of this Agreement;

“**Selling Jurisdictions**” has the meaning ascribed thereto in the eighth paragraph of this Agreement;

“**SR&ED**” has the meaning ascribed thereto in subsection 7(k);

“**Standard Listing Conditions**” means the standard post-Closing conditions imposed by the TSX in the TSX Letter, which shall, for the avoidance of doubt, exclude any requirement for shareholder approval;

“**standard term sheet**” has the meaning ascribed thereto in NI 41-101;

“**Standstill Period**” has the meaning set out in subsection 6(k);

“**Subsequent Closing**” has the meaning set out in Section 8;

“**Subsequent Closing Date**” means such date as may be agreed upon between the Corporation and the Agent for the Subsequent Closing but in any event shall be not later than the date that is 45 days after the date of the Final Receipt;

“**Taxes**” has the meaning ascribed thereto in subsection 7(j);

“**template version**” has the meaning ascribed thereto in NI 41-101;

“**Trading Day**” means a day on which either the TSX or NASDAQ are open for trading;

“**Transfer Agent**” means Computershare Investor Services Inc.;

“**TSX**” means the Toronto Stock Exchange;

“**TSX Letter**” means the conditional approval letter dated October 31, 2019 issued by the TSX in respect of the Offering;

“**TSX Manual**” means the TSX Company Manual;

“**Unit Share**” has the meaning ascribed thereto in the first paragraph of this Agreement;

“**United States**” or “**U.S.**” means the United States of America, its territories and possessions, any state of the United States, and the District of Columbia;

“**USPTO**” means the United States Patent and Trademark Office;

“**U.S. Exchange Act**” means the United States Securities and Exchange Act of 1934, as amended;

“**U.S. Person**” means a “U.S. person” as such term is defined in Regulation S under the U.S. Securities Act;

“**U.S. Securities Act**” means the United States Securities Act of 1933, as amended;

“**U.S. Securities Laws**” means all applicable United States federal securities laws, including, without limitation, the U.S. Securities Act, the U.S. Exchange Act and the rules and regulations promulgated thereunder;

“**U.S. Selling Group Member**” has the meaning ascribed thereto in the second paragraph of this Agreement;

“**VWAP**” means the volume weighted average trading price of the Common Shares, calculated by dividing the total value by the volume of Common Shares traded on the Primary Trading Market for the 10 Trading Days immediately preceding the date of the calculation;

“**VWAP Threshold**” means, at any given time before the end of the Standstill Period, a VWAP of (i) \$0.7896, if the applicable Primary Trading Market is the TSX, or (ii) US \$0.60, if the applicable Primary Trading Market is NASDAQ; which, in any case, shall be automatically adjusted to reflect the impacts of any reorganization, recapitalization, reclassification, stock dividend, stock split, stock consolidation, or other similar transaction effective before the end of the Standstill Period;

“**Warrant**” has the meaning ascribed thereto in the first paragraph of this Agreement;

“**Warrant Certificates**” means the certificates representing the Warrants substantially in the form set out in the Warrant Indenture;

“**Warrant Indenture**” means the warrant indenture between the Corporation and Computershare Trust Company of Canada, in its capacity as warrant agent, governing the Warrants and the Over-Allotment Warrants; and

“**Warrant Share**” has the meaning ascribed thereto in the first paragraph of this Agreement.

The following are the schedules attached to this Agreement, which schedules are deemed to be a part hereof and are hereby incorporated by reference herein:

Schedule “A”	-	Convertible Securities
Schedule “B”	-	Corporation IP
Schedule “C”	-	Licensor Contracts

TERMS AND CONDITIONS

1. Nature of the Transaction

Based upon the foregoing and subject to the terms and conditions set out below, the Corporation hereby appoints the Agent to act as its sole and exclusive agent, and the Agent hereby accepts such appointment, to effect the sale of the Offered Units for an aggregate purchase price of a minimum amount equal to the Minimum Offering up to a maximum amount equal to the Maximum Offering, on a best efforts basis to persons resident in the Selling Jurisdictions. The Agent agrees to use its best efforts to sell the Offered Units, but it is hereby understood and agreed that the Agent shall act as agent only and is under no obligation to purchase any of the Offered Units, although the Agent may subscribe for the Offered Units if it so desires. The Offering will be subject to subscriptions being received for the Minimum Offering. All funds received by the Agent will be held in trust until the Minimum Offering has been attained. Notwithstanding any other term of this Agreement, all subscription funds received by the Agent will be returned to the Purchasers if the Minimum Offering is not attained by the Closing Time.

During the Distribution of the Qualified Securities, the Corporation and Agent shall approve in writing (prior to such time that marketing materials are provided to potential investors) any marketing materials reasonably requested to be provided by the Agent to any potential investor, such marketing materials to comply with Applicable Securities Laws of the Canadian Selling Jurisdictions and the United States. The Agent shall provide a copy of any marketing materials used in connection with the Offering, to the Corporation in accordance with this Section 1. The Corporation shall file a template version and any revised template version of such marketing materials with the Canadian Securities Regulators and the SEC as soon

as reasonably practicable after such marketing materials are so approved in writing by the Corporation and the Agent, and in any event on or before the day the marketing materials are first provided to any potential investor, and such filing shall constitute the Agent's authority to use such marketing materials in connection with the Offering. Any comparables shall be redacted from the template version in accordance with NI 44-101 prior to filing such template version with the Canadian Securities Regulators and a complete template version containing such comparables and any disclosure relating to the comparables, if any, shall be delivered to the Canadian Securities Regulators by the Corporation.

The Corporation and the Agent, on a several basis, covenant and agree:

- (a) not to provide any potential investor with any marketing materials unless a template version of such marketing materials has been filed by the Corporation with the Canadian Securities Regulators and, if required by U.S. Securities Laws, the SEC, on or before the day such marketing materials are first provided to any potential investor;
- (b) not to provide any potential investor with any materials or information in relation to the Distribution of the Qualified Securities or the Corporation other than: (i) such marketing materials that have been approved and filed in accordance with this Section 1; (ii) the Prospectus and any Prospectus Amendments; and (iii) any standard term sheets approved in writing by the Corporation and the Agent; and
- (c) that any marketing materials approved and filed in accordance with this Section 1 and any standard term sheets approved in writing by the Corporation and the Agent shall only be provided to potential investors in the Selling Jurisdictions where the provision of such marketing materials or standard term sheets does not contravene Applicable Securities Laws.

2. Final Prospectus

- (a) The Corporation shall, as soon as reasonably practicable following the execution of this Agreement, use its commercially reasonable efforts to: (i) prepare and file the Final Prospectus in each of the Canadian Selling Jurisdictions and with the SEC; (ii) obtain, pursuant to the Passport System, the Final Receipt; and (iii) take all other steps and proceedings that may be necessary to be taken by the Corporation in order to: (A) qualify the Qualified Securities for Distribution in each of the Canadian Selling Jurisdictions under Applicable Securities Laws; and (B) qualify the grant of the Compensation Warrants in each of the Canadian Selling Jurisdictions under Applicable Securities Laws, on or before 5:00 p.m. (Toronto time) on the date hereof or such later date as the Corporation and the Agent may agree.
- (b) The Corporation shall, as soon as possible following receipt by the Corporation of the Final Receipt, use its commercially reasonable efforts to: (i) obtain the Effective Notice from the SEC; and (ii) take all other steps and proceedings that may be necessary to be taken by the Corporation in order to: (A) qualify the Qualified Securities for Distribution in the United States under U.S. Securities Laws and (B) qualify the Compensation Warrants in the United States under U.S. Securities Laws.
- (c) Until the date on which the Distribution of the Qualified Securities is completed, the Corporation will use commercially reasonable efforts to promptly take, or cause to be taken, all additional steps and proceedings that may from time to time be required or desirable under Applicable Securities Laws of the Canadian Selling Jurisdictions and the

United States under the U.S. Securities Act to continue to qualify the Distribution of the Qualified Securities and the Compensation Warrants, or, in the event that the Qualified Securities and the Compensation Warrants have, for any reason, ceased to so qualify, to so qualify again the Qualified Securities and the Compensation Warrants for Distribution in such Selling Jurisdictions.

3. Covenants and Representations of the Agent

- (a) The Agent has complied and will comply, and shall require any other Selling Firm with which the Agent has a contractual relationship in respect of the Distribution of the Qualified Securities (including, for the avoidance of doubt, the U.S. Selling Group Members) to comply, with Applicable Securities Laws in connection with the Distribution of the Qualified Securities, shall ensure that each Selling Firm agrees to comply with the covenants and obligations given by the Agent herein, to the extent applicable, and shall offer the Qualified Securities for sale to the public in the Selling Jurisdictions directly and through Selling Firms upon the terms and conditions set out in the Prospectus and this Agreement. The Agent agrees to obtain such an agreement of each Selling Firm. The Agent has offered and will offer, and shall require any Selling Firm to offer, for sale to the public and sell the Qualified Securities only in those jurisdictions where they may be lawfully offered for sale or sold.
- (b) The Agent shall, and shall require any Selling Firm to agree to, distribute the Qualified Securities in a manner which complies with and observes all Applicable Laws in each jurisdiction into and from which they may offer to sell Qualified Securities or distribute the Prospectus or any Prospectus Amendment in connection with the Distribution of the Qualified Securities and will not, directly or indirectly, offer, sell or deliver any Qualified Securities or deliver the Prospectus or any Prospectus Amendment to any person in any jurisdiction other than in the Canadian Selling Jurisdictions and the United States except in a manner which will not require the Corporation to comply with the registration, prospectus, filing or other similar requirements under the Applicable Laws relating to securities of such other jurisdictions.
- (c) The Agent shall use all reasonable efforts to complete the Distribution of the Qualified Securities pursuant to the Prospectus as early as practicable and the Agent shall advise the Corporation in writing when, in the opinion of the Agent, the Agent has completed the Distribution of the Qualified Securities and within 25 days of the last Closing Date provide a breakdown of the number of Qualified Securities distributed and proceeds received in each of the Canadian Selling Jurisdictions where such breakdown is required for the purpose of calculating fees payable to the Canadian Securities Regulators.
- (d) The Agent shall deliver a copy of the Prospectus and any Prospectus Amendment to each Purchaser.
- (e) The Agent represents and warrants to the Corporation and acknowledges that the Corporation is relying upon such representations and warranties in entering into this Agreement that:
 - (i) it is a valid and subsisting corporation, duly incorporated and in good standing under the laws of the jurisdiction in which it was incorporated;

- (ii) it holds all licenses and permits that are required for carrying on its business in the manner in which such business has been carried on;
 - (iii) it has good and sufficient right and authority to enter into this Agreement and complete the transactions contemplated under this Agreement on the terms and conditions set forth herein;
 - (iv) all information reasonably requested by the Agent and its counsel in connection with the due diligence investigations of the Agent will be treated by the Agent and its counsel as confidential and will only be used in connection with the Offering;
 - (v) it is an appropriately registered investment dealer under provincial securities laws, rules and regulations of the Canadian Selling Jurisdictions so as to permit it to lawfully fulfil its obligations hereunder;
 - (vi) it and each Selling Firm that is not registered as a broker-dealer under Section 15 of the U.S. Exchange Act will not offer or sell any of the Qualified Securities in the United States or to, or for the account or benefit of, U.S. Persons other than through a U.S. Selling Group Member or otherwise in compliance with Rule 15a-6 under the U.S. Exchange Act; and
 - (vii) all offers and sales of the Qualified Securities in the United States or to, or for the account or benefit of, U.S. Persons will be effected by a U.S. Selling Group Member in accordance with all applicable U.S. federal and state broker-dealer requirements. Such U.S. Selling Group Member is, and will be on the date of each offer or sale of the Qualified Securities in the United States, duly registered as a broker-dealer pursuant to Section 15(b) of the U.S. Exchange Act and the securities laws of each state in which such offer or sale is made (unless exempted from the respective states' broker-dealer registration requirements) and a member of and in good standing with the Financial Industry Regulatory Authority, Inc.
- (f) The representations and warranties of the Agent contained in this Agreement shall be true at the Closing Time and Over-Allotment Closing Time and they shall survive the completion of the transactions contemplated under this Agreement until the third anniversary of the last Closing Date.

For the purposes of this Section 3, the Agent shall be entitled to assume that the Qualified Securities are qualified for Distribution in any Canadian Selling Jurisdiction where the Final Receipt shall have been obtained pursuant to the Passport System following the filing of the Final Prospectus. The Agent shall be entitled to assume that the Qualified Securities are qualified for Distribution in the United States where an Effective Notice shall have been obtained from the SEC.

The Corporation understands and agrees that the Agent may arrange for Purchasers in jurisdictions other than Canada and the United States, on a private placement basis and provided that the purchase of such Qualified Securities does not contravene the Applicable Securities Laws of the jurisdiction where the Purchaser is resident and provided that such sale does not trigger: (i) any obligation to prepare and file a prospectus, registration statement or similar disclosure document; or (ii) any registration or other obligation on the part of the Corporation including, but not limited to, any continuing obligation in that jurisdiction.

4. Deliveries

- (a) The Corporation shall deliver, or cause to be delivered to the Agent, without charge:
- (i) on the date hereof, a copy of the Preliminary Prospectus and the Final Prospectus, each signed and certified as required by Applicable Securities Laws;
 - (ii) contemporaneously with the filing of the Final Prospectus, a copy of any other document required to be filed or that is otherwise delivered by the Corporation in respect of the Offering under the laws of each of the Selling Jurisdictions in compliance with Applicable Securities Laws, to the extent not available on SEDAR or EDGAR;
 - (iii) prior to the filing of the Final Prospectus, copies of correspondence indicating that the application for the listing and posting for trading on the TSX of the Unit Shares, Warrant Shares, Over-Allotment Shares, Over-Allotment Warrant Shares and Compensation Shares have been approved for listing subject only to satisfaction by the Corporation of the Standard Listing Conditions;
 - (iv) contemporaneously with, prior to, or as soon as reasonably practicable after the filing of the Final Prospectus but in any event prior to the Initial Closing Date, copies of the correspondence indicating that the NASDAQ has been properly notified of the listing of the Unit Shares, Warrant Shares, Over-Allotment Shares, Over-Allotment Warrant Shares and Compensation Shares on the NASDAQ;
 - (v) contemporaneously with, or prior to, the filing of the Final Prospectus, a “long form” comfort letter dated the date of the Final Prospectus, in form and substance satisfactory to the Agent, addressed to the Agent from the Corporation’s Auditors with respect to financial and accounting information relating to the Corporation contained in the Final Prospectus, which letter shall be based on a review by the Corporation’s Auditors within a cut-off date of not more than two Business Days prior to the date of the letter, which letter shall be in addition to the Corporation’s Auditors consent letter addressed to the Canadian Securities Regulators; and
 - (vi) prior to the filing of any Prospectus Amendment with the Securities Regulators and/or the SEC, a copy of such Prospectus Amendment signed and certified as required by Applicable Securities Laws of the Canadian Selling Jurisdictions. Concurrently with the delivery of any Prospectus Amendment, the Corporation shall deliver to the Agent and the Agent’s counsel, with respect to such Prospectus Amendment, opinions, comfort letters and such other documentation substantially equivalent or similar to those referred to in this Section 4, as appropriate or reasonably requested by the Agent in the circumstances.
- (b) Delivery of the Prospectus and any Prospectus Amendment shall constitute a representation and warranty by the Corporation to the Agent that, as at the date of the Prospectus or Prospectus Amendment, as the case may be: (i) all information and statements (except information and statements relating solely to the Agent and provided by the Agent in writing) contained in the Prospectus and any Prospectus Amendments are true and correct in all material respects and contain no misrepresentation and constitute full, true and plain disclosure of all material facts relating to the Corporation and the Qualified Securities; (ii) no material fact or information has been omitted from such disclosure (except facts or

information relating solely to the Agent and provided by the Agent in writing) which is required to be stated in such disclosure or is necessary to make the statements or information contained in such disclosure not misleading in light of the circumstances under which they were made; (iii) such documents comply in all material respects with the requirements of the Applicable Securities Laws of the Canadian Selling Jurisdictions and the U.S. Securities Act, and have been filed (and a receipt or notice of effectiveness of such filing will be obtained, if required) in each of the Canadian Selling Jurisdictions and the United States, as applicable; and (iv) except as set forth or contemplated in the Prospectus or any Prospectus Amendment, there has been no material change (actual, anticipated, contemplated, proposed or threatened) in the business, affairs, business prospects, operations, assets, liabilities (contingent or otherwise), capital or ownership of the Corporation since the end of the period covered by the Financial Statements. Such deliveries shall also constitute the Corporation's consent to the use by the Agent and any Selling Firm of the Prospectus and any Prospectus Amendment in connection with the Distribution of the Qualified Securities in the Selling Jurisdictions in compliance with this Agreement and Applicable Securities Laws.

- (c) The Corporation shall cause commercial copies of the Final Prospectus and any Prospectus Amendment to be delivered to the Agent without charge, in such numbers and in such cities as the Agent may reasonably request. Such delivery shall be effected as soon as possible after obtaining the Final Receipt and, in any event, no later than 5:00 p.m. (Toronto time) on November 1, 2019 in respect of the Final Prospectus and 5:00 p.m. (Toronto time) on November 1, 2019 in respect of the Form F-10 or such other date and time as may be agreed upon by the Agent and the Corporation. The Corporation shall similarly cause to be delivered commercial copies of any Prospectus Amendment.

5. Material Change During Distribution

- (a) During the Distribution of the Qualified Securities, the Corporation shall promptly notify the Agent in writing of:
 - (i) any material change (actual, anticipated, contemplated, proposed or threatened) in the business, affairs, business prospects, operations, assets, liabilities (contingent or otherwise), capital or ownership of the Corporation;
 - (ii) any material fact which has arisen or has been discovered and would have been required to have been stated in the Prospectus had the fact arisen or been discovered on, or prior to, the date of the Prospectus; and
 - (iii) any change in any material fact or matter covered by a statement contained in the Prospectus or any Prospectus Amendment (collectively, the "**Offering Documents**") which change is, or may be, of such a nature as to render any of the Offering Documents misleading or untrue or which would result in a misrepresentation in any of the Offering Documents or which would result in the Prospectus or any Prospectus Amendment not complying with the Applicable Securities Laws or other laws of any Canadian Selling Jurisdiction or the SEC.
- (b) The Corporation will comply with Section 57 of the *Securities Act* (Ontario) and with the comparable provisions of other Applicable Securities Laws in the Canadian Selling Jurisdictions, and the Corporation will prepare and will file any Prospectus Amendment, which, in the opinion of the Agent and its counsel, acting reasonably, may be necessary to

continue to qualify the Qualified Securities for Distribution in each of the Canadian Selling Jurisdictions and the United States.

- (c) In addition to the provisions of subsections 5(a) and 5(b), the Corporation shall, in good faith, discuss with the Agent any fact or change in circumstances (actual, anticipated, contemplated, proposed or threatened, financial or otherwise) which is of such a nature that there is reasonable doubt whether written notice need be given under this section and shall consult with the Agent with respect to the form and content of any amendment or other Prospectus Amendment proposed to be filed by the Corporation, it being understood and agreed that no such amendment or other Prospectus Amendment shall be filed with any Securities Regulator prior to the review thereof by the Agent and its counsel, acting reasonably.

6. Covenants of the Corporation

The Corporation hereby covenants to the Agent that the Corporation:

- (a) shall advise the Agent, promptly after receiving notice thereof, of the time when the Final Prospectus and any Prospectus Amendment has been filed with the Canadian Securities Regulators and the SEC, and receipts for the filings with the Canadian Securities Regulators have been obtained pursuant to the Passport System and will provide evidence reasonably satisfactory to the Agent of each such filing and copies of such receipts;
- (b) shall advise the Agent promptly after receiving the Effective Notice and shall provide evidence thereof;
- (c) shall prior to the Closing Time and the Over-Allotment Closing Time, allow the Agent (and its counsel and consultants) to conduct all due diligence which the Agent may reasonably require or consider necessary or appropriate in order to fulfill the Agent's obligations as registrants to complete the Offering as provided herein. The Corporation will provide to the Agent (and its counsel and consultants) reasonable access to the Corporation's properties (if any), senior management personnel and corporate, financial and other records, for the purposes of conducting such due diligence. Without limiting the scope of the due diligence inquiry the Agent (or its counsel and consultants) may conduct, the Corporation shall also make available its directors, senior management and counsel to answer any questions which the Agent may have and to participate in one or more due diligence sessions to be held prior to each Closing and Over-Allotment Closing (collectively, the "**Due Diligence Session**"). The Agent shall distribute a list of written questions in advance of each Due Diligence Session;
- (d) shall forthwith advise the Agent of, and provide the Agent with copies of, any written communications relating to:
 - (i) the issuance by any securities regulatory authority, including the Exchanges, of any order suspending or preventing the use of the Prospectus or any Prospectus Amendment or any cease trading or stop order or any halt in trading relating to the Common Shares or the institution or threat of any proceedings for that purpose; and

- (ii) the receipt of any material communication from any securities regulatory authority, including the Exchanges or other authority relating to the Prospectus or any Prospectus Amendment or the Offering;
- (e) shall use its commercially reasonable efforts to prevent the issuance of any order referred to in (d)(i) above and, if issued, shall forthwith take all reasonable steps which it is able to take and which may be necessary or desirable in order to obtain the withdrawal thereof as soon as is reasonably practicable;
- (f) shall use its commercially reasonable efforts to maintain its status as a “reporting issuer” (or the equivalent thereof) not in default of the requirements of the Applicable Securities Laws of each of the Canadian Selling Jurisdictions and the United States for as long as any Warrants remain outstanding, other than in a business combination or similar transaction where all the outstanding securities of the Corporation have been exchanged for cash or the securities of another issuer which is a reporting issuer under any Applicable Securities Laws;
- (g) shall use its commercially reasonable efforts to maintain the listing of the Common Shares on the Exchanges or such other recognized stock exchange or quotation system as the Agent may approve, acting reasonably, for as long as any Warrants remain outstanding, other than in a business combination or similar transaction where all the outstanding securities of the Corporation have been exchanged for cash or the securities of another issuer which is a reporting issuer under any Applicable Securities Laws;
- (h) shall use its commercially reasonable efforts to ensure that the Unit Shares, Warrant Shares, Over-Allotment Shares, Over-Allotment Warrant Shares and Compensation Shares will be conditionally approved for listing on the TSX upon their issue, subject only to Standard Listing Conditions, and that the NASDAQ be properly notified of the listing of the Unit Shares, Warrant Shares, Over-Allotment Shares, Over-Allotment Warrant Shares and Compensation Shares on the NASDAQ such that such securities are listed on the NASDAQ by the Initial Closing Date;
- (i) shall use the net proceeds of the Offering in the manner and subject to the qualifications described in the Prospectus under the heading “Use of Proceeds”;
- (j) shall, as soon as practicable, use its commercially reasonable efforts to receive all necessary consents to the transactions contemplated herein; and
- (k) shall not, for a period of 45 days following the Initial Closing Date (the “**Standstill Period**”), issue or sell any Common Shares to Aspire Capital Fund, LLC, including pursuant to the Aspire Agreement; provided that the Corporation shall be entitled to issue or sell Common Shares to Aspire Capital Fund, LLC pursuant to the Aspire Agreement before the end of the Standstill Period (i) upon prior written consent of the Agent (which shall not be unreasonably withheld or delayed), or (ii) at any time where the VWAP of the Common Shares is equal to or higher than VWAP Threshold.

7. Representations and Warranties of the Corporation

The Corporation hereby represents and warrants to the Agent that as at the date hereof:

- (a) the Corporation has been duly incorporated, continued or amalgamated and is validly existing under the laws of its governing jurisdiction, has all requisite power and authority and is duly qualified to carry on its business as now conducted and to own or lease its properties and assets and the Corporation has all requisite corporate power and authority to carry out its obligations under this Agreement, the Warrant Indenture (upon execution and delivery thereof), the Compensation Warrant Certificates (upon execution and delivery thereof) and any other document, filing, instrument or agreement delivered in connection with the Offering, and to carry out its obligations hereunder and thereunder;
- (b) no agreement is in force or effect which in any manner affects the voting or control of any of the securities of the Corporation to which the Corporation is a party or of which the Corporation has knowledge;
- (c) the Corporation does not beneficially own, or exercise control or direction over, 10% or more of the outstanding voting shares of any company;
- (d) all consents, approvals, permits, authorizations or filings as may be required under Applicable Securities Laws necessary for the execution and delivery of this Agreement and the sale of the Offered Units, and the consummation of the transactions contemplated hereby, have been made or obtained or will be obtained prior to the Initial Closing Date, as applicable, subject only to the Standard Listing Conditions and any post-Closing notice filings required under applicable United States federal or state securities laws;
- (e) upon the execution and delivery thereof, each of this Agreement, the Warrant Indenture, the Warrant Certificates and the Compensation Warrant Certificates shall constitute a valid and binding obligation of the Corporation and each shall be enforceable against the Corporation in accordance with its terms, except as enforcement thereof may be limited by bankruptcy, insolvency, reorganization, moratorium and other laws relating to or affecting the rights of creditors generally and except as limited by the application of equitable principles when equitable remedies are sought, and by the fact that rights to indemnity, contribution and waiver, and the ability to sever unenforceable terms, may be limited by Applicable Laws;
- (f) the currently issued and outstanding Common Shares are listed and posted for trading on the Exchanges and no order ceasing or suspending trading in the Common Shares or prohibiting the trading of any of the Common Shares has been issued and no proceedings for such purpose are pending or, to the knowledge of the Corporation, threatened;
- (g) the definitive form of certificate representing the Common Shares complies with the requirements of the *Business Corporations Act* (Ontario), complies with the requirements of the TSX Manual and does not conflict with the constating documents of the Corporation;
- (h) the Financial Statements:
 - (i) have been prepared in accordance with international financial reporting standards in Canada consistently applied throughout the period referred to therein;
 - (ii) contain no misrepresentation and present fairly, in all material respects, the financial position (including the assets and liabilities, whether absolute, contingent or otherwise) of the Corporation as at such dates and results of operations of the Corporation for the periods then ended; and

- (iii) contain and reflect adequate provision or allowance for all reasonably anticipated liabilities, expenses and losses of the Corporation,

and there has been no change in accounting policies or practices of the Corporation since December 31, 2016;

- (i) the Corporation has not declared or paid any dividends or declared or made any other payments or distributions on or in respect of any of the Common Shares and has not, directly or indirectly, redeemed, purchased or otherwise acquired any of its securities or agreed to do so or otherwise effected any return of capital with respect to such securities;
- (j) all taxes (including income tax, capital tax, payroll taxes, employer health tax, workers' compensation payments, property taxes, custom and land transfer taxes), duties, royalties, levies, imposts, assessments, deductions, charges or withholdings and all liabilities with respect thereto including any penalty and interest payable with respect thereto (collectively, "Taxes") due and payable by the Corporation have been paid except where the failure to pay such taxes would not have a Material Adverse Effect. All tax returns, declarations, remittances and filings required to be filed by the Corporation have been filed with all appropriate governmental authorities and all such returns, declarations, remittances and filings are complete and accurate and no material fact or facts have been omitted therefrom which would make any of them misleading except where such failure would not have a Material Adverse Effect. The Corporation has not received any written notice regarding examination of any tax return of the Corporation currently in progress and the Corporation has no knowledge of any facts that could give rise to any such examination and there are no issues or disputes outstanding with any governmental authority respecting any Taxes that have been paid, or may be payable, by the Corporation except where such examinations would not have a Material Adverse Effect;
- (k) the Scientific Research and Experimental Development ("SR&ED") credits receivable as described in the Offering Documents and any other SR&ED credits otherwise applied for by the Corporation are based on underlying work, expenses and claims of the Corporation giving rise to such SR&ED credits which satisfy the requirements of the *Income Tax Act* (Canada) in order for the Corporation to claim or have claimed such SR&ED credits, and to the knowledge of the Corporation there are no facts, circumstances or basis upon which the applicable taxing authority could reject, disallow, adversely reassess or deny the Corporation any such SR&ED credits, except as otherwise disclosed to the Agent in writing;
- (l) the Corporation's Auditors, which are the auditors who audited the Annual Financial Statements and who provided their audit report thereon, are independent public accountants under Applicable Securities Laws of the Canadian Selling Jurisdictions and there has never been a "reportable disagreement" (within the meaning of NI 51-102) between the Corporation and the Corporation's Auditors;
- (m) the Corporation maintains a system of internal accounting controls sufficient to provide reasonable assurance that:
 - (i) transactions are executed in accordance with management's general or specific authorization;

- (ii) transactions are recorded as necessary to permit preparation of financial statements in conformity with international financial reporting standards and to maintain accountability for assets;
 - (iii) access to assets is permitted only in accordance with management's general or specific authorization; and
 - (iv) the recorded accountability for assets is compared with existing assets at reasonable intervals and appropriate action is taken with respect to any differences;
- (n) the Corporation is in compliance with the certification requirements contained in National Instrument 52-109 – *Certification of Disclosure in Issuers' Annual and Interim Filings* of the Canadian Securities Administrators with respect to the Corporation's annual and interim filings with Canadian Securities Regulators;
- (o) the audit committee of the Corporation is comprised and operates in accordance with the requirements of National Instrument 52-110 – *Audit Committees* of the Canadian Securities Administrators;
- (p) except for the Warrants, the Over-Allotment Warrants, the Compensation Warrants and as set forth in Schedule "A" to this Agreement, no holder of outstanding securities of the Corporation will be entitled to any pre-emptive or any similar rights to subscribe for any of the Common Shares or other securities of the Corporation, and no rights, warrants or options to acquire, or instruments convertible into or exchangeable for, any shares in the capital of the Corporation are outstanding;
- (q) all information which has been prepared by the Corporation relating to the Corporation and its business, properties and liabilities that is or has been publicly disclosed or otherwise provided to the Agent or its counsel, including any investor or corporate presentations posted on the Corporation's website, and all financial, marketing, sales and operational information, is, as of the date of such information, true and correct in all material respects, contains no misrepresentation and no fact or facts have been omitted therefrom which would make such information misleading;
- (r) except as properly disclosed in the Offering Documents, the Corporation has not approved, has not entered into any agreement in respect of, and to the knowledge of the Corporation there are no facts or circumstances in respect of:
- (i) the purchase of any material property or assets or any interest therein or the sale, transfer or other disposition of any material property or assets or any interest therein currently owned, directly or indirectly, by the Corporation whether by asset sale, transfer of shares or otherwise;
 - (ii) the issuance of any securities of the Corporation or a right of first refusal with respect to the issuance by the Corporation of any securities;
 - (iii) any change in control of the Corporation (whether by sale, transfer or other disposition of shares or sale, transfer, lease or other disposition of all or substantially all of the property and assets of the Corporation);

- (iv) a proposed or planned disposition of shares by any shareholder who owns, directly or indirectly, 10% or more of the outstanding shares of the Corporation; or
- (v) an agreement in force or having the effect of which in any manner affects or will affect the voting or control of any of the securities of the Corporation;
- (s) no legal or governmental proceedings are pending to which the Corporation is a party or to which its property is subject that would result individually or in the aggregate in a Material Adverse Effect and, to the knowledge of the Corporation, no such proceedings have been threatened against, or are contemplated with respect to, the Corporation or its properties;
- (t) the Corporation is the legal and beneficial owner, free of all mortgages, liens, charges, pledges, security interests, encumbrances, claims or demands whatsoever, of the interests in personal property referred to as owned by it in the Prospectus, and all material agreements under which the Corporation holds an interest in personal property are in good standing according to their terms;
- (u) the minute books and records of the Corporation made available to counsel for the Agent in connection with its due diligence investigations of the Corporation are all of the minute books and records of the Corporation and contain copies of all material proceedings of the shareholders, the board of directors and all committees of the board of directors of the Corporation to the date of review of such corporate records and minute books, and there have been no other meetings, resolutions or proceedings of the shareholders, board of directors or any committees of the board of directors of the Corporation not reflected in such minute books and other records;
- (v) the Corporation is, and will be at the Closing Time and Over-Allotment Closing Time, an Eligible Issuer and a reporting issuer under Applicable Securities Laws in the Canadian Selling Jurisdictions, and the Corporation is not in default in any material respect of any requirement of Applicable Securities Laws and the Corporation is not included in a list of defaulting reporting issuers maintained by the applicable Securities Regulators. In particular, without limiting the foregoing, the Corporation is in compliance at the date hereof with its obligations to make timely disclosure of all material changes relating to it and, since January 1, 2016, no such disclosure has been made on a confidential basis and there is no material change relating to the Corporation which has occurred and with respect to which the requisite material change report has not been filed, except to the extent that the Offering and the transactions contemplated thereunder may constitute a material change;
- (w) on September 23, 2019, the Corporation filed the Preliminary Prospectus in each of the Canadian Selling Jurisdictions and obtained, pursuant to the Passport System, a receipt or deemed receipt dated September 23, 2019 from the Ontario Securities Commission, as principal regulator, on behalf of the Canadian Securities Regulators for the Preliminary Prospectus;
- (x) the execution and delivery of each of this Agreement, the Warrant Indenture, the Warrant Certificates and the Compensation Warrant Certificates and the compliance with all provisions contemplated thereunder, the Offering and sale of the Qualified Securities and the issuance of the Qualified Securities and the Compensation Warrants does not and will not:

- (i) require the consent, approval, authorization, registration or qualification of or with any governmental authority, stock exchange, securities regulatory authority or other third party (in each case in the Selling Jurisdictions), except: (A) such as have been obtained; or (B) such as may be required and will be obtained by the Closing Time on the Initial Closing Date;
- (ii) result in a breach of, or default under, nor create a state of facts which, after notice or lapse of time or both, would result in a breach of or default under, nor conflict with:
 - (A) any of the terms, conditions or provisions of the constating documents or resolutions of the shareholders, board of directors or any committee of the board of directors of the Corporation;
 - (B) any Applicable Law applicable to the Corporation, including the Applicable Securities Laws, or any judgment, order or decree of any governmental body, agency or court having jurisdiction over the Corporation; or
 - (C) any Material Agreement; or
- (iii) give rise to any lien, charge or claim in or with respect to the properties or assets now owned or hereafter acquired by the Corporation or the acceleration of or the maturity of any debt under any indenture, mortgage, lease, agreement or instrument binding or affecting the Corporation or any of its properties;
- (y) the authorized capital of the Corporation consists of an unlimited number of Common Shares of which, as of the close of business on October 31, 2019, 33,567,399 Common Shares are issued and outstanding as fully paid and non-assessable;
- (z) other than as contemplated hereby, there is no person acting or purporting to act at the request or on behalf of the Corporation that is entitled to any brokerage or finder's fee in connection with the Offering;
- (aa) all material disclosure filings required to be made by the Corporation pursuant to Applicable Securities Laws of the Canadian Selling Jurisdictions from January 1, 2016 have been made and such disclosure and filings contained no material misrepresentation as at the respective dates thereof;
- (bb) all forward-looking information and statements of the Corporation contained in the Prospectus and the assumptions underlying such information and statements, subject to any qualifications contained therein, including any forecasts and estimates, expressions of opinion, intention and expectation, as at the time they were or will be made, were or will be made or based on assumptions that are reasonable;
- (cc) the statistical, industry and market related data included in the Prospectus are derived from sources which the Corporation reasonably believes to be accurate, reasonable and reliable, and such data agrees in all material respects with the sources from which it was derived;

- (dd) the Corporation has no knowledge of any legislation, or proposed legislation (published by a legislative body), which it anticipates will materially and adversely affect the business, affairs, operations, assets, liabilities (contingent or otherwise) or prospects of the Corporation;
- (ee) the Corporation is in material compliance with all Applicable Laws respecting employment and employment practices, terms and conditions of employment, pay equity and wages, except where non-compliance with such laws could not reasonably be expected to have a Material Adverse Effect, and has not and is not engaged in any unfair labour practice;
- (ff) except as properly disclosed in the Offering Documents, there has not been and there is not currently any labour disruption or conflict which could reasonably be expected to have a Material Adverse Effect;
- (gg) the Corporation does not have any loans or other indebtedness outstanding which have been made to any of its officers, directors or employees, past or present, any known holder of more than 10% of any class of shares of the Corporation, or any person not dealing at arm's length with the Corporation that are currently outstanding;
- (hh) except as disclosed in the Disclosure Record, none of the directors, officers or employees of the Corporation, any known holder of more than 10% of any class of shares of the Corporation, or any associate or affiliate of any of the foregoing persons, had or has any material interest, direct or indirect, in any transaction or any proposed transaction that was or is material to the Corporation;
- (ii) the Corporation maintains insurance covering the properties, operations, personnel and businesses of the Corporation as the Corporation reasonably deems adequate; such insurance insures against such losses and risks to an extent which is adequate in the reasonable opinion of management of the Corporation to protect the Corporation and the business of the Corporation; all such insurance is fully in force on the date hereof and will be fully in force on the Closing Date; and the Corporation has no reason to believe that it will not be able to renew any such insurance as and when such insurance expires;
- (jj) the Corporation (i) is in compliance with any and all Applicable Laws relating to the protection of human health and safety, the environment or hazardous or toxic substances or wastes, pollutants or contaminants ("**Environmental Laws**"), (ii) has received all permits, licenses or other approvals required under applicable Environmental Laws to conduct its business, (iii) is in compliance with all terms and conditions of any such permit, license or approval, (iv) to the knowledge of the Corporation, there have been no past, and there are no pending or threatened claims, complaints, notices or requests for information received by the Corporation with respect to any alleged material violation of any Environmental Law, and (v) to the knowledge of the Corporation, no conditions exist at, on or under which, with the passage of time, or the giving of notice or both, would give rise to liability under any Environmental Law; except where such non-compliance, failure to receive a permit, licence or other approval, claim or condition would not, singly or in the aggregate, have or would be expected to have a Material Adverse Effect on the Corporation;

- (kk) no order, ruling or determination having the effect of suspending the sale or ceasing the trading in any securities of the Corporation has been issued by any securities regulatory authority and is continuing in effect and no proceedings for that purpose have been instituted or, to the knowledge of the Corporation, are pending, contemplated or threatened by any securities regulatory authority;
- (ll) the Corporation has not made any loans to, or guaranteed the obligations of, any person;
- (mm) with respect to each of the premises of the Corporation which is material to the Corporation and which the Corporation occupies as tenant (the “**Leased Premises**”), the Corporation has the right to occupy and use such Leased Premises, and each of the leases pursuant to which the Corporation occupies the Leased Premises are in good standing and in full force and effect, and neither the Corporation nor any other party thereto is in breach of any material covenants, conditions or obligations contained therein;
- (nn) there have not been and there are not currently any material disagreements with any of the employees of the Corporation which are adversely affecting the carrying on of the business of the Corporation;
- (oo) there is no action, suit, proceeding, inquiry or investigation before or brought by any court or governmental agency or body, domestic or foreign, including, for the avoidance of doubt, any Regulatory Authority, now pending or threatened against or affecting the Corporation, which would cause a Material Adverse Effect;
- (pp) the Transfer Agent at its principal offices in the City of Toronto has been duly appointed as registrar and transfer agent for the Common Shares;
- (qq) neither the Corporation, nor to the knowledge of the Corporation, any director, officer, agent, employee or other person associated with or acting on behalf of the Corporation has:
 - (i) used any corporate funds for any unlawful contribution, gift, entertainment or other unlawful expense relating to political activity;
 - (ii) made any direct or indirect unlawful payment to any foreign or domestic government official or employee from corporate funds;
 - (iii) violated any applicable anti-bribery, export control and economic sanctions laws including any provision of the *Corruption of Foreign Officials Act* (Canada) or the *United States Foreign Corrupt Practice Act*; or
 - (iv) made any bribe, rebate, payoff, influence payment, kickback or other unlawful payment;
- (rr) the Corporation holds all of the permits, licenses and like authorizations necessary for it to carry on its business in each jurisdiction where such business is carried on that are material to the conduct of the business of the Corporation (as such business is currently conducted), including, but not limited to, permits, licenses and like authorizations from Regulatory Authorities (collectively, the “**Material Permits**”); all such Material Permits which are so required are valid and subsisting and in good standing and none of the same contains any term, provision, condition or limitation which has or would reasonably be expected to affect or restrict in a materially adverse manner the operation of the business of the Corporation, as now carried on or proposed to be carried on, as set out in the Prospectus, and the Corporation is not in breach thereof or in default with respect to filings to be effected or conditions to be fulfilled in order to maintain such Material Permits in good standing;

- (ss) the Corporation is and at all times has been in material compliance with each Material Permit held by it and is not in violation of, or in default under, any such Material Permit in any material respect, except in any case where the Corporation has received a valid and effective waiver of such violation or default;
- (tt) all clinical studies, tests and trials being conducted by or on behalf of the Corporation that have been or will be submitted to any governmental entity, including any Regulatory Authority, including in Canada and the European Union, in connection with any Material Permits, are being or have been conducted by the Corporation or, to the knowledge of the Corporation, are being or have been conducted on behalf of the Corporation, in compliance in all material respects with applicable experimental protocols, procedures and controls pursuant to generally accepted professional scientific standards and applicable local, provincial, state, federal and foreign legal requirements, rules and regulations (including Applicable Laws administered by the Regulatory Authorities);
- (uu) the results of the clinical studies, tests and trials being conducted by or on behalf of the Corporation described in the Prospectus are accurate and complete in all material respects and, to the knowledge of the Corporation, there are no other trials, studies or tests, the results of which could reasonably call into question the results described or referred to in the Prospectus; and the Corporation has not received any notices or other correspondence from such Regulatory Authorities or any other governmental agency or any other person requiring the termination, suspension or material modification of any research, pre-clinical and clinical validation studies or other studies and tests that are described in the Prospectus or the results of which are referred to therein;
- (vv) except (i) with respect to Intellectual Property to which ownership is not statutorily protected, (ii) reversionary and moral rights, and (iii) for the Intellectual Property identified in Schedule "C", the Corporation is the sole legal and beneficial owner of, has good and marketable title to, and owns all right, title and interest in and to all Corporation IP free and clear of all encumbrances, charges, covenants, conditions, options to purchase and restrictions or other adverse claims or interest of any kind or nature, and the Corporation has no knowledge of any claim of adverse ownership in respect thereof;
- (ww) Schedule "B" to this Agreement contains, among other things, a true and complete list of all active (including reinstatable) applied for and registered Patents and Trademarks owned by the Corporation;
- (xx) to the Corporation's knowledge, there is no Intellectual Property, other than the Intellectual Property which the Corporation owns and licenses, that is required to permit the Corporation to substantially carry on its present business as described in the Prospectus, and the Corporation has no knowledge of any Intellectual Property owned by another person that is required to permit the Corporation to substantially carry on its business as described in the Prospectus and to which the Corporation knows it cannot obtain a license;
- (yy) the licenses identified at Schedule "C" do not materially impede, restrict or prevent the conduct of the business of the Corporation as described in the Prospectus;

- (zz) the Corporation has not received any notice or claim (whether written, oral or otherwise) challenging the Corporation's ownership or right to use any of the Corporation IP or suggesting that any other person has any claim of legal or beneficial ownership or other claim or interest with respect thereto, nor, to the knowledge of the Corporation, is there a reasonable basis for any claim that any person other than the Corporation has any claim of legal or beneficial ownership or other claim or interest in any of the Corporation IP, except for the Intellectual Property identified in Schedule "C";
- (aaa) all active Applied for Corporation IP and active Registered Corporation IP is, to the knowledge of the Corporation, in good standing, is recorded in the name of the Corporation and has been filed in a timely manner in the appropriate offices to preserve the rights thereto (if any) and, in the case of a provisional application, the Corporation confirms that all right, title and interest in and to the potential invention(s) disclosed in such application have been or as of the Closing Date will be assigned in writing (without any express right to revoke such assignment) to the Corporation. To the knowledge of the Corporation, there has been no public disclosure, sale or offer for sale by the Corporation of any invention described in each of the Corporation IP anywhere in the world that would prevent the valid issue of a registration from that Corporation IP in the corresponding jurisdiction;
- (bbb) all material prior art or other information known to the Corporation relating to the Corporation IP has been disclosed to the appropriate offices if and to the extent such disclosure is required to comply with the Applicable IP Laws in the jurisdictions where the corresponding applications are pending;
- (ccc) to the knowledge of the Corporation, all active Registered Corporation IP has been filed, prosecuted and obtained in accordance with the corresponding Applicable IP Laws and is currently in effect and in compliance with such Applicable IP Laws;
- (ddd) to the knowledge of the Corporation, and except for (i) provisional patent applications which were filed more than one year ago, and (ii) any inactive Intellectual Property identified in Schedule "B", no Applied for Corporation IP or Registered Corporation IP has expired, become abandoned, been cancelled or expunged, or has lapsed for failure to be renewed or maintained;
- (eee) to the knowledge of the Corporation, the conduct of the business of the Corporation (including the use or other exploitation of the Corporation IP by the Corporation or other licensees) has not infringed, violated or misappropriated any Intellectual Property right of any person;
- (fff) the Corporation is not a party to any legal action or legal proceeding, nor has the Corporation received notice of any legal action or legal proceeding being threatened, that alleges that any current or proposed conduct of the Corporation's business (including the use or other exploitation of any Corporation IP by the Corporation or any customers, distributors or other licensees) has or will infringe, violate or misappropriate any Intellectual Property right of any person;
- (ggg) to the knowledge of the Corporation, no person has infringed upon, misappropriated, illegally exported, or violated any of the Corporation's rights in the Corporation IP;
- (hhh) the Corporation has entered into agreements pursuant to which the Corporation has been granted licenses or permissions to one or more of make, use, reproduce, sub license,

manufacture, sell, modify, update, enhance or otherwise exploit the Licensed IP to the extent required to operate the business of the Corporation currently conducted (including, if required, the right to incorporate such Licensed IP into the Corporation's products) as described in the Prospectus. To the knowledge of the Corporation, any Licensed IP that was terminated in the past 6 months is not material to the business of the Corporation;

- (iii) to the extent that any of the non-publicly disclosed Corporation IP is disclosed to any person or any person has access to such Corporation IP (including any employee, officer, shareholder or consultant of the Corporation), the Corporation has entered into an agreement which contains customary terms and conditions with respect to the use and disclosure of such Corporation IP. In each case in accordance with their respective terms, neither the Corporation nor, to the knowledge of the Corporation, any other person is in default of its obligations thereunder with respect to the terms and conditions relating to use and disclosure of Corporation IP;
- (jjj) the Corporation has taken all actions that it is contractually obligated to take and all actions that are customary and reasonable to protect the confidentiality of the Corporation IP that it treats as confidential;
- (kkk) to the knowledge of the Corporation, it is not, and will not be, necessary for the Corporation to utilize any Intellectual Property owned by or in possession of any of its employees that was made prior to their employment with the Corporation in a manner that is in violation of the rights of such employee or the rights of his or her prior employers;
- (lll) the Corporation has not received any opinion from its legal counsel that any of the active Registered Corporation IP or Applied for Corporation IP is clearly, but not as a result of any prior art, invalid, unregistrable, or unenforceable in the case of Registered Corporation IP;
- (mmm) the Corporation has not received any grant relating to research and development which is subject to repayment in whole or in part or to conversion to debt upon sale of any Common Shares or which may affect the right of ownership of the Corporation in the Corporation IP;
- (nnn) the Corporation requires each of its employees and consultants to execute a non-disclosure agreement containing customary terms and conditions for agreements of this nature, and all current employees and consultants of the Corporation have executed such agreement and, to the knowledge of the Corporation, all past employees and consultants of the Corporation have executed such agreement;
- (ooo) all of the present and past employees of the Corporation, and all of the present and past consultants, contractors and agents of the Corporation performing services relating to the conception, discovery, making or development of the Corporation IP, have entered into a written agreement assigning or requiring assignment to the Corporation of, or confirming that the Corporation owns all right, title and interest in and to all such Intellectual Property and, with respect to any Corporation IP in which moral rights subsist, waiving all moral rights in such Intellectual Property in favour of the Corporation;
- (ppp) any and all fees or payments required to keep the Registered Corporation IP and, to the knowledge of the Corporation, the registered Licensed IP active have been paid, except those which the Corporation has decided to let lapse;

- (qqq) there are no ongoing Intellectual Property disputes, settlement negotiations, settlement agreements or communications relating to the foregoing between the Corporation and any other persons relating to or potentially relating to the business of the Corporation which have not been resolved;
- (rrr) the Corporation has conducted and is conducting its business in compliance in all material respects with all Applicable Laws of each jurisdiction in which it carries on business and 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 Applicable Laws which would have a Material Adverse Effect;
- (sss) except pursuant to the licenses identified in Schedule "C", the Corporation has no knowledge of any reason why it would not be entitled to make use of or commercially exploit the Corporation IP. With respect to any license that is material to its business by which the Corporation has obtained the rights to exploit, in any way, the Licensed IP rights or by which the Corporation has granted to any third party the right to so exploit such Licensed IP:
 - (i) such license is in operation and enforceable in accordance with its terms, except to the extent that enforceability may be limited by: (A) applicable bankruptcy, insolvency, reorganization, moratorium, and other laws of general application affecting enforcement of creditors' rights generally; or (B) laws relating to the availability of specific performance, injunctive relief, or other equitable remedies, and no event of default has occurred and is continuing under any such license or agreement;
 - (ii) (A) the Corporation has not received any notice of termination or cancellation under such license, and no party thereto has any right of termination or cancellation thereunder except in accordance with its terms; (B) the Corporation has not received any notice of a breach or default under such license which breach or default has not been cured; and (C) the Corporation has not granted to any other person any rights contrary to, or in conflict with, the terms and conditions of such license;
 - (iii) the Corporation has no knowledge of any other party to such license or agreement that is in breach or default thereof, and has no knowledge of any event that has occurred that, with notice or lapse of time would constitute such a breach or default or permit termination, modification or acceleration under such license or agreement;
- (ttt) none of the Corporation nor any of its predecessors has had the registration of a class of securities under the U.S. Exchange Act revoked by the United States Securities Exchange Commission pursuant to Section 12(j) of the U.S. Exchange Act and any rules or regulations promulgated thereunder;
- (uuu) the operations of the Corporation are and have been conducted at all times in compliance with, in each case to the extent applicable, the financial recordkeeping and reporting requirements of the *United States Currency and Foreign Transactions Reporting Act of 1970*, the *Proceeds of Crime (Money Laundering)* and *Terrorist Financing Act (Canada)*, the anti-money laundering statutes of all jurisdictions, the rules and regulations thereunder and any related or similar rules, regulations or guidelines, issued, administered or enforced

by any governmental agency (collectively, the “**Anti-Money Laundering Laws**”), and no action, suit or proceeding by or before any court or governmental agency, authority or body or any arbitrator involving the Corporation with respect to the Anti-Money Laundering Laws is pending or, to the knowledge of the Corporation, threatened; and

- (vvv) neither the Corporation, nor, to the knowledge of the Corporation, any director, officer, agent, employee or affiliate of the Corporation is currently subject to any U.S. sanctions administered by the Office of Foreign Assets Control of the U.S. Treasury Department (“**OFAC**”) and the Corporation 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 or entity, for the purpose of financing the activities of any person currently subject to any U.S. sanctions administered by OFAC.

8. Closing

The purchase and sale of the Offered Units shall be completed at the Closing Time at the offices of counsel to the Corporation, Borden Ladner Gervais LLP, Toronto, Ontario, or at such other place or places as the Agent and the Corporation may agree. At the Closing Time, the Corporation shall: (a) deliver to the Agent certificates in definitive form and/or book-entry only securities in accordance with the “non-certificated inventory” rules and procedures of CDS representing the Offered Units registered in the name of CDS & Co. or in such other name or names as shall be designated by the Agent; and (b) with respect to Purchasers in the United States that are Institutional Accredited Investors which have expressly requested Warrant Certificates, deliver to the Agent Warrant Certificates registered as the agent may direct the Corporation in writing, against payment by the Agent to the Corporation of the aggregate purchase price payable to the Corporation for the Offered Units by certified cheque, bank draft or wire transfer. The payment made to the Corporation will be net of the Agency Fee and net of amounts payable to the Agent’s legal counsel, Baker & McKenzie LLP, and out-of-pocket expenses of the Agent incurred in connection with the Offering (which expenses shall be borne by the Corporation), as more fully set out in Section 14. In addition, the Corporation shall, at the Closing Time, issue to the Agent the Compensation Warrant Certificates.

If the aggregate gross proceeds to the Corporation from the Initial Closing is equal to or greater than the Minimum Offering, the Corporation and the Agent may agree from time to time to hold additional Closings on or prior to 45 days following the date of issuance of the Final Receipt to issue additional Offered Units until such time as the aggregate gross proceeds to the Corporation is equal to the Maximum Offering. Any such additional closing shall be referred to as a “**Subsequent Closing**” and shall be conducted in the same manner as the Initial Closing. At any Subsequent Closing, the Corporation and the Agent shall make all necessary payments and the Corporation shall, at its sole expense, deliver all of the certificates, opinions and other documents to be delivered by it on the Initial Closing Date, each updated to the date of any such Subsequent Closing.

9. Closing Conditions

The Agent’s obligation to complete the Closing at the Closing Time shall be subject to the accuracy of the representations and warranties of the Corporation contained in this Agreement and in certificates required to be delivered by the Corporation hereunder as of the date of this Agreement and as of the Closing Date, the performance by the Corporation of its obligations under this Agreement and the following conditions:

- (a) the Agent shall have received opinions, dated the Closing Date, of the Corporation’s Canadian counsel, Borden Ladner Gervais LLP, the Corporation’s U.S. counsel, Dorsey & Whitney LLP, as applicable, and any other local counsel, in form and substance satisfactory to the Agent, acting reasonably (it being understood that such counsel may rely to the extent

appropriate in the circumstance: (i) as to matters of fact, on certificates of the Corporation executed on its behalf by a senior officer of the Corporation and on certificates of the Transfer Agent, as to the issued capital of the Corporation; and (ii) as to matters of fact not independently established, on certificates of public officials) with respect to the following matters (with such opinions being subject to usual and customary assumptions and qualifications, including the qualifications set out below):

- (i) as to the incorporation and subsistence of the Corporation under the laws of the Province of Ontario and as to the corporate power of the Corporation to carry out its obligations under this Agreement and to issue the securities as contemplated by this Agreement;
- (ii) as to the authorized and issued capital of the Corporation;
- (iii) that the Corporation has all requisite corporate power and authority under the laws of its jurisdiction of incorporation to carry on its business and to own or lease its properties and assets as described in the Prospectus;
- (iv) that none of the execution and delivery of this Agreement, the Warrant Indenture, the Warrant Certificates, and the Compensation Warrant Certificates and the performance by the Corporation of its obligations hereunder, or the sale or issuance of the Unit Shares, the Warrants, the Warrant Shares, the Compensation Warrants, the Compensation Shares, the Over-Allotment Shares, the Over-Allotment Warrants and the Over-Allotment Warrant Shares will conflict with or result in any breach of the articles or by-laws of the Corporation;
- (v) that each of this Agreement, the Warrant Indenture, the Warrant Certificates, and the Compensation Warrant Certificates have been duly authorized and executed and delivered by the Corporation, and constitutes a valid and legally binding obligation of the Corporation enforceable against it in accordance with its terms, except as enforcement thereof may be limited by bankruptcy, insolvency, liquidation, reorganization, moratorium or similar laws affecting the rights of creditors generally and except as limited by the application of equitable principles when equitable remedies are sought, and the qualification that the enforceability of rights of indemnity and contribution may be limited by Applicable Law;
- (vi) all necessary corporate action has been taken by the Corporation to authorize the execution and delivery of the Prospectus and any Prospectus Amendment and the filing of such documents as are required under Applicable Securities Laws in each of the Canadian Selling Jurisdictions;
- (vii) no consent, approval, authorization or order of or filing, registration or qualification with any court, governmental agency or body or securities regulatory authority having jurisdiction is required at this time for the execution and delivery by the Corporation of this Agreement, the Warrant Indenture, the Warrant Certificates, the Over-Allotment Warrant Certificates or the Compensation Warrant Certificates and the performance of its obligations hereunder and thereunder, except for such as have been made or obtained;
- (viii) that the Unit Shares, have been validly issued as fully paid and non-assessable securities in the capital of the Corporation;

- (ix) that the Warrants the Over-Allotment Warrants and Compensation Warrants have been duly and validly created and issued;
- (x) that the Warrant Shares have been authorized and allotted for issuance and, upon the issuance of the Warrant Shares following due exercise of the Warrants in accordance with the terms thereof, the Warrant Shares will be validly issued as fully paid and non-assessable securities in the capital of the Corporation;
- (xi) that the Compensation Shares have been authorized and allotted for issuance and, upon the issuance of the Compensation Shares following due exercise of the Compensation Warrants in accordance with the terms thereof, the Compensation Shares will be validly issued as fully paid and non-assessable securities in the capital of the Corporation;
- (xii) that the Over-Allotment Shares have been authorized and allotted for issuance and, upon the issuance of the Over-Allotment Shares following due exercise of the Over-Allotment Option in accordance with the terms thereof, the Over-Allotment Shares will be validly issued as fully paid and non-assessable securities in the capital of the Corporation;
- (xiii) that the Over-Allotment Warrant Shares have been authorized and allotted for issuance and, upon the issuance of the Over-Allotment Warrant Shares following due exercise of the Over-Allotment Warrants in accordance with the terms thereof, the Over-Allotment Warrant Shares will be validly issued as fully paid and non-assessable securities in the capital of the Corporation;
- (xiv) all approvals, permits, consents, orders and authorizations have been obtained, all necessary documents have been filed and all other legal requirements have been fulfilled under Applicable Securities Laws of the Canadian Selling Jurisdictions to qualify the issuance or Distribution and sale of the Qualified Securities to the public in each of the Canadian Selling Jurisdictions and the Compensation Warrants to the Agent and to permit the issuance, sale and delivery of the Qualified Securities to the public through dealers registered under the Applicable Laws of each of the Canadian Selling Jurisdictions who have complied with the relevant provisions of such laws and the terms of their registration;
- (xv) subject to the qualifications, assumptions, limitations and understandings set out therein, the statements set out in the Prospectus, under the heading “Eligibility for Investment” are true and correct as at the date of the Prospectus;
- (xvi) subject to the qualifications, assumptions, limitations and understandings set out therein, the statements set out in the Prospectus, under the headings “Eligibility for Investment” and “Certain Canadian Federal Income Tax Considerations” are true and correct as at the date of the Prospectus;
- (xvii) subject to the qualifications, assumptions, limitations and understandings set out therein, the statements set out in the Prospectus, under the heading “Certain United States Federal Income Tax Considerations”, to the extent that such statements purport to constitute summaries of matters of law or regulation or legal conclusions, have been reviewed and fairly summarize the matters described therein in all material respects;

- (xviii) that the Final Prospectus was declared effective by the SEC under the U.S. Securities Act, and no stop order suspending its effectiveness has been issued by the SEC, nor, to the knowledge of the Corporation's U.S. counsel, is a proceeding for that purpose pending before or contemplated or threatened by the SEC;
 - (xix) that the attributes of the Common Shares conform in all material respects with the description thereof contained in the Prospectus;
 - (xx) that the Offering has been conditionally accepted by the TSX, subject only to Standard Listing Conditions;
 - (xxi) the Unit Shares, Warrant Shares, Over-Allotment Warrant Shares, Over-Allotment Shares and Compensation Shares have been duly authorized by the Company for listing and trading on the NASDAQ and the TSX; and
 - (xxii) as to such other matters as the Agent's legal counsel may reasonably request prior to the Closing Time;
- (b) the Agent shall have received the Unit Shares, the Warrants, and the Compensation Warrants (in physical or electronic form, subject to compliance with Applicable Securities Laws, and as the Agent may advise);
 - (c) the Agent shall have received an incumbency certificate dated the Closing Date including specimen signatures of the President and Chief Executive Officer, the Chief Financial Officer and any other officer of the Corporation signing this Agreement or any document delivered hereunder;
 - (d) the Agent shall have received a certificate dated the Closing Date of the President and Chief Executive Officer and the Chief Financial Officer of the Corporation or other officers of the Corporation acceptable to the Agent, to the effect that, to the best of their knowledge, information and belief, after due inquiry and without personal liability:
 - (i) the representations and warranties of the Corporation contained in this Agreement are true and correct in all respects as if made at and as of the Closing Time;
 - (ii) the Corporation has complied with and satisfied the covenants, terms and conditions of this Agreement on its part to be complied with and satisfied up to the Closing Time;
 - (iii) the constating documents of the Corporation delivered at Closing are full, true and correct copies, unamended, and in effect on the date thereof;
 - (iv) the minutes or other records of various proceedings and actions of the Corporation's board of directors relating to the Offering and delivered at Closing are full, true and correct copies thereof and have not been modified or rescinded as of the date thereof;
 - (v) no order, ruling or determination having the effect of suspending the sale or ceasing the trading of the Common Shares or any other securities of the Corporation has been issued by any stock exchange, securities commission or

securities regulatory authority and is continuing in effect and no proceedings for that purpose have been instituted or are pending;

- (vi) since the respective dates as of which information is given in the Prospectus as amended by any Prospectus Amendment: (A) there has been no material change (actual, anticipated, contemplated, proposed or threatened, whether financial or otherwise) in the business, financial condition, affairs, operations, business prospects, assets, liabilities or obligations (contingent or otherwise) or capital of the Corporation; and (B) other than the Offering and except as disclosed in the Prospectus or any Prospectus Amendment, as the case may be, no transaction has been entered into by the Corporation which constitutes a material change as defined in Applicable Securities Laws of the Canadian Selling Jurisdictions;
 - (vii) none of the documents filed with applicable securities regulatory authorities since January 1, 2016, contained a misrepresentation as at the time the relevant document was filed that has not since been corrected; and
 - (viii) there are no contingent liabilities affecting the Corporation which are material to the Corporation, other than as disclosed in the Final Prospectus or any Prospectus Amendment, as the case may be;
- (e) the Agent shall have received a comfort letter dated the Closing Date, in form and substance satisfactory to the Agent from the Corporation's Auditors, confirming the continued accuracy of the comfort letter to be delivered to the Agent pursuant to subsection 4(a)(v) with such changes as may be necessary to bring the information in such letter forward to a date not more than two Business Days prior to the Closing Date, which changes shall be acceptable to the Agent;
 - (f) the Corporation's board of directors shall have authorized and approved the execution and delivery of this Agreement, the Warrant Indenture, the Warrant Certificates, and the Compensation Warrant Certificates, the allotment, issuance and delivery of the Unit Shares, Over-Allotment Shares and the Over-Allotment Warrant Shares and the creation and issuance of the Warrants, Over-Allotment Warrants and Compensation Warrants and, upon the due exercise of the Warrants, Over-Allotment Warrants and the Compensation Warrants, the allotment, issuance and delivery of the Warrant Shares, Over-Allotment Shares and the Compensation Shares, as the case may be, and all matters relating thereto;
 - (g) the Corporation shall have received the conditional approval from the TSX for the listing of the Unit Shares, Warrant Shares, Over-Allotment Shares, Over-Allotment Warrant Shares and Compensation Shares for trading on the TSX and the Corporation shall have properly notified NASDAQ for the listing of the Unit Shares, Warrant Shares, Over-Allotment Shares, Over-Allotment Warrant Shares and Compensation Shares for trading on the NASDAQ;
 - (h) the Corporation shall not have received any notice from the TSX or from NASDAQ that the Unit Shares, the Warrant Shares, the Over-Allotment Shares, the Over-Allotment Warrant Shares, or the Compensation Shares shall not be accepted for listing on the TSX or NASDAQ;
 - (i) that final acceptance of the Offering by the TSX shall be subject only to the fulfilment of Standard Listing Conditions;

- (j) the Agent shall have received confirmation from the Corporation that the Corporation is not on the defaulting issuer's list (or equivalent) maintained by the Canadian Securities Regulators in the Canadian Selling Jurisdictions;
- (k) the Agent shall have received a certificate of good standing or equivalent thereof in respect of the Corporation;
- (l) the Agent and its counsel shall have been provided with all information and documentation reasonably requested relating to their due diligence inquiries and investigations;
- (m) the Corporation will have made and/or obtained the necessary filings, approvals, consents and acceptances of the appropriate securities regulatory authorities required to be made or obtained by the Corporation in connection with the sale of the Qualified Securities to the Purchasers prior to the Closing Time; as herein contemplated, it being understood that the Agent shall do all that is reasonably required to assist the Corporation to fulfil this condition, subject only to the Standard Listing Conditions and any post-Closing notice filings under applicable United States federal or state securities laws; and
- (n) the Agent shall have received a certificate from the Transfer Agent as to the number of Common Shares issued and outstanding as at a date no more than two Business Days prior to the Closing Date.

The Corporation agrees that the aforesaid legal opinions and certificates to be delivered at the Closing Time will be addressed to the Agent and the Agent's counsel.

10. Exercise of Over-Allotment Option

The Agent may exercise the Over-Allotment Option, in whole or in part, at any time and from time to time prior to the Over-Allotment Expiry Date by delivery of written notice to the Corporation of the number of Over-Allotment Securities in respect of which the Over-Allotment Option is being exercised and the date for delivery of the Over-Allotment Securities (an "**Over-Allotment Option Notice**"). The Over-Allotment Option Closing Date shall be determined by the Agent but shall not be earlier than two business days or later than seven business days after delivery of the Over-Allotment Option Notice. In the event the Over-Allotment Option is exercised prior to the Initial Closing Date, the Over-Allotment Closing shall take place together with the Initial Closing on the Initial Closing Date. Upon exercise of the Over-Allotment Option as provided herein the Corporation shall become obligated to sell the total number of Over-Allotment Securities in respect of which the Agent is exercising the Over-Allotment Option.

Any such closing shall be referred to as a "**Over-Allotment Closing**" and shall be conducted in the same manner as the Initial Closing. At any Over-Allotment Closing, the Corporation and the Agent shall make all necessary payments and the Corporation shall, at its sole expense, deliver all of the certificates, opinions and other documents to be delivered by it on the Initial Closing Date, each updated to the date of any such Over-Allotment Closing.

11. All Terms to be Conditions

The Corporation agrees that the conditions contained in this Agreement, including those terms in Section 9, will be construed as conditions and any breach or failure to comply with any of the conditions shall entitle the Agent to terminate its obligations hereunder by written notice to that effect given to the Corporation at or prior to the Closing Time. It is understood that the Agent may waive, in whole or in part, or extend the time for compliance with, any of such terms and conditions without prejudice to the rights of the Agent in

respect of any such terms and conditions or any other or subsequent breach or non-compliance of the Corporation, provided that to be binding on the Agent, any such waiver or extension must be in writing and signed by the Agent.

12. Rights of Termination

Without limiting any of the other provisions of this Agreement, the Agent will be entitled, at its option, to terminate and cancel, without any liability on its part or on the part of the Purchasers, its obligations under this Agreement by giving written notice to the Corporation at any time prior to the Closing Time if, after the date hereof and at any time prior to the Closing:

- (a) there shall have occurred any change in any material fact, material change (actual, intended, anticipated or threatened) or the Agent shall have discovered any previously undisclosed material fact (determined by the Agent in its sole discretion, acting reasonably) in relation to the Corporation, which, in the opinion of the Agent, acting reasonably, prevents or restricts trading in the securities of the Corporation or the Distribution of the Qualified Securities or has or could reasonably be expected to have a Material Adverse Effect;
- (b) there shall have occurred any change in the Applicable Securities Laws of any Selling Jurisdiction or any inquiry, investigation or other proceeding by a securities regulatory authority or any order is issued under or pursuant to any statute of Canada or any province thereof, or the SEC, or any stock exchange in relation to the Corporation or any of its securities (except for any inquiry, investigation or other proceeding based upon activities of the Agent and not upon activities of the Corporation), which, in the reasonable opinion of the Agent, would be expected to have a significant adverse effect on the market price of value of the Offered Units or the Common Shares;
- (c) there should develop, occur or come into effect or existence any event, action, state, condition or major financial occurrence or catastrophe, accident, public protest, government law or regulation, war or act of terrorism of national or international consequence or any law or regulation which, in the opinion of the Agent, seriously adversely affects or involves, or will seriously adversely affect, or involve, the financial markets or the business, operations or affairs of the Corporation or the market price of value of the Offered Units or the Common Shares;
- (d) the state of the financial markets in Canada and the United States is such that, in the reasonable opinion of the Agent, the Offered Units cannot be marketed profitably;
- (e) there is an inquiry or investigation (whether formal or informal) by any Securities Regulator or other regulatory authority in relation to the Corporation or any one of its directors or officers, or any of its principal shareholders, which has not been rescinded, revoked or withdrawn and which, in each case, operates to materially prevent or restrict the Distribution of the Qualified Securities as contemplated by this Agreement;
- (f) a cease trading order with respect to any securities of the Corporation is made by any Securities Regulator or other competent authority by reason of the fault of the Corporation or its directors, officers and agents and such cease trading order has not been rescinded, revoked or withdrawn;

- (g) the Agent, acting reasonably, is not satisfied in its sole discretion with its due diligence review and investigations;
- (h) the Corporation is in breach of a material term, condition or covenant of this Agreement or any representation or warranty given by the Corporation in this Agreement becomes or is false or misleading; and
- (i) the Corporation receives notice from the TSX or NASDAQ that the Unit Shares, Warrant Shares, Over-Allotment Shares, Over-Allotment Warrant Shares and/or Compensation Shares shall not be accepted for listing on the TSX or NASDAQ.

The rights of termination contained herein are in addition to any other rights or remedies that the Agent may have in respect of any default, act or failure to act or non-compliance by the Corporation in respect of any of the matters contemplated by this Agreement or otherwise.

In the event of any such termination, there shall be no further liability on the part of the Agent to the Corporation or on the part of the Corporation to the Agent except in respect of any liability which may have arisen prior to or arise after such termination under any or both of Sections 13 and 14.

13. Indemnity and Contribution

The Corporation agrees to indemnify and hold harmless the Agent and each Selling Firm (provided that each such Selling Firm is in material compliance with the covenants and obligations of the Agent set forth in Section 3 herein (as if such Selling Firm were an Agent), to the extent applicable) and each of their subsidiaries and affiliates, and each of their respective directors, officers, employees, shareholders, partners, advisors and agents (collectively, the “**Indemnified Parties**” and each, an “**Indemnified Party**”), to the full extent lawful, from and against any and all losses (except loss of profit), claims, actions, suits, proceedings, damages, liabilities or expenses of whatsoever nature or kind, including the aggregate amount paid in reasonable settlement of any actions, suits, proceedings, investigations or claims and the reasonable fees and expenses of their counsel in connection with any action, suit, proceeding, investigation or claim that may be made or threatened against any Indemnified Party or in enforcing this indemnity (collectively, the “**Claims**”) to which an Indemnified Party may become subject or otherwise involved in any capacity insofar as the Claims relate to, are caused by, result from, arise out of or are based upon, directly or indirectly, the performance of professional services rendered to the Corporation by an Indemnified Party hereunder or otherwise in connection with the matters referred to in this Agreement, whether performed before or after the Corporation’s execution of this Agreement, including in connection with Claims relating to or arising from the following:

- (a) any information or statement (except any information or statement relating solely to or provided by the Agent) contained in the Offering Documents, which at the time and in light of the circumstances under which it was made contains or is alleged to contain a misrepresentation or any omission or any alleged omission to state therein any fact or information (except facts or information relating solely to the Agent and provided by the Agent) required to be stated therein or necessary to make any of the statements therein not misleading in light of the circumstances in which they are made;
- (b) the omission or alleged omission to state in any certificate of the Corporation or of any officers of the Corporation delivered in connection with the Offering any material fact (except facts or information relating solely to the Agent and provided by the Agent) required to be stated therein where such omission or alleged omission constitutes or is alleged to constitute a misrepresentation;

- (c) any order made or any inquiry, investigation or proceeding commenced or threatened by any securities regulatory authority, stock exchange or by any other competent authority, based upon any misrepresentation (as defined in the *Securities Act* (Ontario)) or alleged misrepresentation (except a misrepresentation relating solely to the Agent and provided by the Agent) in the Offering Documents (except any document or material delivered or filed solely by the Agent) based upon any failure or alleged failure to comply with Applicable Securities Laws (other than any failure or alleged failure to comply by the Agent) preventing and restricting the trading in or the sale of the Offered Units in any of the Selling Jurisdictions;
- (d) the non-compliance or alleged non-compliance by the Corporation with any material requirement of Applicable Securities Laws, including the Corporation's non-compliance with any statutory requirement to make any document available for inspection; or
- (e) material breach of any representation, warranty or covenant of the Corporation contained in this Agreement or the failure of the Corporation to comply in all material respects with any of its obligations hereunder or thereunder,

and further agrees to immediately reimburse each Indemnified Party forthwith, upon demand, for any legal or other expenses reasonably incurred by such Indemnified Party in connection with any Claim.

The Corporation also agrees that no Indemnified Party shall have any liability (either direct or indirect, in contract or tort or otherwise) to the Corporation or any person asserting Claims on the Corporation's behalf or in right for or in connection with the performance of professional services rendered to the Corporation by an Indemnified Party hereunder or otherwise in connection with the matters referred to in this Agreement, whether performed before or after the Corporation's execution of the Agreement, except to the extent that any losses, expenses, Claims, actions, damages or liabilities incurred by the Corporation are determined by a court of competent jurisdiction in a final judgement that has become non-appealable to have resulted from the Indemnified Party's breach of this Agreement, or the gross negligence, wilful misconduct, fraud or dishonesty of such Indemnified Party.

In the event and to the extent that a court of competent jurisdiction in a final judgement that has become non-appealable determines that an Indemnified Party breached this Agreement, or was grossly negligent or guilty of wilful misconduct, fraud or dishonesty in connection with a Claim in respect of which the Corporation has advanced funds to the Indemnified Party pursuant to this indemnity, such Indemnified Party shall immediately reimburse such funds to the Corporation and thereafter this indemnity shall not apply to such Indemnified Party in respect of such Claim.

The Corporation agrees to waive any right the Corporation might have of first requiring the Indemnified Party to proceed against or enforce any other right, power, remedy or security or claim payment from any other person before claiming under this indemnity.

In case any Claim is brought against an Indemnified Party, the Indemnified Party will give the Corporation prompt written notice of any such Claim of which the Indemnified Party has knowledge and the Corporation will undertake the investigation and defence thereof on behalf of the Indemnified Party, including the prompt employment of counsel acceptable to the Indemnified Parties affected and the payment of all expenses. Failure by the Indemnified Party to so notify shall not relieve the Corporation of its obligation of indemnification hereunder unless (and only to the extent that) such failure results in the forfeiture by the Corporation of substantive rights or defences or the extent that the Corporation is materially prejudiced thereby.

No admission of liability and no settlement, compromise or termination of any Claim shall be made without the Corporation's consent and the consent of the Indemnified Parties affected, such consents not to be unreasonably withheld or delayed. No Indemnified Party shall be obliged to enter into any settlement which does not provide a complete release of such Indemnified Party from all further obligations to the claimant.

Notwithstanding that the Corporation will undertake the investigation and defence of any Claim, an Indemnified Party will have the right to employ separate counsel with respect to any Claim and participate in the defence thereof, but the fees and expenses of such counsel will be at the expense of the Indemnified Party unless:

- (a) the employment of such counsel has been authorized in writing by the Corporation;
- (b) the Corporation has not assumed the defence within a reasonable period of time after receiving notice of such Claim;
- (c) the named parties to any such Claim include both the Corporation and the Indemnified Party and the Indemnified Party shall have been advised by counsel that there may be a conflict of interest between the Corporation and the Indemnified Party; or
- (d) the Indemnified Party has been advised in writing by counsel that there are one or more defences available to the Indemnified Party which are different from or in addition to those available to the Corporation, which makes representation by the same counsel inappropriate.

The rights accorded to the Indemnified Parties hereunder shall be in addition to any rights an Indemnified Party may have at common law or otherwise.

If for any reason the foregoing indemnification is unavailable (other than in accordance with the terms hereof) to the Indemnified Parties (or any of them) or insufficient to hold them harmless, then the Corporation shall contribute to the amount paid or payable by the Indemnified Parties as a result of such Claim in such proportion as is appropriate to reflect not only the relative benefits received by the Corporation on the one hand and the Indemnified Parties on the other hand, but also the relative fault of the Corporation and the Indemnified Parties, as well as any other equitable considerations which may be relevant; provided that the Corporation shall, in any event, contribute to the amount paid or payable by the Indemnified Parties as a result of such Claim, any amount in excess of the fees actually received by the Indemnified Parties hereunder in which case such fees and expenses will be for the Corporation's account.

The Corporation hereby acknowledges the Agent as trustee for each of the other Indemnified Parties of the Corporation's covenants under this indemnity with respect to such persons and the Agent agrees to accept such trust and to hold and enforce such covenants on behalf of such persons.

The Corporation agrees to immediately reimburse the Agent monthly for the time spent by an Indemnified Party in connection with any Claim at their reasonable per diem rates. The Corporation also agrees that if any Claim shall be brought against, or an investigation commenced in respect of the Corporation or the Corporation and the Indemnified Parties shall be required to testify, participate or respond in respect of or in connection with the performance of professional services rendered to the Corporation by an Indemnified Party hereunder or otherwise in connection with the matters referred to in this Agreement, the Agent shall have the right to employ its own counsel in connection therewith and the Corporation will immediately reimburse the Agent monthly for the time spent by an Indemnified Party in connection therewith at their reasonable per diem rates together with such fees and disbursements and reasonable out-of-pocket expenses as may be incurred, including the fees and disbursements of the Agent's counsel.

14. Expenses

Whether or not the transactions contemplated by this Agreement shall be completed, all expenses of or incidental to the Offering and all expenses of or incidental to all other matters in connection with the transaction set out in this Agreement shall be borne directly by the Corporation, including fees and expenses payable in connection with the qualification of the Offered Units, Over-Allotment Units or Over-Allotment Warrants and the Compensation Warrants for Distribution, fees and disbursements of Canadian counsel to the Agent incurred in connection with the Offering (to a maximum of \$85,000 plus disbursements and applicable taxes), fees and disbursements of United States counsel to the Agent (to a maximum of US \$15,000 plus disbursements and applicable taxes), all fees and disbursements of counsel to the Corporation and local counsel, all fees and expenses of the Corporation's Auditors, the reasonable fees and expenses relating to the marketing of the Qualified Securities (including "road shows", marketing meetings, marketing documentation and institutional investor meetings) and all reasonable out-of-pocket expenses of the Agent (including the Agent's travel expenses in connection with due diligence, marketing meetings and "road shows") and all costs incurred in connection with the preparation and printing of the Prospectus, any Prospectus Amendment, and certificates representing the Unit Shares, Warrants, Over-Allotment Shares, Over-Allotment Warrants and Compensation Warrants issued in connection with the Offering. All reasonable expenses incurred by or on behalf of the Agent and all fees and disbursements of counsel to the Agent payable pursuant to the foregoing shall be deducted from the aggregate purchase price for the Qualified Securities in accordance with Section 8.

15. Survival of Representations, Warranties, Covenants and Agreements

The representations, warranties, covenants and agreements of the Corporation contained in this Agreement and in any certificate delivered pursuant to this Agreement or in connection with the purchase and sale of the Qualified Securities shall be true and correct at the Closing Time and shall survive the purchase of the Qualified Securities and shall continue in full force and effect until the later of: (i) three years following the Closing Date; and (ii) the latest date under the Applicable Securities Laws in which a Purchaser of Qualified Securities is resident or, if the Applicable Securities Laws do not specify such a date, the latest date under the *Limitations Act, 2002* (Ontario).

16. Conflict of Interest

The Corporation acknowledges that the Agent and its affiliates carry on a range of businesses, including providing stockbroking, investment advisory, research, investment management and custodial services to clients and trading in financial products as agent or principal. It is possible that the Agent and other entities in its group that carry on those businesses may hold long or short positions in securities of companies or other entities, which are or may be involved in the transactions contemplated in this Agreement and effect transactions in those securities for their own account or for the account of their respective clients. The Corporation agrees that these divisions and entities may hold such positions and effect such transactions without regard to the Corporation's interests under this Agreement.

17. Fiduciary

The Corporation hereby acknowledges that the Agent is acting solely as agent in connection with the offer and sale of the Offered Units. The Corporation further acknowledges that the Agent is acting pursuant to a contractual relationship created solely by this Agreement entered into on an arm's length basis, and in no event do the parties intend that the Agent act or be responsible as a fiduciary to the Corporation, its management, shareholders or creditors or any other person in connection with any activity that the Agent may undertake or have undertaken in furtherance of such offer and sale of the Corporation's securities, either before or after the date hereof. The Agent hereby expressly disclaims any fiduciary or similar

obligations to the Corporation, either in connection with the transactions contemplated by this Agreement or any matters leading up to such transactions, and the Corporation hereby confirms its understanding and agreement to that effect. The Corporation and the Agent agree that they are each responsible for making their own independent judgments with respect to any such transactions and that any opinions or views expressed by the Agent to the Corporation regarding such transactions, including, but not limited to, any opinions or views with respect to the price or market for the Corporation's securities, do not constitute advice or recommendations to the Corporation. The Corporation and the Agent agree that the Agent is acting as principal and not the agent or fiduciary of the Corporation and the Agent has not, and the Agent will not assume, any advisory responsibility in favour of the Corporation with respect to the transactions contemplated hereby or the process leading thereto (irrespective of whether the Agent has advised or is currently advising the Corporation on other matters). The Corporation hereby waives and releases, to the fullest extent permitted by law, any claims that the Corporation may have against the Agent with respect to any breach or alleged breach of any fiduciary duty to the Corporation in connection with the transactions contemplated by this Agreement.

18. Notice

Unless otherwise expressly provided in this Agreement, any notice or other communication to be given under this Agreement (a "**Notice**") shall be in writing addressed as follows:

If to the Corporation, addressed and sent to:

Titan Medical Inc.
170 University Avenue, Suite 1000
Toronto, Ontario M5H 3B3

Attention: David J. McNally, President and Chief Executive Officer
Email: david.mcnally@titanmedicalinc.com

with a copy (which shall not constitute notice) to:

Borden Ladner Gervais LLP
Bay Adelaide Centre, East Tower
22 Adelaide Street West, Suite 3400
Toronto, Ontario M5H 4E3

Attention: Manoj Pundit
Fax: (416) 367-6749
Email: mpundit@blg.com

If to the Agent, addressed and sent to:

Bloom Burton Securities Inc.
65 Front Street East, Suite 300
Toronto, Ontario M5E 1B5

Attention: Michael Pollard
Email: mpollard@bloomburton.com

with a copy (which shall not constitute notice) to:

Baker & McKenzie LLP
Brookfield Place, Bay/Wellington Tower
181 Bay Street, Suite 2100
Toronto, Ontario M5J 2T3

Attention: David Palumbo
Fax: (416) 863-6875
Email: david.palumbo@bakermckenzie.com

or to such other address as any of the persons may designate by Notice given to the others.

Each Notice shall be personally delivered to the addressee or sent by fax or email to the addressee and: (i) a Notice which is personally delivered shall, if delivered on a Business Day, be deemed to be given and received on that day and, in any other case, be deemed to be given and received on the first Business Day following the day on which it is delivered; and (ii) a Notice which is sent by fax or email shall be deemed to be given and received on the first Business Day following the day on which it is sent, provided that the sender has evidence of a successful transmission, such as a fax confirmation or email receipt confirmation.

19. Entire Agreement

The provisions herein contained constitute the entire agreement between the parties relating to the Offering and supersede all previous communications, representations, understandings and agreements between the parties, including the Engagement Letter, with respect to the subject matter hereof whether verbal or written.

20. Press Releases

Any press release connected with the Offering issued by the Corporation shall be issued only after consultation with the Agent and in compliance with Applicable Securities Laws and the U.S Securities Act. If the Offering is successfully completed, the Agent shall be permitted to publish, at the Agent's expense, such advertisements or announcements relating to the services provided hereunder in such newspaper or other publications as it may consider appropriate as long as such advertisement or announcement complies with Applicable Securities Laws.

21. Funds

Unless otherwise specified, all funds referred to in this Agreement shall be in Canadian dollars.

22. Time of the Essence

Time shall be of the essence of this Agreement.

23. Further Assurances

Each of the parties hereto shall cause to be done all such acts and things or execute or cause to be executed all such documents, agreements and other instruments as may reasonably be necessary or desirable for the purposes of carrying out the provisions and intent of this Agreement.

24. Assignment

Except as contemplated herein, no party hereto may assign this Agreement or any part hereof without the prior written consent of the other party hereto. Subject to the foregoing, this Agreement shall enure to the benefit of, and shall be binding upon, the Corporation and the Agent and their successors and legal representatives, and nothing expressed or mentioned in this Agreement is intended or shall be construed to give any other person any legal or equitable right, remedy or claim under or in respect of this Agreement, or any provisions contained in this Agreement, this Agreement and all conditions and provisions of this Agreement being intended to be and being for the sole and exclusive benefit of such persons and for the benefit of no other person except that the covenants and indemnities of the Corporation set out under the heading "Indemnity and Contribution" shall also be for the benefit of the Indemnified Party.

25. Severability

If any provision of this Agreement is determined to be void or unenforceable in whole or in part, it shall be deemed not to affect or impair the validity of any other provision of this Agreement and such void or unenforceable provision shall be severable from this Agreement.

26. Singular and Plural, etc.

Unless otherwise expressly provided in this Agreement, words importing only the singular number include the plural and *vice versa* and words importing gender include all genders. References to "Sections", "subsections" or "subparagraphs" are to the appropriate section, subsection or subparagraph of this Agreement. References to any agreement or instrument, including this Agreement, are deemed to be references to the agreement or instrument as varied, amended, modified, supplemented or replaced from time to time, references herein to "including" shall mean "including, without limitation", and any specific references herein to any legislation or enactment are deemed to be references to such legislation or enactment as the same may be amended or replaced from time to time.

27. Governing Law

This Agreement shall be governed by and construed in accordance with the laws of the Province of Ontario and the laws of Canada applicable therein and the parties hereto irrevocably attorn to the jurisdiction of the courts of such province.

28. Language

The parties hereto confirm their express wish that this Agreement and all documents and agreements directly or indirectly relating thereto be drawn up in the English language.

Les parties reconnaissent leur volonté express que la présente convention ainsi que tous les documents et contrats s'y rattachant directement ou indirectement soient rédigés en anglais.

29. Counterparts

This Agreement may be executed by any one or more of the parties to this Agreement in any number of counterparts, each of which shall be deemed to be an original, but all such counterparts shall together constitute one and the same agreement.

30. Facsimile and Electronic Transmission

The Corporation and the Agent shall be entitled to rely on delivery by facsimile or other electronic means of an executed copy of this Agreement and acceptance by the Corporation and the Agent of that delivery shall be legally effective to create a valid and binding agreement between the Corporation and the Agent in accordance with the terms of this Agreement.

[REMAINDER OF PAGE INTENTIONALLY LEFT BLANK]

If the foregoing is in accordance with your understanding and is agreed to by you, please signify your acceptance by executing this letter where indicated below and returning the same to the Agent upon which this letter as so accepted shall constitute an agreement between us.

Yours very truly,

BLOOM BURTON SECURITIES INC.

By: *(signed) "Jolyon Burton"*
Authorized Officer

The foregoing offer is accepted and agreed to as of the date first above written.

TITAN MEDICAL INC.

By: *(signed) "Stephen Randall"*
Authorized Officer

SCHEDULE "A"

CONVERTIBLE SECURITIES

STOCK OPTIONS GRANTED AND OUTSTANDING OCTOBER 31, 2019

Canadian Dollar Denominated Options			
Exercise Price (CDN)	Number Outstanding	Weighted-average remaining contractual life (years)	Options Exercisable
\$3.28	31,498	5.92	31,498
\$4.50	18,936	3.53	18,936
\$4.54	743,122	7.16	349,909
\$4.80	3,040	0.96	3,040
\$7.49	5,590	5.77	5,590
\$9.00	11,481	5.77	11,481
\$9.60	1,105	1.02	1,105
\$11.70	6,667	1.19	6,667
\$12.00	1,948	1.18	1,948
\$30.00	28,260	1.90	28,260
\$30.60	2,096	1.23	2,096
\$32.40	810	1.33	810
\$41.70	658	0.21	658
\$45.30	560	0.87	560
\$51.60	5,266	0.69	5,268
	861,037	4.37	467,826
US Dollar Denominated Options			
Exercise Price (USD)	Number Outstanding	Weighted-average remaining contractual life (years)	Options Exercisable
\$1.55	50,349	2.22	50,349
\$2.20	469,420	6.79	2,165
\$3.40	294,273	6.62	197,273
\$3.72	40,000	2.95	-
	854,042	5.32	249,787
Total	1,715,079	5.32	717,613

WARRANTS

Below is a table that sets out the various series of warrants of the Corporation adjusted in accordance with the Corporation's consolidation of its Common Shares on the basis of one post-consolidation Common Share for 30 pre-consolidation Common Shares effective June 19, 2018. There is no assurance that any warrants will be exercised prior to their expiry.

AS AT OCTOBER 31, 2019

	Issue Date	Expiry Date	Number Issued	Number Outstanding	Exercise Price (US\$)	Exercise Price (CDN\$)
			Note 1	Note 1		
TMD.W.T.F	16-Nov-15	16-Nov-20	233,740	233,740		48.00
TMD.W.T.G	12-Feb-16	12-Feb-21	389,027	386,694		30.00
TMD.W.T.G	23-Feb-16	23-Feb-21	58,226	58,226		30.00
TMD.W.T.H	31-Mar-16	31-Mar-21	501,831	501,831		36.00
TMD.W.T.H	14-Apr-16	14-Apr-21	75,275	75,275		36.00
TMD.W.T.I	20-Sep-16	20-Sep-21	569,444	569,444		22.50
TMD.W.T.I	27-Oct-16	27-Oct-21	67,667	67,667		22.50
Not Listed	16-Mar-17	16-Mar-21	357,787	355,253		15.00
Not Listed	29-Jun-17	29-Jun-22	1,612,955	75,810		6.00
Not Listed	21-Jul-17	29-Jun-22	370,567	370,567		6.00
Not Listed	24-Aug-17	24-Aug-22	563,067	563,067		6.00
Not Listed	5-Dec-17	5-Dec-22	1,533,333	1,533,333		18.00
Not Listed	10-Apr-18	10-Apr-23	1,126,665	1,126,665		10.50
Not Listed	10-May-18	10-Apr-23	168,889	168,889		10.50
Not Listed	10-Aug-18	10-Aug-23	7,679,574	6,661,068	3.20	
Not Listed	21-Mar-19	21-Mar-24	8,455,882	8,455,882	4.00	
			23,763,929	21,203,411		

* The exercise price of the August 10, 2018 and the March 21, 2019 warrants are denominated in USD.

BROKER WARRANTS

AS AT OCTOBER 31, 2019

Issue Date	Expiry Date	Number Issued *	Number Outstanding *	Exercise Price (US\$)	Exercise Price (CDN\$)
5-Dec-17	5-Dec-19	105,350	105,350		15.00
10-Apr-18	10-Apr-20	78,867	78,867		9.00
10-May-18	10-May-20	10,928	10,928.00		9.00
10-Aug-18	10-Aug-20	537,570	537,570.00	2.50	
21-Mar-19	21-Mar-24	591,911	591,911	3.40	
		1,324,626	1,324,626		

* After giving effect to the 30:1 Share Consolidation June 2018

SCHEDULE "B"
CORPORATION IP

Patents

<u>Region</u>	<u>Application No.</u>	<u>IP Right No.</u>
AU	2017210349	
CA	3004277	
CA	2984092	
CA	2986770	
CA	3010863	
CA	3010896	
CA	3027080	
CA	3034919	
CN	201580064733.4	
CN	201580079340.0	
CN	201680041417.X	
CN	201680078615.3	
CN	201780005500.6	
CN	201910026625.8	
EP	11876682.3	
EP	17171068.4	
EP	15891039.8	
EP	16810648.2	
EP	16838146.5	
EP	17740924.0	
EP	18213627.5	
EP	19170809.8	
IN	201717021787	
IN	11772/DELNP/2015	
JP	2018-529653	
JP	2018-530517	
JP	2018-000231	
JP	2019-18850	
KR	2018-7019407	
KR	2018-7023785	
US	16/185,788	
US	14/262,221	
US	14/279,828	
US	15/570,286	
US	16/176,221	
US	16/411,537	
US	15/737,245	
US	15/744,014	
US	16/060,905	
US	15/780,207	
US	15/780,593	
US	16/084,368	
US	16/085,152	
US	15/485,720	

US	16/093,918	
US	15/494,740	
US	15/686,571	
US	15/566,525	
US	15/846,986	
US	15/893,195	
US	16/110,883	
US	16/156,651	
US	16/174,602	
US	16/174,649	
US	16/174,620	
US	29/668,353	
US	16/186,234	
US	16/235,071	
US	16/235,288	
US	16/235,246	
US	16/273,442	
US	16/299,834	
US	16/415,303	
US	16/419,743	
US	16/419,696	
US	16/427,164	
US	16/432,231	
US	16/435,170	
US	16/449,095	
US	16/453,930	
US	16/453,948	
US	16/453,939	
US	16/453,933	
US	16/453,910	
US	16/455,192	
US	16/512,682	
US	16/514,782	
US	16/520,751	
US	16/531,534	
US	16/539,233	
US	16/598,751	
WO	PCT/US18/45646	
WO	PCT/US19/55255	
WO	PCT/US19/58170	
WO	PCT/CA19/51493	
AU	2015362021	2015362021
CA	2913943	2913943
CA	2968609	2968609
CA	2973227	2973227
CA	2973235	2973235
CA	2982615	2982615
CA	2996014	2996014
CN	201380078618	105431106
EP	11874984.5	2773277
EP	13887243.7	2996613

EP	15866790.7	3206842
EP	16734868.9	3242774
EP	16734867.1	3242773
JP	2016-520200	6274630
JP	2017-531374	6433595
KR	20177017983	1965678
US	09/474,924	6,358,196
US	13/494,852	8,768,509
US	16/160,200	10,357,319
US	15/211,295	9,681,922
US	14/831,045	9,421,068
US	14/302,723	9,149,339
US	12/449,779	8,792,688
US	12/227,582	8,224,485
US	12/459,292	8,347,754
US	12/583,351	8,332,072
US	12/655,675	8,306,656
US	13/106,306	9,033,998
US	13/660,615	8,930,027
US	13/660,328	9,763,739
US	14/261,614	9,724,162
US	14/899,768	10,278,683
US	15/552,993	10,368,909
US	15/754,566	10,357,147
US	15/294,477	9,629,688
US	15/442,070	9,925,014
US	15/490,098	10,130,434
US	15/593,000	10,292,760
US	15/542,356	10,327,856
US	15/542,398	10,159,536
US	15/677,307	10,284,838
US	15/690,035	10,363,064
US	15/961,507	10,058,396
US	16/053,232	10,245,113
US	16/156,625	10,398,287
US	16/174,646	10,426,561

Trade-marks

<u>Region</u>	<u>Serial/Application No.</u>	<u>Registration No.</u>
US	88/444,220	
US	88/444,226	
US	88/444,228	
US	87/222,823	
US	87/222,834	
CA	1807214	TMA1060879
CA	1807220	
CN	27681249	
CN	27681250	
CN	27681251	
CN	27681252	
CN	27681253	
CN	27681254	
CN	13580910	13580910
CN	13580908	13580908
CN	13580907	13580907
CN	13580905	13580905

SCHEDULE “C”

LICENSOR CONTRACTS

Corporation as Licensor

- Synergist Medical Inc., a predecessor to the Corporation, entered into a patent agreement with Reiza Rayman on May 12, 2008 pursuant to which Synergist Medical Inc. granted to Rayman certain exclusive rights in and to U.S. Patent No. 6,358,196.
- Synergist Medical Inc., a predecessor to the Corporation, entered into a patent agreement with John D. Unsworth on May 1, 2008 pursuant to which Synergist Medical Inc. granted to Unsworth certain exclusive rights in and to U.S. Patent Nos. 8,224,485, 8,768,509, 8,792,688, 9,421,068, 9,681,922 and 10,130,434, 10,357,319 and U.S. Patent Application No. 16/455,192.