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

**FORM 8-K**

**CURRENT REPORT PURSUANT  
TO SECTION 13 OR 15(d) OF THE  
SECURITIES EXCHANGE ACT OF 1934**

Date of Report (Date of earliest event reported): **March 27, 2019**

**Precision Therapeutics Inc.**

(Exact name of registrant as specified in charter)

**Delaware**  
(State or other jurisdiction  
of incorporation)

**001-36790**  
(Commission  
File Number)

**33-1007393**  
(IRS Employer  
Identification No.)

**2915 Commers Drive, Suite 900**  
**Eagan, Minnesota 55121**  
(Address of principal executive offices)

**(651) 389-4800**  
(Registrant's telephone number, including area code)

**Not Applicable**  
(Former name or former address, if changed from last report)

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

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

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

Emerging growth company

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

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

**Registered Offering of Common Stock and Warrants**

On March 27, 2019, Precision Therapeutics Inc. (“Precision” or the “Company”), entered into a Placement Agency Agreement (the “Placement Agency Agreement”) pursuant to which Dawson James Securities, Inc. served as placement agent on a “best efforts” basis (the “Placement Agent”) for a registered direct offering in which the Company sold 1,478,750 shares of the Company’s common stock (“Common Stock”) and warrants to purchase up to 739,377 shares of Common Stock (the “Warrants”) (the “Offering”). The Common Stock and Warrants were sold in units (the “Units”), with each Unit consisting of one share of Common Stock and a Warrant to purchase 0.5 of a share of our Common Stock at an exercise price of \$1.00 per whole share. The Warrants are exercisable at any time on or after the date of issuance and expire on the fifth anniversary of issuance.

The Units were sold at a price of \$0.80 per Unit, resulting in gross proceeds to the Company of \$1.183 million, before deducting placement agent fees and estimated offering expenses. The net offering proceeds to the Company, after deducting the placement agent’s fees and other estimated offering expenses payable by the Company, are expected to be approximately \$1.02 million.

The closing of the Offering occurred on March 29, 2019.

Pursuant to the Placement Agency Agreement, the Company agreed to pay the Placement Agent a cash fee equal to 8% of the aggregate purchase price of the Units sold. The Company also agreed to reimburse the Placement Agent for its expenses in connection with this offering, up to \$30,000, and agreed to reimburse the placement agent for its reasonable “blue sky” fees and expenses, of \$5,000. The Placement Agency Agreement contains indemnification, representations, warranties, conditions precedent to closing and other provisions customary for transactions of this nature.

Also pursuant to the Placement Agency Agreement, the Company, in connection with the offering, entered into Unit Purchase Option agreements, dated as of March 29, 2019 (the “Unit Purchase Options”), pursuant to which the Company granted the Placement Agent or its assigns the right to purchase from the Company up to an aggregate of 73,937 Units (which represents 5% of the Units sold to investors in the offering) at an exercise price equal to 125% of the public offering price of the Units in the offering, or \$1.00 per Unit. The Unit Purchase Options will expire on March 27, 2024.

The securities in the Offering were offered and sold pursuant to the Company’s “shelf” registration statement (File No. 333-213766), which was declared effective by the United States Securities and Exchange Commission on October 4, 2016. A copy of the Maslon LLP’s legal opinion relating to the legality of the issuance and sale of the securities in the Offering is attached as Exhibit 5.1 to this report.

The Placement Agency Agreement, form of Warrant and form of Unit Purchase Option agreement are filed as Exhibits 1.1, 4.1 and 4.2, respectively, and are incorporated into this Item 1.01 by reference. The foregoing description of such documents is qualified in its entirety by reference to the full text thereof. The representations, warranties and covenants contained in the Placement Agency Agreement were made only for purposes of such agreements and as of specific dates, were solely for the benefit of the parties to such agreements. The press releases announcing the Offering and the pricing of the Offering are attached hereto as Exhibits 99.1 and 99.2, respectively, and are incorporated herein by reference.

**Item 9.01 Financial Statements and Exhibits.**

<b>Exhibit No.</b>	<b>Description</b>
<a href="#">1.1</a>	<a href="#">Placement Agency Agreement</a>
<a href="#">4.1</a>	<a href="#">Form of Warrant</a>
<a href="#">4.2</a>	<a href="#">Form of Unit Purchase Option</a>
<a href="#">5.1</a>	<a href="#">Opinion of Maslon LLP</a>
<a href="#">23.1</a>	<a href="#">Consent of Maslon LLP (included in Exhibit 5.1)</a>
<a href="#">99.1</a>	<a href="#">Press release dated March 26, 2019</a>
<a href="#">99.2</a>	<a href="#">Press release dated March 27, 2019</a>

**SIGNATURES**

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

Date: April 2, 2019

PRECISION THERAPEUTICS INC.

By: /s/ Bob Myers  
Bob Myers  
Chief Financial Officer



## EXHIBIT INDEX

<b>Exhibit No.</b>	<b>Description</b>
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## PLACEMENT AGENCY AGREEMENT

Dawson James Securities, Inc.  
1 North Federal Highway  
Boca Raton, Florida 33432

March 27, 2019

Ladies and Gentlemen:

This letter (this "Agreement") constitutes the agreement between Precision Therapeutics Inc., a Delaware corporation (the "Company") and Dawson James Securities, Inc. ("Dawson" or the "Placement Agent") pursuant to which Dawson shall serve as the exclusive placement agent (the "Services") for the Company, on a reasonable "best efforts" basis, in connection with the proposed offer and placement (the "Offering") by the Company of its Securities (as defined Section 3 of this Agreement). The Company expressly acknowledges and agrees that Dawson's obligations hereunder are on a reasonable "best efforts" basis only and that the execution of this Agreement does not constitute a commitment by Dawson to purchase the Securities and does not ensure the successful placement of the Securities or any portion thereof or the success of Dawson placing the Securities.

1. Appointment of Dawson James Securities, Inc. as Exclusive Placement Agent.

On the basis of the representations, warranties, covenants and agreements of the Company herein contained, and subject to all the terms and conditions of this Agreement, the Company hereby appoints the Placement Agent as its exclusive placement agent in connection with a distribution of its Securities to be offered and sold by the Company pursuant to a registration statement filed under the Securities Act of 1933, as amended (the "Securities Act") on Form S-3 (File No. 333-213766), and Dawson agrees to act as the Company's exclusive Placement Agent. Pursuant to this appointment, the Placement Agent will solicit offers for the purchase of or attempt to place all or part of the Securities of the Company in the proposed Offering. Until the final closing or earlier upon termination of this Agreement pursuant to Section 5 hereof, the Company shall not, without the prior written consent of the Placement Agent, solicit or accept offers to purchase the Securities other than through the Placement Agent. The Company acknowledges that the Placement Agent will act as an agent of the Company and use its reasonable "best efforts" to solicit offers to purchase the Securities from the Company on the terms, and subject to the conditions, set forth in the Prospectus (as defined below). The Placement Agent shall use commercially reasonable efforts to assist the Company in obtaining performance by each Purchaser (as defined herein) whose offer to purchase Securities has been solicited by the Placement Agent, but the Placement Agent shall not, except as otherwise provided in this Agreement, be obligated to disclose the identity of any potential Purchaser or have any liability to the Company in the event any such purchase is not consummated for any reason. Under no circumstances will the Placement Agent be obligated to underwrite or purchase any Securities for its own account and, in soliciting purchases of the Securities, the Placement Agent shall act solely as an agent of the Company. The Services provided pursuant to this Agreement shall be on an "agency" basis and not on a "principal" basis.

The Placement Agent will solicit offers for the purchase of the Securities in the Offering at such times and in such amounts as the Placement Agent deems advisable. The Company shall have the sole right to accept offers to purchase Securities and may reject any such offer, in whole or in part. The Placement Agent may retain other brokers or dealers to act as sub-agents on its behalf in connection with the Offering and may pay any sub-agent a solicitation fee with respect to any Securities placed by it. The Company and Placement Agent shall negotiate the timing and terms of the Offering and acknowledge that the Offering and the provision of Placement Agent services related to the Offering are subject to market conditions and the receipt of all required related clearances and approvals.

2. Fees; Expenses; Other Arrangements.

A. Placement Agent's Fee. As compensation for services rendered, the Company shall pay to the Placement Agent in cash by wire transfer in immediately available funds to an account or accounts designated by the Placement Agent an amount (the "Placement Fee") equal to eight percent (8.0%) of the aggregate gross proceeds received by the Company from the sale of the Securities, at the closing (the "Closing") and the date on which the Closing occurs, the "Closing Date"; and the Company shall issue to the Placement Agent or its designees at the Closing a five-year unit purchase option to purchase such number of Units (as defined in Section 3) equal to 5.0% of the Units sold in this Offering at an exercise price of \$1.00 per unit (125% of the price per Unit sold to Purchaser in the Offering), which unit purchase option shall be exercisable at any time during the period commencing 180 days from the commencement of sales in the Offering (the "Effective Date") (the "Placement Agent Unit Purchase Option" and together with the shares of Common Stock and Warrants (and Common Stock underlying such Warrants) underlying the Placement Agent Unit Purchase Option, the "Placement Agent Securities"). The Placement Agent may deduct from the net proceeds of the Offering payable to the Company on the Closing Date the Placement Fee set forth herein to be paid by the Company to the Placement Agent.

B. Offering Expenses. The Company will be responsible for and will pay all expenses relating to the Offering, including, without limitation, (a) all filing fees and expenses relating to the registration of the Securities with the Commission; (b) all FINRA Public Offering filing fees; (c) all fees and expenses relating to the listing of the Company's common stock on the NASDAQ Stock Market; (d) all fees, expenses and disbursements relating to the registration or qualification of the Securities under the "blue sky" securities laws of such states and other jurisdictions as Dawson may reasonably designate (including, without limitation, all filing and registration fees, and the reasonable fees and disbursements of "blue sky" counsel, which shall be Dawson's counsel and which fee shall be \$5,000); (e) all fees, expenses and disbursements relating to the registration, qualification or exemption of the Securities under the securities laws of such foreign jurisdictions as Dawson may reasonably designate; (f) the costs of all mailing and printing of the Offering documents; (g) transfer and/or stamp taxes, if any, payable upon the transfer of Securities from the Company to Investors; (h) the fees and expenses of the Company's accountants; and (i) "road show" expenses, diligence expenses and legal fees of Dawson's counsel not to exceed in the aggregate \$30,000. The Placement Agent may deduct from the net proceeds of the Offering payable to the Company on the Closing Date the expenses set forth herein to be paid by the Company to the Placement Agent, provided, however, that in the event that the Offering is terminated, the Company agrees to reimburse the Placement Agent to the extent required by Section 5 hereof.

C. Tail Financing; Right of First Refusal. The Placement Agent shall be entitled to fees per Section 2.A. of this Agreement with respect to any public or private offering or other financing or capital-raising transaction of any kind ("Tail Financing") to the extent that such Tail Financing is provided to the Company by any investors that the Placement Agent has introduced to the Company during the term of the Placement Agent's engagement for this Offering, if such Tail Financing is consummated at any time within the 12-month period following the Closing Date. If the Offering is completed, for a period of 24 months from the closing date of such Offering, the Company grants Dawson the right of first refusal to act as lead managing underwriter or book runner, or as lead placement agent, for any and all future equity, equity-linked or debt (excluding commercial bank debt) offerings during such period, of the Company, or any successor to or any subsidiary of the Company. Notwithstanding the foregoing, in the event of a public or private sale of securities during the foregoing 24-month period, unless Dawson declined to participate under its right of first refusal, Dawson shall be entitled to receive as its compensation at least 50% of the compensation payable to the underwriters or placement agents. During the 24-month period described above, if the Company makes any equity, equity-linked or debt (excluding commercial bank debt) offerings, unless Dawson declined to participate under its right of first refusal, Dawson shall be permitted to participate at a 50% level as a placement agent or underwriter for such offering.

### 3. Description of the Offering.

The Securities to be offered directly to various investors (each, an "Investor" or "Purchaser" and, collectively, the "Investors" or the "Purchasers") in the Offering shall consist of a combination of (i) one share of the Company's common stock ("Common Stock" or "Shares"); and (ii) warrants to purchase 0.5 of a share of Common Stock at an exercise price of \$1.00 per whole share (the "Warrants"). The Common Stock and the Warrants will be sold as units (the "Units", with each Unit consisting of one Share and a Warrant to purchase 0.5 of a Share). The Common Stock and Warrants shall be referred to as the "Securities". The purchase price for one Unit shall be \$0.80 per Unit (the "Unit Purchase Price"). If the Company shall default in its obligations to deliver Securities to a Purchaser whose offer it has accepted and who has tendered payment, the Company shall indemnify and hold the Placement Agent harmless against any loss, claim, damage or expense arising from or as a result of such default by the Company under this Agreement.

4. Delivery and Payment: Closing.

Settlement of the Securities purchased by an Investor shall be made by 5:00 p.m. on the Closing Date by wire transfer in federal (same day) funds, payable to the order of the Company after delivery of the certificates (in form and substance satisfactory to the Placement Agent) or via electronic delivery. On the Closing Date, the Shares and Warrants to which the Closing relates shall be delivered through such means as the parties may hereafter agree. The Securities shall be registered in such name or names and in such authorized denominations as the Placement Agent may request in writing at least one Business Day prior to the Closing Date. The term "Business Day" means any day other than a Saturday, a Sunday or a legal holiday or a day on which banking institutions are authorized or obligated by law to close in New York, New York.

The Closing shall occur at such place as shall be agreed upon by the Placement Agent and the Company. In the absence of an agreement to the contrary, each Closing shall take place at the offices of Schiff Hardin LLP, 901 K Street, NW, Suite 700, Washington, DC 20001. Deliveries of the documents with respect to the purchase of the Securities, if any, shall be made at the offices of Schiff Hardin, LLP, 901 K Street, NW, Suite 700, Washington, DC 20001 on the Closing Date. All actions taken at a Closing shall be deemed to have occurred simultaneously.

5. Term and Termination of Agreement.

The term of this Agreement will commence upon the execution of this Agreement and will terminate at the earlier of the Closing of the Offering or 11:59 p.m. (New York Time) on the fifth Business Day after the date hereof. Notwithstanding anything to the contrary contained herein, any provision in this Agreement concerning or relating to confidentiality, indemnification, contribution, advancement, the Company's representations and warranties and the Company's obligations to pay fees and reimburse expenses will survive any expiration or termination of this Agreement. If any condition specified in Section 8 is not satisfied when and as required to be satisfied, this Agreement may be terminated by the Placement Agent by notice to the Company at any time on or prior to a Closing Date, which termination shall be without liability on the part of any party to any other party, except that those portions of this Agreement specified in Section 19 shall at all times be effective and shall survive such termination. Notwithstanding anything to the contrary in this Agreement, in the event that this Agreement shall not be carried out for any reason whatsoever, within the time specified herein or any extensions thereof pursuant to the terms herein, the Company shall be obligated to pay to the Placement Agent the expenses provided for in Section 2.B. above and upon demand the Company shall pay the full amount thereof to the Placement Agent.

6. Permitted Acts.

Nothing in this Agreement shall be construed to limit the ability of the Placement Agent, its officers, directors, employees, agents, associated persons and any individual or entity "controlling," controlled by," or "under common control" with the Placement Agent (as those terms are defined in Rule 405 under the Securities Act) to conduct its business including without limitation the ability to pursue, investigate, analyze, invest in, or engage in investment banking, financial advisory or any other business relationship with any individual or corporation, partnership, trust, incorporated or unincorporated association, joint venture, limited liability company, joint stock company, government (or an agency or subdivision thereof) or other entity of any kind.

7. Representations, Warranties and Covenants of the Company.

As of the date and time of the execution of this Agreement, the Closing Date and the Initial Sale Time (as defined herein), the Company represents, warrants and covenants to the Placement Agent, other than as disclosed in any of its filings with the Securities and Exchange Commission (the "Commission"), that:

A. Registration Matters.

- i. The Company has filed with the Commission a registration statement on Form S-3 (File No. 333-213766) including a related prospectus, for the registration of certain securities (the “Shelf Securities”), including the Shares, the Warrants, the Common Stock underlying the Warrants (the “Warrants Shares”) under the Securities Act, and the rules and regulations thereunder (the “Securities Act Regulations”). The registration statement has been declared effective under the Securities Act by the Commission. The “Registration Statement,” as of any time, means such registration statement as amended by any post-effective amendments thereto to such time, including the exhibits and any schedules thereto at such time, the documents incorporated or deemed to be incorporated by reference therein at such time pursuant to Form S-3 under the Securities Act and the documents otherwise deemed to be a part thereof as of such time pursuant to Rule 430A (“Rule 430A”) or Rule 430B under the Securities Act Regulations (“Rule 430B”); provided, however, that the “Registration Statement” without reference to a time means such registration statement as amended by any post-effective amendments thereto as of the time of the first contract of sale for the Securities, which time shall be considered the “new effective date” of such registration statement with respect to the Securities within the meaning of paragraph (f)(2) of Rule 430B, including the exhibits and schedules thereto as of such time, the documents incorporated or deemed incorporated by reference therein at such time pursuant to Form S-3 under the Securities Act and the documents otherwise deemed to be a part thereof as of such time pursuant to Rule 430A or Rule 430B. Any registration statement filed pursuant to Rule 462(b) of the Securities Act Regulations is hereinafter called the “Rule 462(b) Registration Statement,” and after such filing the term “Registration Statement” shall include the Rule 462(b) Registration Statement. The prospectus covering the Shelf Securities in the form first used to confirm sales of the Securities (or in the form first made available to the Placement Agent by the Company to meet requests of purchasers pursuant to Rule 173 under the Securities Act) is hereinafter referred to as the “Base Prospectus.” The Base Prospectus, as supplemented by the prospectus supplement specifically related to the Securities in the form first used to confirm sales of the Securities (or in the form first made available to the Placement Agent by the Company to meet requests of purchasers pursuant to Rule 173 under the Securities Act), is hereinafter referred to, collectively, as the “Prospectus,” and the term “Preliminary Prospectus” means any preliminary form of the Prospectus, including any preliminary prospectus supplement specifically related to the Securities filed with the Commission by the Company with the consent of the Placement Agent.
- ii. All references in this Agreement to financial statements and schedules and other information which is “contained,” “included” or “stated” (or other references of like import) in the Registration Statement, any Preliminary Prospectus or the Prospectus shall be deemed to include all such financial statements and schedules and other information incorporated or deemed incorporated by reference in the Registration Statement, such Preliminary Prospectus or the Prospectus, as the case may be, prior to the execution and delivery of this Agreement; and all references in this Agreement to amendments or supplements to the Registration Statement, any Preliminary Prospectus or the Prospectus shall be deemed to include the filing of any document under the Securities Exchange Act of 1934, as amended (the “Exchange Act”), and the rules and regulations thereunder (the “Exchange Act Regulations”), incorporated or deemed to be incorporated by reference in the Registration Statement, such Preliminary Prospectus or the Prospectus, as the case may be, at or after the execution and delivery of this Agreement.
- iii. The term “Disclosure Package” means (i) the Preliminary Prospectus, as most recently amended or supplemented immediately prior to the Initial Sale Time (as defined herein), (ii) the Issuer Free Writing Prospectuses (as defined below), if any, identified in Schedule I hereto, and (iii) any other Free Writing Prospectus (as defined below) that the parties hereto shall hereafter expressly agree to treat as part of the Disclosure Package.
- iv. The term “Issuer Free Writing Prospectus” means any issuer free writing prospectus, as defined in Rule 433 of the Securities Act Regulations. The term “Free Writing Prospectus” means any free writing prospectus, as defined in Rule 405 of the Securities Act Regulations.
- v. Neither the Company nor any of the Subsidiaries (as defined herein), nor any of their respective affiliates, officers, directors or, to the Company’s knowledge, any beneficial owner of 5% or more of the Company’s equity securities, (i) is required to register as a “broker” or “dealer” in accordance with the provisions of the Exchange Act or the Exchange Act Regulations, or (ii) has any direct or indirect affiliation or association with any member firm of Financial Industry Regulatory Authority, Inc. (“FINRA”) (as determined in accordance with the rules and regulations of FINRA).



- vi. Any Preliminary Prospectus when filed with the Commission, and the Registration Statement as of each effective date and as of the date hereof, complied or will comply, and the Prospectus and any further amendments or supplements to the Registration Statement, any Preliminary Prospectus or the Prospectus will, when they become effective or are filed with the Commission, as the case may be, comply, in all material respects, with the requirements of the Securities Act and the Securities Act Regulations; and the documents incorporated by reference in the Registration Statement, any Preliminary Prospectus or the Prospectus complied, and any further documents so incorporated will comply, when filed with the Commission, in all material respects to the requirements of the Exchange Act and Exchange Act Regulations.
- vii. The issuance by the Company of the Securities and the Warrant Shares has been registered under the Securities Act. The Securities and Warrant Shares will be issued pursuant to the Registration Statement and each of the Securities and Warrant Shares will be freely transferable and freely tradable by each of the Investors without restriction, unless otherwise restricted by applicable law or regulation. The Company is eligible to use Form S-3 under the Securities Act and it meets the transaction requirements with respect to the aggregate market value of the Securities and Warrant Shares being sold pursuant to this offering.

B. Stock Exchange Listing. The Warrant Shares and Common Stock are approved for listing on the NASDAQ Capital Market (the “Exchange”) and the Company has taken no action designed to, or likely to have the effect of, delisting the shares of Common Stock from the Exchange, nor has the Company received any notification that the Exchange is contemplating terminating such listing, except as disclosed in the SEC Reports (as defined below).

C. No Stop Orders, etc. Neither the Commission nor, to the Company's knowledge, any state regulatory authority has issued any order preventing or suspending the use of the Registration Statement, any Preliminary Prospectus or the Prospectus or has instituted or, to the Company's knowledge, threatened to institute, any proceedings with respect to such an order. The Company has complied with each request (if any) from the Commission for additional information.

D. Subsidiaries. Each of the Company's subsidiaries have been duly incorporated and are validly existing as entities in good standing under the laws of jurisdictions of their respective organization, with power and authority to own, lease and operate their respective properties and conduct their respective businesses as described in the Preliminary Prospectus, and have been duly qualified as foreign corporations for the transaction of business and are in good standing under the laws of each other jurisdictions in which they own or lease properties or conduct any business so as to require such qualification, except where the failure so to qualify or be in good standing would not have a Material Adverse Change (as defined below); all of the issued and outstanding capital stock (or other ownership interests) of such subsidiaries has been duly and validly authorized and issued, is fully paid and non-assessable and is owned, directly and indirectly, by the Company free and clear of any security interest, mortgage, pledge, lien, encumbrance, claim or equity. Unless otherwise set forth, all references in this Section 7 to the “Company” shall include references to all such subsidiaries.

E. Disclosures in Registration Statement.

i. Compliance with Securities Act and 10b-5 Representation.

(a) Each of the Registration Statement and any post-effective amendment thereto, at the time it became effective, complied in all material respects with the requirements of the Securities Act and the Securities Act Regulations. The Preliminary Prospectus and the Prospectus, at the time each was or will be filed with the Commission, complied or will comply in all material respects with the requirements of the Securities Act and the Securities Act Regulations. The Preliminary Prospectus delivered to the Placement Agent for use in connection with this Offering and the Prospectus was or will be identical to the electronically transmitted copies thereof filed with the Commission pursuant to EDGAR, except to the extent permitted by Regulation S-T.

(b) Neither the Registration Statement nor the Preliminary Prospectus as of 8:00 a.m. (Eastern time) on the date of this Agreement (the “Initial Sale Time”), and at the Closing Date, contained, contains or will contain an untrue statement of a material fact or omitted, omits or will omit to state a material fact required to be stated therein or necessary to make the statements therein not misleading; provided, however, that this representation and warranty shall not apply to statements made or statements omitted in reliance upon and in conformity with written information furnished to the Company with respect to the Placement Agent by the Placement Agent expressly for use in the Registration Statement or any amendment thereof or supplement thereto. The parties acknowledge and agree that such information provided by or on behalf of any Placement Agent consists solely of the following disclosure contained in the “Plan of Distribution” section of the Prospectus: (i) the name of the Placement Agent, (ii) the information related to the compensation, fees and expenses of the Placement Agent (the “Placement Agent’s Information”), and (iii) the disclosure in the paragraph under the caption “Potential Conflicts of Interest.”

(c) The Disclosure Package, as of the Initial Sale Time and at the Closing Date, did not, does not and will not include an untrue statement of a material fact or omit to state a material fact necessary in order to make the statements therein, in the light of the circumstances under which they were made, not misleading; and each Issuer Free Writing Prospectus does not conflict with the information contained in the Registration Statement, any Preliminary Prospectus, or the Prospectus, and each such Issuer Free Writing Prospectus, as supplemented by and taken together with the Preliminary Prospectus as of the Initial Sale Time, did not include an untrue statement of a material fact or omit to state a material fact necessary in order to make the statements therein, in light of the circumstances under which they were made, not misleading; provided, however, that this representation and warranty shall not apply to statements made or statements omitted in reliance upon and in conformity with written information furnished to the Company with respect to the Placement Agent by the Placement Agent expressly for use in the Registration Statement, the Preliminary Prospectus or the Prospectus or any amendment thereof or supplement thereto. The parties acknowledge and agree that such information provided by or on behalf of any Placement Agent consists solely of the Placement Agent’s Information; and

(d) Neither the Prospectus nor any amendment or supplement thereto, as of its issue date, at the time of any filing with the Commission pursuant to Rule 424(b), at the Closing Date, included, includes or will include an untrue statement of a material fact or omitted, omits or will omit to state a material fact necessary in order to make the statements therein, in the light of the circumstances under which they were made, not misleading; provided, however, that this representation and warranty shall not apply to the Placement Agent’s Information.

- ii. Disclosure of Agreements. The agreements and documents described in the Registration Statement, the Disclosure Package and the Prospectus conform in all material respects to the descriptions thereof contained therein and there are no agreements or other documents required by the Securities Act and the Securities Act Regulations to be described in the Registration Statement, the Disclosure Package and the Prospectus or to be filed with the Commission as exhibits to the Registration Statement, that have not been so described or filed. Each agreement or other instrument (however characterized or described) to which the Company is a party or by which it is or may be bound or affected and (i) that is referred to in the Registration Statement, the Disclosure Package and the Prospectus, and (ii) is material to the Company’s business, has been duly authorized and validly executed by the Company, is in full force and effect in all material respects and is enforceable against the Company and, to the Company’s knowledge, the other parties thereto, in accordance with its terms, except (x) as such enforceability may be limited by bankruptcy, insolvency, reorganization or similar laws affecting creditors’ rights generally, (y) as enforceability of any indemnification or contribution provision may be limited under the federal and state securities laws, and (z) that the remedy of specific performance and injunctive and other forms of equitable relief may be subject to the equitable defenses and to the discretion of the court before which any proceeding therefor may be brought. None of such agreements or instruments has been assigned by the Company, and neither the Company nor, to the Company’s knowledge, any other party is in default thereunder and, to the Company’s knowledge, no event has occurred that, with the lapse of time or the giving of notice, or both, would constitute a default thereunder, except as disclosed in the Registration Statement, the Disclosure Package and the Prospectus. To the Company’s knowledge, performance by the Company of the material provisions of such agreements or instruments will not result in a violation of any existing applicable law, rule, regulation, judgment, order or decree of any governmental agency or court, domestic or foreign, having jurisdiction over the Company or any of its assets or businesses (each, a “Governmental Entity”), including, without limitation, those relating to environmental laws and regulations.

- iii. Prior Securities Transactions. For the past three completed fiscal years through the date hereof, no securities of the Company have been sold by the Company or, to the Company's knowledge, by or on behalf of, or for the benefit of, any person or persons controlling, controlled by or under common control with the Company, except as disclosed in the Registration Statement, the Disclosure Package and the Preliminary Prospectus or, with respect to parties other than the Company, other filings by such other persons with the Commission.
- iv. Regulations. The disclosures in the Registration Statement, the Disclosure Package and the Prospectus concerning the effects of federal, state, local and all foreign regulation on the Offering and the Company's business as currently contemplated are correct in all material respects and no other such regulations are required to be disclosed in the Registration Statement, the Disclosure Package and the Prospectus which are not so disclosed.
- v. Changes After Dates in Registration Statement.

(a) No Material Adverse Change. Since the respective dates as of which information is given in the Registration Statement, the Disclosure Package and the Prospectus, except as otherwise specifically stated therein: (i) there has been no material adverse change in the financial position or results of operations of the Company, nor any change or development that, singularly or in the aggregate, would involve a material adverse change, in or affecting the condition (financial or otherwise), results of operations, business, assets or prospects of the Company (a "Material Adverse Change"); (ii) there have been no material transactions entered into by the Company, other than as contemplated pursuant to this Agreement; and (iii) no officer or director of the Company has resigned from any position with the Company.

(b) Recent Securities Transactions, etc. Subsequent to the respective dates as of which information is given in the Registration Statement, the Disclosure Package and the Prospectus, and except as may otherwise be indicated or contemplated herein or disclosed in the Registration Statement, the Disclosure Package and the Prospectus, the Company has not: (i) issued any securities (other than (i) grants under any stock compensation plan and (ii) shares of common stock issued upon exercise or conversion of option, warrants or convertible securities described in the Registration Statement, the Disclosure Package and the Prospectus) or incurred any liability or obligation, direct or contingent, for borrowed money; or (ii) declared or paid any dividend or made any other distribution on or in respect to its capital stock.

F. Independent Accountants. To the knowledge of the Company, Olsen Thielen & Co., Ltd., during such time as it was engaged by the Company (the "Auditors"), has been an independent registered public accounting firm as required by the Securities Act and the Securities Act Regulations and the Public Company Accounting Oversight Board. During such time period in which the Auditors served as the Company's independent registered public accounting firm the Auditors did not or have not, during the periods covered by the financial statements included in the Registration Statement, the Disclosure Package and the Prospectus, provided to the Company any non-audit services, as such term is used in Section 10A(g) of the Exchange Act.

G. SEC Reports: Financial Statements, etc. In the past twelve months, the Company has complied in all material respects with requirements to file all reports, schedules, forms, statements and other documents required to be filed by it under the Securities Act and the Exchange Act, including pursuant to Section 13(a) or 15(d) thereof (the foregoing materials, including the exhibits thereto and documents incorporated by reference therein, being collectively referred to herein as the “SEC Reports”) on a timely basis or has received a valid extension of such time of filing and has filed any such SEC Reports prior to the expiration of any such extension. As of their respective dates, the SEC Reports complied in all material respects with the requirements of the Securities Act and the Exchange Act and the rules and regulations of the Commission promulgated thereunder, and none of the SEC Reports, when filed, contained any untrue statement of a material fact or omitted to state a material fact required to be stated therein or necessary in order to make the statements therein, in the light of the circumstances under which they were made, not misleading. The financial statements of the Company included in the SEC Reports comply in all material respects with applicable accounting requirements and the rules and regulations of the Commission with respect thereto as in effect at the time of filing. Such financial statements have been prepared in accordance with United States generally accepted accounting principles applied on a consistent basis during the periods involved (“GAAP”), except as may be otherwise specified in such financial statements or the notes thereto and except that unaudited financial statements may not contain all footnotes required by GAAP, and fairly present in all material respects the financial position of the Company and its consolidated subsidiaries as of and for the dates thereof and the results of operations and cash flows for the periods then ended, subject, in the case of unaudited statements, to normal year-end audit adjustments that are not expected to be material in the aggregate. The financial statements, including the notes thereto and supporting schedules included in the Registration Statement, the Disclosure Package and the Prospectus, fairly present in all material respects the financial position and the results of operations of the Company at the dates and for the periods to which they apply; and such financial statements have been prepared in conformity with GAAP, consistently applied throughout the periods involved (provided that unaudited interim financial statements are subject to year-end audit adjustments that are not expected to be material in the aggregate and do not contain all footnotes required by GAAP); and the supporting schedules included in the Registration Statement present fairly in all material respects the information required to be stated therein. Except as included therein, no historical or pro forma financial statements are required to be included in the Registration Statement, the Disclosure Package or the Prospectus under the Securities Act or the Securities Act Regulations. The pro forma and pro forma as adjusted financial information and the related notes, if any, included in the Registration Statement, the Disclosure Package and the Prospectus have been properly compiled and prepared in all material respects in accordance with the applicable requirements of the Securities Act and the Securities Act Regulations and present fairly in all material respects the information shown therein, and the assumptions used in the preparation thereof are reasonable and the adjustments used therein are appropriate to give effect to the transactions and circumstances referred to therein. All disclosures contained in the Registration Statement, the Disclosure Package or the Prospectus regarding “non-GAAP financial measures” (as such term is defined by the rules and regulations of the Commission), if any, comply with Regulation G of the Exchange Act and Item 10 of Regulation S-K of the Securities Act, to the extent applicable. Each of the Registration Statement, the Disclosure Package and the Prospectus discloses all material off-balance sheet transactions, arrangements, obligations (including contingent obligations), and other relationships of the Company with unconsolidated entities or other persons that may have a material current or future effect on the Company's financial condition, changes in financial condition, results of operations, liquidity, capital expenditures, capital resources, or significant components of revenues or expenses. Except as disclosed in the Registration Statement, the Disclosure Package and the Prospectus, (a) the Company has not incurred any material liabilities or obligations, direct or contingent, or entered into any material transactions other than in the ordinary course of business, (b) the Company has not declared or paid any dividends or made any distribution of any kind with respect to its capital stock, (c) there has not been any change in the capital stock of the Company (other than (i) grants under any stock compensation plan and (ii) shares of common stock issued upon exercise or conversion of option, warrants or convertible securities described in the Registration Statement, the Disclosure Package and the Prospectus), and (d) there has not been any Material Adverse Change in the Company's long-term or short-term debt.

H. Authorized Capital: Options, etc. The Company had, at the date or dates indicated in the Registration Statement, the Disclosure Package and the Prospectus, the duly authorized, issued and outstanding capitalization as set forth therein. Based on the assumptions stated in the Registration Statement, the Disclosure Package and the Prospectus, the Company will have on the Closing Date the adjusted stock capitalization set forth therein. Except as set forth in, or contemplated by, the Registration Statement, the Disclosure Package and the Prospectus, on the Effective Date, as of the Initial Sale Time, on the Closing Date, there will be no stock options, warrants, or other rights to purchase or otherwise acquire any authorized, but unissued shares of Common Stock of the Company or any security convertible or exercisable into shares of Common Stock of the Company, or any contracts or commitments to issue or sell shares of Common Stock or any such options, warrants, rights or convertible securities.

I. Valid Issuance of Securities, etc.

i. Outstanding Securities. All issued and outstanding securities of the Company issued prior to the transactions contemplated by this Agreement have been duly authorized and validly issued and are fully paid and non-assessable; the holders thereof have no rights of rescission with respect thereto, and are not subject to personal liability by reason of being such holders; and except as disclosed in the Registration Statement, the Disclosure Package and the Prospectus, none of such securities were issued in violation of the preemptive rights of any holders of any security of the Company or similar contractual rights granted by the Company. The authorized shares of Common Stock, Company preferred stock and other outstanding securities conform in all material respects to all statements relating thereto contained in the Registration Statement, the Disclosure Package and the Prospectus. The offers and sales of the outstanding shares of Common Stock were at all relevant times either registered under the Securities Act and the applicable state securities or “blue sky” laws or, based in part on the representations and warranties of the purchasers of such shares, exempt from such registration requirements.

ii. Securities Sold Pursuant to this Agreement. The Common Stock, Warrants, Warrant Shares and the Placement Agent Securities have been duly authorized for issuance and sale and, when issued and paid for, will be validly issued, fully paid and non-assessable; the holders thereof are not and will not be subject to personal liability by reason of being such holders; the Common Stock, Warrants, Warrant Shares and the Placement Agent Securities are not and will not be subject to the preemptive rights of any holders of any security of the Company or similar contractual rights granted by the Company. All corporate action required to be taken for the authorization, issuance and sale of the Common Stock, Warrants, Warrant Shares and the Placement Agent Securities has been duly and validly taken; the Warrant Shares and the Common Stock included within the Placement Agent Securities have been duly authorized and reserved for issuance by all necessary corporate action on the part of the Company and when paid for, if applicable, and issued in accordance with the Warrants or and the Placement Agent Unit Purchase Option, as applicable, such Warrant Shares or Placement Agent Securities will be validly issued, fully paid and non-assessable. The Securities and the Placement Agent Securities conform in all material respects to all statements with respect thereto contained in the Registration Statement, the Disclosure Package and the Prospectus.

J. Registration Rights of Third Parties. Except as set forth in the Registration Statement, the Disclosure Package and the Prospectus, no holders of any securities of the Company or any rights exercisable for or convertible or exchangeable into securities of the Company have the right to require the Company to register any such securities of the Company under the Securities Act or to include any such securities in a registration statement to be filed by the Company (except for any such rights that have been waived).

K. Validity and Binding Effect of Agreements. This Agreement, the Placement Agent Unit Purchase Option, and each warrant agreement representing the Warrants to be delivered to each investor in the Offering each has been duly and validly authorized by the Company, and, when executed and delivered, will constitute, the valid and binding agreement of the Company, enforceable against the Company in accordance with its respective terms, except: (i) as such enforceability may be limited by bankruptcy, insolvency, reorganization or similar laws affecting creditors' rights generally; (ii) as enforceability of any indemnification or contribution provision may be limited under the federal and state securities laws; and (iii) that the remedy of specific performance and injunctive and other forms of equitable relief may be subject to the equitable defenses and to the discretion of the court before which any proceeding therefor may be brought.

L. No Conflicts, etc. The execution, delivery and performance by the Company of this Agreement, the Placement Agent Unit Purchase Option and each warrant agreement representing the Warrants to be delivered to each investor in the Offering and all ancillary documents, the consummation by the Company of the transactions herein and therein contemplated and the compliance by the Company with the terms hereof and thereof do not and will not, with or without the giving of notice or the lapse of time or both: (i) result in a material breach of, or conflict with any of the terms and provisions of, or constitute a material default under, or result in the creation, modification, termination or imposition of any lien, charge or encumbrance upon any property or assets of the Company pursuant to the terms of any agreement or instrument to which the Company is a party; (ii) result in any violation of the provisions of the Company's Certificate of Incorporation (as the same may be amended or restated from time to time, the “Charter”) or the by-laws of the Company (as the same may be amended or restated from time to time, the “Bylaws”); or (iii) violate any existing applicable law, rule, regulation, judgment, order or decree of any Governmental Entity as of the date hereof (including, without limitation, those promulgated by the Food and Drug Administration of the U.S. Department of Health and Human Services (the “FDA”) or by any foreign, federal, state or local regulatory authority performing functions similar to those performed by the FDA, except violations (except in the case of clause (ii) above) that would not be expected to have a Material Adverse Change.

M. Regulatory. Except as described in the Registration Statement, the Disclosure Package and the Prospectus or as would not reasonably be expected to result, individually or in the aggregate, in a Material Adverse Change: (i) the Company has not received any FDA Form 483, notice of adverse finding, warning letter or other correspondence or notice from the FDA or any other Governmental Entity alleging or asserting noncompliance with any Applicable Laws (as defined in clause (ii) below) or Authorizations (as defined in clause (iii) below); (ii) the Company is and has been in material compliance with statutes, laws, ordinances, rules and regulations applicable to the Company for the ownership, testing, development, manufacture, packaging, processing, use, distribution, marketing, labeling, promotion, sale, offer for sale, storage, import, export or disposal of any product manufactured or distributed by the Company, including without limitation, the Federal Food, Drug, and Cosmetic Act, 21 U.S.C. § 301, et seq., similar laws of other Governmental Entities and the regulations promulgated pursuant to such laws (collectively, "Applicable Laws"); (iii) the Company possesses all licenses, certificates, approvals, clearances, consents, authorizations, qualifications, registrations, permits, and supplements or amendments thereto required by any such Applicable Laws and/or to carry on its businesses as now conducted ("Authorizations") and such Authorizations are valid and in full force and effect and the Company is not in violation of any term of any such Authorizations; (iv) the Company has not received notice of any claim, action, suit, proceeding, hearing, enforcement, investigation, arbitration or other action from any Governmental Entity or third party alleging that any product, operation or activity is in violation of any Applicable Laws or Authorizations or has any knowledge that any such Governmental Entity or third party is considering any such claim, litigation, arbitration, action, suit, investigation or proceeding, nor, to the best of the Company's knowledge, has there been any material noncompliance with or violation of any Applicable Laws by the Company that could reasonably be expected to require the issuance of any such communication or result in an investigation, corrective action, or enforcement action by FDA or similar Governmental Entity; (v) the Company has not received notice that any Governmental Entity has taken, is taking or intends to take action to limit, suspend, modify or revoke any Authorizations or has any knowledge that any such Governmental Entity has threatened or is considering such action; (vi) the Company has filed, obtained, maintained or submitted all reports, documents, forms, notices, applications, records, claims, submissions and supplements or amendments as required by any Applicable Laws or Authorizations and that all such reports, documents, forms, notices, applications, records, claims, submissions and supplements or amendments were complete, correct and not misleading on the date filed (or were corrected or supplemented by a subsequent submission); and (vii) the Company has not, either voluntarily or involuntarily, initiated, conducted or issued, or caused to be initiated, conducted or issued, any recall, market withdrawal or replacement, safety alert, post-sale warning, "dear doctor" letter, or other notice or action relating to the alleged lack of safety or efficacy of any product or any alleged product defect or violation and, to the Company's knowledge, no third party has initiated, conducted or intends to initiate or conduct such notice or action. Neither the Company nor, to the Company's knowledge, any of its directors, officers, employees or agents has been convicted of any crime under any Applicable Laws or has been the subject of an FDA debarment proceeding. The Company has not been or is now subject to FDA's Application Integrity Policy. To the Company's knowledge, neither the Company, nor any of its directors, officers, employees or agents, has made, or caused the making of, any false statements on, or material omissions from, any other records or documentation prepared or maintained to comply with the requirements of the FDA or any other Governmental Entity. Neither the Company nor, to the Company's knowledge, any of its directors, officers, employees or agents, have with respect to each of the following statutes, or regulations promulgated thereto, as applicable: (i) engaged in activities under 42 U.S.C. §§ 1320a-7b or 1395nn; (ii) knowingly engaged in any activities under 42 U.S.C. § 1320a-7b or the Federal False Claims Act, 31 U.S.C. § 3729; or (iii) knowingly and willfully engaged in any activities under 42 U.S.C. § 1320a-7b, which are prohibited, cause for civil penalties, or mandatory or permissive exclusion from Medicare, Medicaid, or any other State Health Care Program or Federal Health Care Program.

N. No Defaults; Violations. No material default exists in the due performance and observance of any term, covenant or condition of any material license, contract, indenture, mortgage, deed of trust, note, loan or credit agreement, or any other agreement or instrument evidencing an obligation for borrowed money, or any other material agreement or instrument to which the Company is a party or by which the Company may be bound or to which any of the properties or assets of the Company is subject. The Company is not (i) in violation of any term or provision of its Charter or Bylaws, or (ii) in violation of any franchise, license, permit, applicable law, rule, regulation, judgment or decree of any Governmental Entity applicable to the Company.

O. Corporate Power; Licenses; Consents.

i. Except as described in the Registration Statement, the Disclosure Package and the Prospectus, the Company has all requisite corporate power and authority, and has all necessary authorizations, approvals, orders, licenses, certificates and permits of and from all governmental regulatory officials and bodies that it needs as of the date hereof to conduct its business purpose as described in the Registration Statement, the Disclosure Package and the Prospectus.

ii. The Company has all corporate power and authority to enter into this Agreement and to carry out the provisions and conditions hereof, and all consents, authorizations, approvals and orders required in connection therewith have been obtained. No consent, authorization or order of, and no filing with, any court, government agency or other body is required for the valid issuance, sale and delivery of the Common Stock, Warrants and Warrant Shares, and the consummation of the transactions and agreements contemplated by this Agreement and as contemplated by the Registration Statement, the Disclosure Package and the Prospectus, except with respect to applicable federal and state securities laws and the rules and regulations of the Financial Industry Regulatory Authority, Inc. (“FINRA”).

P. Litigation; Governmental Proceedings. There is no material action, suit, proceeding, inquiry, arbitration, investigation, litigation or governmental proceeding pending or, to the Company's knowledge, threatened against, or involving the Company or, to the Company's knowledge, any executive officer or director which has not been disclosed in the Registration Statement, the Disclosure Package and the Prospectus or in connection with the Company's listing application for the additional listing of the Common Stock and Warrant Shares on the Exchange.

Q. Good Standing. The Company has been duly organized and is validly existing as a corporation and is in good standing under the laws of the State of Delaware as of the date hereof, and is duly qualified to do business and is in good standing in each other jurisdiction in which its ownership or lease of property or the conduct of business requires such qualification, except where the failure to qualify, singularly or in the aggregate, would not have or reasonably be expected to result in a Material Adverse Change.

R. Insurance. The Company carries or is entitled to the benefits of insurance, with, to the Company's knowledge, reputable insurers, and in such amounts and covering such risks which the Company believes are reasonably adequate, and all such insurance is in full force and effect. The Company has no reason to believe that it will not be able (i) to renew its existing insurance coverage as and when such policies expire or (ii) to obtain comparable coverage from similar institutions as may be necessary or appropriate to conduct its business as now conducted and at a cost that would not result in a Material Adverse Change.

S. Transactions Affecting Disclosure to FINRA.

i. Finder's Fees. Except as described in the Registration Statement, the Disclosure Package and the Prospectus, there are no claims, payments, arrangements, agreements or understandings relating to the payment of a finder's, consulting or origination fee by the Company or any executive officer or director of the Company (each an, “Insider”) with respect to the sale of the Securities hereunder or any other arrangements, agreements or understandings of the Company or, to the Company's knowledge, any of its stockholders that may affect the Placement Agent's compensation, as determined by FINRA.

ii. Payments Within Twelve (12) Months. Except as described in the Registration Statement, the Disclosure Package and the Prospectus, the Company has not made any direct or indirect payments (in cash, securities or otherwise) to: (i) any person, as a finder's fee, consulting fee or otherwise, in consideration of such person raising capital for the Company or introducing to the Company persons who raised or provided capital to the Company; (ii) any FINRA member; or (iii) any person or entity that has any direct or indirect affiliation or association with any FINRA member, within the twelve (12) months prior to the date hereof, other than (A) the payment to the Placement Agent as provided hereunder in connection with the Offering, and (B) other payments to the Placement Agent under other engagement letters.

iii. Use of Proceeds. None of the net proceeds of the Offering will be paid by the Company to any participating FINRA member or its affiliates, except as specifically authorized herein.

iv. FINRA Affiliation. There is no (i) officer or director of the Company, (ii) to the Company's knowledge, beneficial owner of 5% or more of any class of the Company's securities or (iii) to the Company's knowledge, beneficial owner of the Company's unregistered equity securities which were acquired during the 180-day period immediately preceding the filing of the Registration Statement that is an affiliate or associated person of a FINRA member participating in the Offering (as determined in accordance with the rules and regulations of FINRA).

v. Information. To the Company's knowledge, all information provided by the Company's officers and directors in their FINRA Questionnaires to counsel to the Placement Agent specifically for use by counsel to the Placement Agent in connection with its Public Offering Filing System filings (and related disclosure) with FINRA is true, correct and complete in all material respects.

T. Foreign Corrupt Practices Act. Neither the Company nor, to the Company's knowledge, any director, officer, agent, employee or affiliate of the Company or any other person acting on behalf of the Company, has, directly or indirectly, given or agreed to give any money, gift or similar benefit (other than legal price concessions to customers in the ordinary course of business) to any customer, supplier, employee or agent of a customer or supplier, or official or employee of any Governmental Entity or any political party or candidate for office (domestic or foreign) or other person who was, is, or may be in a position to help or hinder the business of the Company (or assist it in connection with any actual or proposed transaction) that (i) might subject the Company to any damage or penalty in any civil, criminal or governmental litigation or proceeding, (ii) if not given in the past, might have had a Material Adverse Change or (iii) if not continued in the future, might adversely affect the assets, business, operations or prospects of the Company. The Company has taken reasonable steps to ensure that its accounting controls and procedures are sufficient to cause the Company to comply in all material respects with the Foreign Corrupt Practices Act of 1977, as amended.

U. Compliance with OFAC. Neither of the Company nor, to the Company's knowledge, any director, officer, agent, employee or affiliate of the Company or any other person acting on behalf of the Company, is currently subject to any U.S. sanctions administered by the Office of Foreign Assets Control of the U.S. Department of the Treasury ("OFAC"), and the Company will not, directly or indirectly, use the proceeds of the Offering hereunder, 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.

V. Money Laundering Laws. The operations of the Company are and have been conducted at all times in compliance with applicable financial recordkeeping and reporting requirements of the Currency and Foreign Transactions Reporting Act of 1970, as amended, the money laundering statutes of all applicable jurisdictions, the rules and regulations thereunder and any related or similar rules, regulations or guidelines, issued, administered or enforced by any Governmental Entity (collectively, the "Money Laundering Laws"); and no action, suit or proceeding by or before any Governmental Entity involving the Company with respect to the Money Laundering Laws is pending or, to the knowledge of the Company, threatened.



W. Officers' Certificate. Any certificate signed by any duly authorized officer of the Company and delivered to you or to Placement Agent Counsel shall be deemed a representation and warranty by the Company to the Placement Agent as to the matters covered thereby.

X. Related Party Transactions. There are no business relationships or related party transactions involving the Company or any other person required to be described in the Registration Statement, the Disclosure Package and the Prospectus that have not been described as required.

Y. Board of Directors. The qualifications of the persons serving as board members and the overall composition of the board comply with the Exchange Act, the Exchange Act Regulations, the Sarbanes-Oxley Act of 2002 and the rules promulgated thereunder (the "Sarbanes-Oxley Act") applicable to the Company and the listing rules of the Exchange. At least one member of the Audit Committee of the Board of Directors of the Company qualifies as an "audit committee financial expert," as such term is defined under Regulation S-K and the listing rules of the Exchange. In addition, at least a majority of the persons serving on the Board of Directors qualify as "independent," as defined under the listing rules of the Exchange.

Z. Sarbanes-Oxley Compliance.

i. The Company has developed and currently maintains disclosure controls and procedures that will comply with Rule 13a-15 or 15d-15 under the Exchange Act Regulations applicable to it, and such controls and procedures are effective to ensure that all material information concerning the Company will be made known on a timely basis to the individuals responsible for the preparation of the Company's Exchange Act filings and other public disclosure documents.

ii. The Company is, or at the Initial Sale Time and on the Closing Date will be, in material compliance with the provisions of the Sarbanes-Oxley Act applicable to it, and has implemented or will implement such programs and taken reasonable steps to ensure the Company's future compliance (not later than the relevant statutory and regulatory deadlines therefor) with all of the material provisions of the Sarbanes-Oxley Act.

AA. Accounting Controls. The Company maintains systems of "internal control over financial reporting" (as defined under Rules 13a-15 and 15d-15 under the Exchange Act Regulations) that comply in all material respects with the requirements of the Exchange Act and have been designed by, or under the supervision of, its principal executive and principal financial officers, or persons performing similar functions, to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external purposes in accordance with GAAP, including, but not limited to, internal accounting controls sufficient to provide reasonable assurance that (i) transactions are executed in accordance with management's general or specific authorizations; (ii) transactions are recorded as necessary to permit preparation of financial statements in conformity with GAAP and to maintain asset accountability; (iii) access to assets is permitted only in accordance with management's general or specific authorization; and (iv) the recorded accountability for assets is compared with the existing assets at reasonable intervals and appropriate action is taken with respect to any differences. Except as disclosed in the Registration Statement, the Disclosure Package and the Prospectus, the Company is not aware of any material weaknesses in its internal controls. The Auditors and the Audit Committee of the Board of Directors of the Company have been advised of: (i) all significant deficiencies and material weaknesses, if any, in the design or operation of internal controls over financial reporting which are known to the Company's management and that have adversely affected or are reasonably likely to adversely affect the Company's ability to record, process, summarize and report financial information; and (ii) any fraud, if any, known to the Company's management, whether or not material, that involves management or other employees who have a significant role in the Company's internal controls over financial reporting.

BB. No Investment Company Status. The Company is not and, after giving effect to the Offering and the application of the proceeds thereof as described in the Registration Statement, the Disclosure Package and the Prospectus, will not be, required to register as an "investment company," as defined in the Investment Company Act of 1940, as amended.

CC. No Labor Disputes. No labor dispute with the employees of the Company exists or, to the knowledge of the Company, is imminent.

DD. Intellectual Property Rights. To the Company's knowledge, the Company has, or can acquire on reasonable terms, ownership of and/or license to, or otherwise has the right to use, all inventions, know-how (including trade secrets and other unpatented and/or unpatentable proprietary or confidential information, systems or procedures), patents and patent rights trademarks, service marks and trade names, copyrights, (collectively "Intellectual Property") material to carrying on its business as described in the Prospectus. The Company has not received any correspondence relating to (A) infringement or misappropriation of, or conflict with, any Intellectual Property of a third party; (B) asserted rights of others with respect to any Intellectual Property of the Company; or (C) assertions that any Intellectual Property of the Company is invalid or otherwise inadequate to protect the interest of the Company, that in each case (if the subject of any unfavorable decision, ruling or finding), individually or in the aggregate, would have or would reasonably be expected to have a Material Adverse Change. There are no third parties who have been able to establish any material rights to any Intellectual Property, except for the retained rights of the owners or licensors of any Intellectual Property that is licensed to the Company. There is no pending or, to the Company's knowledge, threatened action, suit, proceeding or claim by others: (A) challenging the validity, enforceability or scope of any Intellectual Property of the Company or (B) challenging the Company's rights in or to any Intellectual Property or (C) that the Company materially infringes, misappropriates or otherwise violates or conflicts with any Intellectual Property or other proprietary rights of others. The Company has complied in all material respects with the terms of each agreement described in the Registration Statement, Disclosure Package or Prospectus pursuant to which any Intellectual Property is licensed to the Company, and all such agreements related to products currently made or sold by the Company, or to product candidates currently under development, are in full force and effect. All patents issued in the name of, or assigned to, the Company, and all patent applications made by or on behalf of the Company (collectively, the "Company Patents") have been duly and properly filed. The Company is not aware of any material information that was required to be disclosed to the United States Patent and Trademark Office (the "PTO") but that was not disclosed to the PTO with respect to any issued Company Patent, or that is required to be disclosed and has not yet been disclosed in any pending application in the Company Patents and that would preclude the grant of a patent on such application. To the Company's knowledge, the Company is the sole owner of the Company Patents.

EE. Taxes. The Company has filed all returns (as hereinafter defined) required to be filed with taxing authorities prior to the date hereof or has duly obtained extensions of time for the filing thereof. The Company has paid all taxes (as hereinafter defined) shown as due on such returns that were filed and has paid all taxes imposed on or assessed against the Company, except for such exceptions as could not be expected, individually or in the aggregate, to have a Material Adverse Change. The provisions for taxes payable, if any, shown on the financial statements filed with or as part of the Registration Statement are sufficient for all accrued and unpaid taxes, whether or not disputed, and for all periods to and including the dates of such consolidated financial statements. Except as disclosed in writing to the Placement Agent, (i) no issues have been raised (and are currently pending) by any taxing authority in connection with any of the returns or taxes asserted as due from the Company, and (ii) no waivers of statutes of limitation with respect to the returns or collection of taxes have been given by or requested from the Company. The term "taxes" mean all federal, state, local, foreign and other net income, gross income, gross receipts, sales, use, ad valorem, transfer, franchise, profits, license, lease, service, service use, withholding, payroll, employment, excise, severance, stamp, occupation, premium, property, windfall profits, customs, duties or other taxes, fees, assessments or charges of any kind whatever, together with any interest and any penalties, additions to tax or additional amounts with respect thereto. The term "returns" means all returns, declarations, reports, statements and other documents required to be filed in respect to taxes.

FF. Employee Benefit Laws. To the extent applicable, the operations of the Company and its subsidiaries are and have been conducted at all times in material compliance with the Employee Retirement Income Security Act of 1974, as amended, the rules and regulations thereunder and any applicable related or similar rules, regulations or guidelines, issued, administered or enforced by any governmental agency (collectively, the "Employee Benefit Laws") and no action, suit or proceeding by or before any court or governmental agency, authority or body or any arbitrator involving the Company or its subsidiaries with respect to the Employee Benefit Laws is pending or, to the knowledge of the Company, threatened.

GG. Compliance with Laws. The Company: (A) is and at all times has been in compliance with all Applicable Laws, except as would not, individually or in the aggregate, reasonably be expected to have a Material Adverse Change; (B) has not received any correspondence from any Governmental Entity alleging or asserting noncompliance with any Applicable Laws or any Authorizations; (C) possesses all material Authorizations and such Authorizations are valid and in full force and effect and the Company is not in material violation of any term of any such Authorizations, in each case except as would not, individually or in the aggregate, reasonably be expected to have a Material Adverse Change; (D) has not received written notice of any claim, action, suit, proceeding, hearing, enforcement, investigation, arbitration or other action from any Governmental Entity or third party alleging that any product operation or activity is in violation of any Applicable Laws or Authorizations and has no knowledge that any such Governmental Entity or third party is considering any such claim, litigation, arbitration, action, suit, investigation or proceeding; (E) has not received written notice that any Governmental Entity has taken, is taking or intends to take action to limit, suspend, modify or revoke any Authorizations; (F) has filed, obtained, maintained or submitted all material reports, documents, forms, notices, applications, records, claims, submissions and supplements or amendments as required by any Applicable Laws or Authorizations and that all such reports, documents, forms, notices, applications, records, claims, submissions and supplements or amendments were complete and correct in all material respects on the date filed (or were corrected or supplemented by a subsequent submission); and (G) has not, either voluntarily or involuntarily, initiated, conducted, or issued or caused to be initiated, conducted or issued, any recall, market withdrawal or replacement, safety alert, post-sale warning, “dear doctor” letter, or other notice or action relating to the alleged lack of safety or efficacy of any product or any alleged product defect or violation and, to the Company's knowledge, no third party has initiated, conducted or intends to initiate any such notice or action.

HH. Ineligible Issuer. At the time of filing the Registration Statement and any post-effective amendment thereto, at the time of effectiveness of the Registration Statement and any amendment thereto, at the earliest time thereafter that the Company or another offering participant made a bona fide offer (within the meaning of Rule 164(h)(2) of the Securities Act Regulations) of the Securities and at the date hereof, the Company was not and is not an “ineligible issuer,” as defined in Rule 405 of the Securities Act Rules, without taking account of any determination by the Commission pursuant to Rule 405 of the Securities Act Rules that it is not necessary that the Company be considered an ineligible issuer.

II. Industry Data. The statistical and market-related data included in each of the Registration Statement, the Disclosure Package and the Prospectus are based on or derived from sources that the Company reasonably and in good faith believes are reliable and accurate or represent the Company's good faith estimates that are made on the basis of data derived from such sources.

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

KK. Margin Securities. The Company owns no “margin securities” as that term is defined in Regulation U of the Board of Governors of the Federal Reserve System (the “Federal Reserve Board”), and none of the proceeds of Offering will be used, directly or indirectly, for the purpose of purchasing or carrying any margin security, for the purpose of reducing or retiring any indebtedness which was originally incurred to purchase or carry any margin security or for any other purpose which might cause any of the shares of Common Stock to be considered a “purpose credit” within the meanings of Regulation T, U or X of the Federal Reserve Board.

LL. Integration. Neither the Company, nor any of its affiliates, nor any person acting on its or their behalf has, directly or indirectly, made any offers or sales of any security or solicited any offers to buy any security, under circumstances that would cause the Offering to be integrated with prior offerings by the Company for purposes of the Securities Act that would require the registration of any such securities under the Securities Act.

MM. Confidentiality and Non-Competition. To the Company's knowledge, no director, officer, key employee or consultant of the Company is subject to any confidentiality, non-disclosure, non-competition agreement or non-solicitation agreement with any employer or prior employer that could reasonably be expected to materially affect his ability to be and act in his respective capacity of the Company or be expected to result in a Material Adverse Change.

NN. Restriction on Sales of Capital Stock. The Company, on behalf of itself and any successor entity, agrees that it will not, for a period of 90 days after the date of this Agreement (the "Lock-Up Period"), without the prior written consent of the Placement Agent (i) offer, pledge, sell, contract to sell, sell any option or contract to purchase, purchase any option or contract to sell, grant any option, right or warrant to purchase, lend, or otherwise transfer or dispose of, directly or indirectly, any shares of capital stock of the Company or any securities convertible into or exercisable or exchangeable for shares of capital stock of the Company; (ii) file or cause to be filed any registration statement with the Commission relating to the offering of any shares of capital stock of the Company or any securities convertible into or exercisable or exchangeable for shares of capital stock of the Company; (iii) enter into any swap or other arrangement that transfers to another, in whole or in part, any of the economic consequences of ownership of capital stock of the Company, whether any such transaction described in clause (i), (ii) or (iii) above is to be settled by delivery of shares of capital stock of the Company or such other securities, in cash or otherwise; or (iv) publicly announce an intention to effect any transaction specified in clause (i), (ii) or (iii).

OO. Lock-Up Agreements. The Company has caused each of its officers and directors to deliver to the Placement Agent an executed Lock-Up Agreement, in such form as approved by the Placement Agent (the "Lock-Up Agreement"), prior to the execution of this Agreement.

8. Conditions of the Obligations of the Placement Agent.

The obligations of the Placement Agent hereunder shall be subject to the accuracy of the representations and warranties on the part of the Company set forth in Section 7 hereof, in each case as of the date hereof and as of the Closing Date as though then made, to the timely performance by each of the Company of its covenants and other obligations hereunder on and as of such dates, and to each of the following additional conditions:

A. Regulatory Matters.

i. Effectiveness of Registration Statement; Rule 424 Information. The Registration Statement is effective on the date of this Agreement, and, on the Closing Date no stop order suspending the effectiveness of the Registration Statement or any post-effective amendment thereto has been issued under the Securities Act, no order preventing or suspending the use of any Preliminary Prospectus or the Prospectus has been issued and no proceedings for any of those purposes have been instituted or are pending or, to the Company's knowledge, contemplated by the Commission. The Company has complied with each request (if any) from the Commission for additional information. All filings with the Commission required by Rule 424 under the Securities Act to have been filed by the Closing Date, shall have been made within the applicable time period prescribed for such filing by Rule 424.

ii. FINRA Clearance. On or before the Closing Date of this Agreement, the Placement Agent shall have received clearance from FINRA as to the amount of compensation allowable or payable to the Placement Agent as described in the Registration Statement.

iii. Exchange Stock Market Clearance. On the Closing Date, the Shares and the Warrant Shares shall have been approved for listing on the Exchange, subject only to official notice of issuance.

B. Company Counsel Matters.

i. On the Closing Date, the Placement Agent shall have received the favorable opinion of Maslon LLP, outside counsel for the Company counsel to the Company, dated the Closing Date and addressed to the Placement Agent, substantially in form and substance reasonably satisfactory to the Placement Agent.

C. Comfort Letters.

i. Comfort Letter. Prior to the Closing Date, Placement Agent shall have received from the Auditors a cold comfort letter containing statements and information of the type customarily included in accountants' comfort letters with respect to the financial statements and certain financial information contained in the Registration Statement, the Disclosure Package and the Prospectus, addressed to the Placement Agent and in form and substance satisfactory in all respects to Placement Agent and to the Auditors, dated as of the date of this Agreement.

ii. Bring-down Comfort Letter. At the Closing Date, the Placement Agent shall have received from the Auditors a letter, dated as of the Closing Date, to the effect that the Auditors reaffirm the statements made in the letter furnished pursuant to Section 8.C.i. except that the specified date referred to shall be a date not more than three (3) business days prior to the Closing Date.

D. Officers' Certificates.

i. Officers' Certificate. The Company shall have furnished to the Placement Agent a certificate, dated the Closing Date, of its Chief Executive Officer and its Chief Financial Officer stating that (i) such officers have carefully examined the Registration Statement, the Disclosure Package, any Issuer Free Writing Prospectus and the Prospectus and, in their opinion, the Registration Statement and each amendment thereto, as of the Initial Sale Time and through the Closing Date did not include any untrue statement of a material fact and did not omit to state a material fact required to be stated therein or necessary to make the statements therein not misleading, and the Disclosure Package, as of the Initial Sale Time through the Closing Date, any Issuer Free Writing Prospectus as of its date and as of the Closing Date, the Prospectus and each amendment or supplement thereto, as of the respective date thereof and as of the Closing Date, did not include any untrue statement of a material fact and did not omit to state a material fact necessary in order to make the statements therein, in the light of the circumstances in which they were made, not misleading, (ii) since the filing of the most recent Form 10-Q, no event has occurred which should have been set forth in a supplement or amendment to the Registration Statement, the Disclosure Package or the Prospectus, (iii) to their knowledge after reasonable investigation, as of the Closing Date, the representations and warranties of the Company in this Agreement are true and correct, and the Company has complied with all agreements and satisfied all conditions on its part to be performed or satisfied hereunder at or prior to the Closing Date, and (iv) there has not been, subsequent to the date of the most recent audited financial statements included in the Disclosure Package, any Material Adverse Change in the financial position or results of operations of the Company, or any change or development that, singularly or in the aggregate, would involve a Material Adverse Change or a prospective Material Adverse Change, in or affecting the condition (financial or otherwise), results of operations, business, assets or prospects of the Company, except as set forth in the Prospectus.

ii. Secretary's Certificate. As of the Closing Date the Placement Agent shall have received a certificate of the Company signed by the Secretary of the Company, dated the Closing Date, certifying: (i) that each of the Company's Charter and Bylaws is true and complete, has not been modified and is in full force and effect; (ii) that the resolutions of the Company's Board of Directors relating to the Offering are in full force and effect and have not been modified; and (iii) the good standing of the Company and its subsidiaries. The documents referred to in such certificate shall be attached to such certificate.

E. No Material Changes. Prior to and on the Closing Date: (i) there shall have been no Material Adverse Change or development involving a prospective Material Adverse Change in the condition or prospects or the business activities, financial or otherwise, of the Company from the latest dates as of which such condition is set forth in the Registration Statement, the Disclosure Package and the Prospectus; (ii) no action, suit or proceeding, at law or in equity, shall have been pending or threatened against the Company or any affiliates of the Company before or by any court or federal or state commission, board or other administrative agency wherein an unfavorable decision, ruling or finding may materially adversely affect the business, operations, prospects or financial condition or income of the Company, except as set forth in the Registration Statement, the Disclosure Package and the Prospectus; (iii) no stop order shall have been issued under the Securities Act and no proceedings therefor shall have been initiated or threatened by the Commission; and (iv) the Registration Statement, the Disclosure Package and the Prospectus and any amendments or supplements thereto shall contain all material statements which are required to be stated therein in accordance with the Securities Act and the Securities Act Regulations and shall conform in all material respects to the requirements of the Securities Act and the Securities Act Regulations, and neither the Registration Statement, the Disclosure Package nor the Prospectus nor any amendment or supplement thereto shall contain any untrue statement of a material fact or omit to state any material fact required to be stated therein or necessary to make the statements therein, in light of the circumstances under which they were made, not misleading.

F. Reservation of Common Stock. So long as any Warrants remain outstanding, the Company shall take all action necessary to at all times have authorized, and reserved for the purpose of issuance, no less than 100% of the maximum number of shares of Common Stock issuable upon exercise of the Warrants or the Placement Agent Securities.

G. Delivery of Agreements.

(i) Lock-Up Agreements. On or before the date of this Agreement, the Company shall have delivered to the Placement Agent executed copies of the Lock-Up Agreements from each of the Company's officers and directors.

(ii) Warrant Agreements. On the Closing Date, the Company shall have delivered to the Representative PDF copies of each warrant agreement representing the Warrants to be delivered to each investor in the Offering, which originals shall be delivered via overnight courier on the following business day.

(iii) Placement Agent Unit Purchase Option Agreement. On the Closing Date, the Company shall have delivered to the Placement Agent executed copies of the Placement Agent's Unit Purchase Option Agreement.

H. Additional Documents. At the Closing Date, Placement Agent Counsel shall have been furnished with such documents and opinions as they may require in order to evidence the accuracy of any of the representations or warranties, or the fulfillment of any of the conditions, herein contained; and all proceedings taken by the Company in connection with the issuance and sale of the Securities as herein contemplated shall be satisfactory in form and substance to the Placement Agent and Placement Agent Counsel.

9. Indemnification and Contribution; Procedures.

A. Indemnification of the Placement Agent. The Company agrees to indemnify and hold harmless the Placement Agent, its affiliates and each person controlling such Placement Agent (within the meaning of Section 15 of the Securities Act), and the directors, officers, agents and employees of the Placement Agent, its affiliates and each such controlling person (the Placement Agent, and each such entity or person hereafter is referred to as an "Indemnified Person") from and against any losses, claims, damages, judgments, assessments, costs and other liabilities (collectively, the "Liabilities"), and shall reimburse each Indemnified Person for all fees and expenses (including the reasonable fees and expenses of counsel for the Indemnified Persons, except as otherwise expressly provided in this Agreement) (collectively, the "Expenses") and agrees to advance payment of such Expenses as they are incurred by an Indemnified Person in investigating, preparing, pursuing or defending any actions, whether or not any Indemnified Person is a party thereto, arising out of or based upon any untrue statement or alleged untrue statement of a material fact contained in (i) the Registration Statement, the Disclosure Package, the Preliminary Prospectus, the Prospectus or in any Issuer Free Writing Prospectus (as from time to time each may be amended and supplemented); (ii) any materials or information provided to investors by, or with the approval of, the Company in connection with the marketing of the Offering, including any "road show" or investor presentations made to investors by the Company (whether in person or electronically); or (iii) any application or other document or written communication (in this Section 9, collectively called "application") executed by the Company or based upon written information furnished by the Company in any jurisdiction in order to qualify the Securities under the securities laws thereof or filed with the Commission, any state securities commission or agency, any national securities exchange; or the omission or alleged omission therefrom of a material fact required to be stated therein or necessary to make the statements therein, in the light of the circumstances under which they were made, not misleading, unless such statement or omission was made in reliance upon, and in conformity with, the Placement Agent's information. The Company also agrees to reimburse each Indemnified Person for all Expenses as they are incurred in connection with such Indemnified Person's enforcement of his or its rights under this Agreement. Each Indemnified Person is an intended third party beneficiary with the same rights to enforce the indemnification that each Indemnified Person would have if he was a party to this Agreement.

B. Procedure. Upon receipt by an Indemnified Person of actual notice of an action against such Indemnified Person with respect to which indemnity may reasonably be expected to be sought under this Agreement, such Indemnified Person shall promptly notify the Company in writing; provided that failure by any Indemnified Person so to notify the Company shall not relieve the Company from any obligation or liability which the Company may have on account of this Section 9 or otherwise to such Indemnified Person, except to the extent (and only to the extent) that its ability to assume the defense is actually impaired by such failure or delay. The Company shall, if requested by the Placement Agent, assume the defense of any such action (including the employment of counsel and reasonably satisfactory to the Placement Agent). Any Indemnified Person shall have the right to employ separate counsel in any such action and participate in the defense thereof, but the fees and expenses of such counsel shall be at the expense of such Indemnified Person unless: (i) the Company has failed promptly to assume the defense and employ counsel for the benefit of the Placement Agent and the other Indemnified Persons or (ii) such Indemnified Person shall have been advised that in the opinion of counsel that there is an actual or potential conflict of interest that prevents (or makes it imprudent for) the counsel engaged by the Company for the purpose of representing the Indemnified Person, to represent both such Indemnified Person and any other person represented or proposed to be represented by such counsel, it being understood, however, that the Company shall not be liable for the expenses of more than one separate counsel (together with local counsel), representing the Placement Agent and all Indemnified persons who are parties to such action. The Company shall not be liable for any settlement of any action effected without its written consent (which shall not be unreasonably withheld). In addition, the Company shall not, without the prior written consent of the Placement Agent, settle, compromise or consent to the entry of any judgment in or otherwise seek to terminate any pending or threatened action in respect of which advancement, reimbursement, indemnification or contribution may be sought hereunder (whether or not such Indemnified Person is a party thereto) unless such settlement, compromise, consent or termination (i) includes an unconditional release of each Indemnified Person, acceptable to such Indemnified Party, from all Liabilities arising out of such action for which indemnification or contribution may be sought hereunder and (ii) does not include a statement as to or an admission of fault, culpability or a failure to act, by or on behalf of any Indemnified Person. The advancement, reimbursement, indemnification and contribution obligations of the Company required hereby shall be made by periodic payments of the amount thereof during the course of the investigation or defense, as every Liability and Expense is incurred and is due and payable, and in such amounts as fully satisfy each and every Liability and Expense as it is incurred (and in no event later than 30 days following the date of any invoice therefor).

C. Indemnification of the Company. The Placement Agent agrees to indemnify and hold harmless the Company, its directors, its officers who signed the Registration Statement and persons who control the Company within the meaning of Section 15 of the Securities Act or Section 20 of the Exchange Act against any and all Liabilities, but only with respect to untrue statements or omissions, or alleged untrue statements or omissions made in the Registration Statement, any Preliminary Prospectus, the Disclosure Package or Prospectus or any amendment or supplement thereto, in reliance upon, and in strict conformity with, the Placement Agent's Information. In case any action shall be brought against the Company or any other person so indemnified based on any Preliminary Prospectus, the Registration Statement, the Disclosure Package or Prospectus or any amendment or supplement thereto, and in respect of which indemnity may be sought against the Placement Agent, the Placement Agent shall have the rights and duties given to the Company, and the Company and each other person so indemnified shall have the rights and duties given to the Placement Agent by the provisions of Section 9.B. The Company agrees promptly to notify the Placement Agent of the commencement of any litigation or proceedings against the Company or any of its officers, directors or any person, if any, who controls the Company within the meaning of Section 15 of the Securities Act or Section 20 of the Exchange Act, in connection with the issuance and sale of the Securities or in connection with the Registration Statement, the Disclosure Package, the Prospectus or any Issuer Free Writing Prospectus, provided, that failure by the Company so to notify the Placement Agent shall not relieve the Placement Agent from any obligation or liability which the Placement Agent may have on account of this Section 9.C. or otherwise to the Company, except to the extent the Placement Agent is materially prejudiced as a proximate result of such failure..

D. Contribution. In the event that a court of competent jurisdiction makes a finding that indemnity is unavailable to any indemnified person, then each indemnifying party shall contribute to the Liabilities and Expenses paid or payable by such indemnified person in such proportion as is appropriate to reflect (i) the relative benefits to the Company, on the one hand, and to the Placement Agent and any other Indemnified Person, on the other hand, of the matters contemplated by this Agreement or (ii) if the allocation provided by the immediately preceding clause is not permitted by applicable law, not only such relative benefits but also the relative fault of the Company, on the one hand, and the Placement Agent and any other Indemnified Person, on the other hand, in connection with the matters as to which such Liabilities or Expenses relate, as well as any other relevant equitable considerations; provided that in no event shall the Company contribute less than the amount necessary to ensure that all Indemnified Persons, in the aggregate, are not liable for any Liabilities and Expenses in excess of the amount of commissions actually received by the Placement Agent pursuant to this Agreement. The relative fault shall be determined by reference to, among other things, whether the untrue or alleged untrue statement of a material fact or the omission or alleged omission to state a material fact relates to information supplied by the Company on the one hand or the Placement Agent on the other and the parties' relative intent, knowledge, access to information and opportunity to correct or prevent such statement or omission. The Company and the Placement Agent agree that it would not be just and equitable if contributions pursuant to this subsection (D) were determined by pro rata allocation or by any other method of allocation which does not take account of the equitable considerations referred to above in this subsection (D). For purposes of this paragraph, the relative benefits to the Company, on the one hand, and to the Placement Agent on the other hand, of the matters contemplated by this Agreement shall be deemed to be in the same proportion as: (a) the total value received by the Company in the Offering, whether or not such Offering is consummated, bears to (b) the commissions paid to the Placement Agent under this Agreement. Notwithstanding the above, no person guilty of fraudulent misrepresentation within the meaning of Section 11(f) of the Securities Act shall be entitled to contribution from a party who was not guilty of fraudulent misrepresentation.

E. Limitation. The Company also agrees that no Indemnified Person shall have any liability (whether direct or indirect, in contract or tort or otherwise) to the Company for or in connection with advice or services rendered or to be rendered by any Indemnified Person pursuant to this Agreement, the transactions contemplated thereby or any Indemnified Person's actions or inactions in connection with any such advice, services or transactions, except to the extent that a court of competent jurisdiction has made a finding that Liabilities (and related Expenses) of the Company have resulted primarily from such Indemnified Person's gross negligence or willful misconduct in connection with any such advice, actions, inactions or services.

F. Survival. The advancement, reimbursement, indemnity and contribution obligations set forth in this Section 9 shall remain in full force and effect regardless of any termination of, or the completion of any Indemnified Person's services under or in connection with, this Agreement. Each Indemnified Person is an intended third-party beneficiary of this Section 9, and has the right to enforce the provisions of Section 9 as if he/she/it was a party to this Agreement.

10. Limitation of Dawson's Liability to the Company.

Dawson and the Company further agree that neither Dawson nor any of its affiliates or any of their respective officers, directors, controlling persons (within the meaning of Section 15 of the Securities Act or Section 20 of the Exchange Act), employees or agents shall have any liability to the Company, its security holders or creditors, or any person asserting claims on behalf of or in the right of the Company (whether direct or indirect, in contract or tort, for an act of negligence or otherwise) for any losses, fees, damages, liabilities, costs, expenses or equitable relief arising out of or relating to this Agreement or the Services rendered hereunder, except for losses, fees, damages, liabilities, costs or expenses that arise out of or are based on any action of or failure to act by Dawson and that are finally judicially determined to have resulted solely from the gross negligence or willful misconduct of Dawson.

11. Limitation of Engagement to the Company.

The Company acknowledges that Dawson has been retained only by the Company, that Dawson is providing services hereunder as an independent contractor (and not in any fiduciary or agency capacity) and that the Company's engagement of Dawson is not deemed to be on behalf of, and is not intended to confer rights upon, any shareholder, owner or partner of the Company or any other person not a party hereto as against Dawson or any of its affiliates, or any of its or their respective officers, directors, controlling persons (within the meaning of Section 15 of the Securities Act or Section 20 of the Exchange Act), employees or agents. Unless otherwise expressly agreed in writing by Dawson, no one other than the Company is authorized to rely upon any statement or conduct of Dawson in connection with this Agreement. The Company acknowledges that any recommendation or advice, written or oral, given by Dawson to the Company in connection with Dawson's engagement is intended solely for the benefit and use of the Company's management and directors in considering a possible Offering, and any such recommendation or advice is not on behalf of, and shall not confer any rights or remedies upon, any other person or be used or relied upon for any other purpose. Dawson shall not have the authority to make any commitment binding on the Company. The Company, in its sole discretion, shall have the right to reject any investor introduced to it by Dawson. If any purchase agreement and/or related transaction documents are entered into between the Company and the investors in the Offering, Dawson will be entitled to rely on the representations, warranties, agreements and covenants of the Company contained in any such purchase agreement and related transaction documents as if such representations, warranties, agreements and covenants were made directly to Dawson by the Company.



12. Amendments and Waivers.

No supplement, modification or waiver of this Agreement shall be binding unless executed in writing by the party to be bound thereby. The failure of a party to exercise any right or remedy shall not be deemed or constitute a waiver of such right or remedy in the future. No waiver of any of the provisions of this Agreement shall be deemed or shall constitute a waiver of any other provision hereof (regardless of whether similar), nor shall any such waiver be deemed or constitute a continuing waiver unless otherwise expressly provided.

13. Confidentiality.

In the event of the consummation or public announcement of any Offering, Dawson shall have the right to disclose its participation in such Offering, including, without limitation, the placement at its cost of "tombstone" advertisements in financial and other newspapers and journals. Dawson agrees not to use any confidential information concerning the Company provided to Dawson by the Company for any purposes other than those contemplated under this Agreement.

14. Headings.

The headings of the various sections of this Agreement have been inserted for convenience of reference only and will not be deemed to be part of this Agreement.

15. Counterparts.

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

16. Severability.

In case any provision contained in this Agreement should be invalid, illegal or unenforceable in any respect, the validity, legality and enforceability of the remaining provisions contained herein will not in any way be affected or impaired thereby.

17. Use of Information.

The Company will furnish Dawson such written information as Dawson reasonably requests in connection with the performance of its services hereunder. The Company understands, acknowledges and agrees that, in performing its services hereunder, Dawson will use and rely entirely upon such information as well as publicly available information regarding the Company and other potential parties to an Offering and that Dawson does not assume responsibility for independent verification of the accuracy or completeness of any information, whether publicly available or otherwise furnished to it, concerning the Company or otherwise relevant to an Offering, including, without limitation, any financial information, forecasts or projections considered by Dawson in connection with the provision of its services.

18. Absence of Fiduciary Relationship.

The Company acknowledges and agrees that: (a) the Placement Agent has been retained solely to act as Placement Agent in connection with the sale of the Securities and that no fiduciary, advisory or agency relationship between the Company and the Placement Agent has been created in respect of any of the transactions contemplated by this Agreement, irrespective of whether the Placement Agent has advised or is advising the Company on other matters; (b) the Unit Purchase Price and other terms of the Securities set forth in this Agreement were established by the Company following discussions and arms-length negotiations with the Placement Agent and the Company is capable of evaluating and understanding and understands and accepts the terms, risks and conditions of the transactions contemplated by this Agreement; (c) it has been advised that the Placement Agent and its affiliates are engaged in a broad range of transactions that may involve interests that differ from those of the Company and that the Placement Agent has no obligation to disclose such interest and transactions to the Company by virtue of any fiduciary, advisory or agency relationship; and (d) it has been advised that the Placement Agent is acting, in respect of the transactions contemplated by this Agreement, solely for the benefit of the Placement Agent, and not on behalf of the Company and that the Placement Agents may have interests that differ from those of the Company. The Company waives to the full extent permitted by applicable law any claims it may have against the Placement Agent arising from an alleged breach of fiduciary duty in connection with the Offering.

19. Survival Of Indemnities, Representations, Warranties, Etc.

The respective indemnities, covenants, agreements, representations, warranties and other statements of the Company and Placement Agent, as set forth in this Agreement or made by them respectively, pursuant to this Agreement, shall remain in full force and effect, regardless of any investigation made by or on behalf of the Placement Agent, the Company, the Purchasers or any person controlling any of them and shall survive delivery of and payment for the Securities. Notwithstanding any termination of this Agreement, including without limitation any termination pursuant to Section 5, the payment, reimbursement, indemnity, contribution and advancement agreements contained in Sections 2, 9, 10, and 11, respectively, and the Company's covenants, representations, and warranties set forth in this Agreement shall not terminate and shall remain in full force and effect at all times. The indemnity and contribution provisions contained in Section 9 and the covenants, warranties and representations of the Company contained in this Agreement shall remain operative and in full force and effect regardless of (i) any termination of this Agreement, (ii) any investigation made by or on behalf of any Placement Agent, any person who controls any Placement Agent within the meaning of either Section 15 of the Securities Act or Section 20 of the Exchange Act or any affiliate of any Placement Agent, or by or on behalf of the Company, its directors or officers or any person who controls the Company within the meaning of either Section 15 of the Securities Act or Section 20 of the Exchange Act, and (iii) the issuance and delivery of the Securities.

20. Governing Law.

This Agreement shall be governed by and construed in accordance with the laws of the State of New York applicable to agreements made and to be fully performed therein. Any disputes that arise under this Agreement, even after the termination of this Agreement, will be heard only in the state or federal courts located in the City of New York, State of New York. The parties hereto expressly agree to submit themselves to the jurisdiction of the foregoing courts in the City of New York, State of New York. The parties hereto expressly waive any rights they may have to contest the jurisdiction, venue or authority of any court sitting in the City and State of New York.

21. Notices.

All communications hereunder shall be in writing and shall be mailed or hand delivered and confirmed to the parties hereto as follows:

If to the Company:

Precision Therapeutics Inc.  
2915 Commers Drive, Suite 900  
Eagan, Minnesota 55121  
Attention: Chief Financial Officer

If to the Placement Agent:

Dawson James Securities, Inc.  
1 North Federal Highway – 5th Floor  
Boca Raton, FL 33432  
Attention: Chief Executive Officer

Any party hereto may change the address for receipt of communications by giving written notice to the others.

22. Miscellaneous.

This Agreement shall not be modified or amended except in writing signed by Dawson and the Company. This Agreement constitutes the entire agreement of Dawson and the Company, and supersedes any prior agreements, with respect to the subject matter hereof. If any provision of this Agreement is determined to be invalid or unenforceable in any respect, such determination will not affect such provision in any other respect, and the remainder of this Agreement shall remain in full force and effect. This Agreement may be executed in counterparts (including facsimile or .pdf counterparts), each of which shall be deemed an original but all of which together shall constitute one and the same instrument.

23. Successors.

This Agreement will inure to the benefit of and be binding upon the parties hereto, and to the benefit of the employees, officers and directors and controlling persons referred to in Section 9 hereof, and to their respective successors, and personal representative, and, except as set forth in Section 9 of this Agreement, no other person will have any right or obligation hereunder.

24. Partial Unenforceability.

The invalidity or unenforceability of any section, paragraph or provision of this Agreement shall not affect the validity or enforceability of any other section, paragraph or provision hereof. If any Section, paragraph or provision of this Agreement is for any reason determined to be invalid or unenforceable, there shall be deemed to be made such minor changes (and only such minor changes) as are necessary to make it valid and enforceable.

[SIGNATURE PAGE TO FOLLOW]

In acknowledgment that the foregoing correctly sets forth the understanding reached by Dawson and the Company, and intending to be legally bound, please sign in the space provided below, whereupon this letter shall constitute a binding Agreement as of the date executed.

Very truly yours,

PRECISION THERAPEUTICS INC.

By: /s/ Bob Myers

Name: Bob Myers

Title: Chief Financial Officer

Agreed and accepted as of the date first above written.

DAWSON JAMES SECURITIES, INC.

By: /s/ Robert D. Keyser, Jr.

Name: Robert D. Keyser, Jr.

Title: Chief Executive Officer

**SCHEDULE I**

**Issuer General Use Free Writing Prospectuses**

None.

COMMON STOCK PURCHASE WARRANT

PRECISION THERAPEUTICS INC.

Warrant Shares: [•]  
Warrant Number: 2019PS2-[•]

Initial Issue Date: March 29, 2019

THIS COMMON STOCK PURCHASE WARRANT (the “Warrant”) certifies that, for value received, [•] or its assigns (the “Holder”) is entitled, upon the terms and subject to the limitations on exercise and the conditions hereinafter set forth, at any time on or after the Initial Issue Date (the “Initial Exercise Date”) and on or prior to the close of business on the five (5) year anniversary of the Initial Exercise Date (the “Termination Date”) but not thereafter, to subscribe for and purchase from Precision Therapeutics Inc., a Delaware corporation (the “Company”), up to [•] shares (as subject to adjustment hereunder, the “Warrant Shares”) of Common Stock. The purchase price of one share of Common Stock under this Warrant shall be equal to the Exercise Price, as defined in Section 2(b).

Section 1. Definitions. The following terms shall have the meanings indicated in this Section 1:

“Affiliate” means any Person that, directly or indirectly through one or more intermediaries, controls or is controlled by or is under common control with a Person, as such terms are used in and construed under Rule 405 under the Securities Act.

“Board of Directors” means the board of directors of the Company.

“Business Day” means any day except any Saturday, any Sunday, any day which is a federal legal holiday in the United States or any day on which banking institutions in the State of New York are authorized or required by law or other governmental action to close.

“Commission” means the United States Securities and Exchange Commission.

“Common Stock” means the common stock of the Company, par value \$0.01, and any other class of securities into which such securities may hereafter be reclassified or changed.

“Common Stock Equivalents” means any securities of the Company or the Subsidiaries which would entitle the holder thereof to acquire at any time Common Stock, including, without limitation, any debt, preferred stock, right, option, warrant or other instrument that is at any time convertible into or exercisable or exchangeable for, or otherwise entitles the holder thereof to receive, Common Stock.

“Exchange Act” means the Securities Exchange Act of 1934, as amended, and the rules and regulations promulgated thereunder.

“Person” means an individual or corporation, partnership, trust, incorporated or unincorporated association, joint venture, limited liability company, joint stock company, government (or an agency or subdivision thereof) or other entity of any kind.

“Registration Statement” means the Company’s registration statement on Form S-3 (File No. 333-213766).

“Securities Act” means the Securities Act of 1933, as amended, and the rules and regulations promulgated thereunder.

“Subsidiary” means any subsidiary of the Company and shall, where applicable, also include any direct or indirect subsidiary of the Company formed or acquired after the date hereof.

“Trading Day” means a day on which the principal Trading Market is open for business.

“Trading Market” means any of the following markets or exchanges on which the Common Stock is listed or quoted for trading on the date in question: the NYSE American, the Nasdaq Capital Market, the Nasdaq Global Market, the Nasdaq Global Select Market or the New York Stock Exchange (or any successors to any of the foregoing).

“Transfer Agent” means Corporate Stock Transfer, Inc., the current transfer agent of the Company, with a mailing address of 3200 Cherry Creek Drive South – Suite 430, Denver, CO 80209, a phone number of (303) 282-4800, and an e-mail address of cbell@corporatestock.com and shumpherys@corporatestock.com, and any successor transfer agent of the Company.

“Warrants” means this Warrant and other Series E Common Stock Purchase Warrants issued by the Company pursuant to the Registration Statement.

## Section 2. Exercise.

a) Exercise of Warrant. Subject to the provisions of Section 2(e) herein, exercise of the purchase rights represented by this Warrant may be made, in whole or in part, at any time or times on or after the Initial Exercise Date and on or before the Termination Date by delivery to the Company of a duly executed facsimile copy (or e-mail attachment) of the Notice of Exercise in the form annexed hereto (the “Notice of Exercise”). Within the earlier of (i) two (2) Trading Days and (ii) the number of Trading Days comprising the Standard Settlement Period (as defined in Section 2(d)(i) herein) following the date of exercise as aforesaid, the Holder shall deliver the aggregate Exercise Price for the shares specified in the applicable Notice of Exercise by wire transfer or cashier’s check drawn on a United States bank unless the cashless exercise procedure specified in Section 2(c) below is specified in the applicable Notice of Exercise. No ink-original Notice of Exercise shall be required, nor shall any medallion guarantee (or other type of guarantee or notarization) of any Notice of Exercise be required. Notwithstanding anything herein to the contrary, the Holder shall not be required to physically surrender this Warrant to the Company until the Holder has purchased all of the Warrant Shares available hereunder and the Warrant has been exercised in full, in which case, the Holder shall surrender this Warrant to the Company for cancellation within three (3) Trading Days of the date on which the final Notice of Exercise is delivered to the Company. Partial exercises of this Warrant resulting in purchases of a portion of the total number of Warrant Shares available hereunder shall have the effect of lowering the outstanding number of Warrant Shares purchasable hereunder in an amount equal to the applicable number of Warrant Shares purchased. The Holder and the Company shall maintain records showing the number of Warrant Shares purchased and the date of such purchases. The Company shall deliver any objection to any Notice of Exercise within one (1) Business Day of receipt of such notice. **The Holder and any assignee, by acceptance of this Warrant, acknowledge and agree that, by reason of the provisions of this paragraph, following the purchase of a portion of the Warrant Shares hereunder, the number of Warrant Shares available for purchase hereunder at any given time may be less than the amount stated on the face hereof.**

b) Exercise Price. The exercise price per share of the Common Stock under this Warrant shall be US\$1.00, subject to adjustment hereunder (the "Exercise Price").

c) Cashless Exercise. If at the time of exercise, there is no effective registration statement registering, or no current prospectus available for, the issuance of the Warrant Shares to the Holder, then the Holder may only satisfy its obligation to pay the Exercise Price by means of a "cashless exercise" in which the Holder shall be entitled to receive a number of Warrant Shares equal to the quotient obtained by dividing [(A-B)(X)] by (A), where:

(A) = the last VWAP immediately preceding the time of delivery of the Notice of Exercise giving rise to the applicable "cashless exercise", as set forth in the applicable Notice of Exercise (to clarify, the "last VWAP" will be the last VWAP as calculated over an entire Trading Day such that, in the event that this Warrant is exercised at a time that the Trading Market is open, the prior Trading Day's VWAP shall be used in this calculation);

(B) = the Exercise Price of this Warrant, as adjusted hereunder; and

(X) = the number of Warrant Shares that would be issuable upon exercise of this Warrant in accordance with the terms of this Warrant if such exercise were by means of a cash exercise rather than a cashless exercise.

If Warrant Shares are issued in such a cashless exercise, the parties acknowledge and agree that in accordance with Section 3(a)(9) of the Securities Act, the Warrant Shares shall take on the registered characteristics of the Warrants being exercised. The Company agrees not to take any position contrary to this Section 2(c).



“VWAP” means, for any date, the price determined by the first of the following clauses that applies: (a) if the Common Stock is then listed or quoted on a Trading Market, the daily volume weighted average price of the Common Stock for such date (or the nearest preceding date) on the Trading Market on which the Common Stock is then listed or quoted as reported by Bloomberg L.P. (based on a Trading Day from 9:30 a.m. (New York City time) to 4:02 p.m. (New York City time)), (b) if OTCQB or OTCQX is not a Trading Market, the volume weighted average price of the Common Stock for such date (or the nearest preceding date) on OTCQB or OTCQX as applicable, (c) if the Common Stock is not then listed or quoted for trading on OTCQB or OTCQX and if prices for the Common Stock are then reported in the “Pink Sheets” published by OTC Markets, Inc. (or a similar organization or agency succeeding to its functions of reporting prices), the most recent bid price per share of the Common Stock so reported, or (d) in all other cases, the fair market value of a share of Common Stock as determined by an independent appraiser selected in good faith by the holders of a majority in interest of the Warrants then outstanding and reasonably acceptable to the Company, the fees and expenses of which shall be paid by the Company.

d) Mechanics of Exercise.

i. Delivery of Warrant Shares Upon Exercise. The Company shall cause the Warrant Shares purchased hereunder to be transmitted by the Transfer Agent to the Holder by crediting the account of the Holder’s or its designee’s balance account with The Depository Trust Company through its Deposit or Withdrawal at Custodian system (“DWAC”) if the Company is then a participant in such system and either (A) there is an effective registration statement permitting the issuance of the Warrant Shares to or resale of the Warrant Shares by the Holder or (B) this Warrant is being exercised via cashless exercise, and otherwise by physical delivery of a certificate, registered in the Company’s share register in the name of the Holder or its designee, for the number of Warrant Shares to which the Holder is entitled pursuant to such exercise to the address specified by the Holder in the Notice of Exercise by the date that is the earliest of (i) two (2) Trading Days after the delivery to the Company of the Notice of Exercise, and (ii) the number of Trading Days comprising the Standard Settlement Period after the delivery to the Company of the Notice of Exercise (such date, the “Warrant Share Delivery Date”). Upon delivery of the Notice of Exercise the Holder shall be deemed for all corporate purposes to have become the holder of record of the Warrant Shares with respect to which this Warrant has been exercised, irrespective of the date of delivery of the Warrant Shares; provided that payment of the aggregate Exercise Price (other than in the case of a cashless exercise) is received within the earlier of (i) two (2) Trading Days and (ii) the number of Trading Days comprising the Standard Settlement Period following delivery of the Notice of Exercise. If the Company fails for any reason to deliver to the Holder the Warrant Shares subject to a Notice of Exercise by the Warrant Share Delivery Date, the Company shall pay to the Holder, in cash, as liquidated damages and not as a penalty, for each \$1,000 of Warrant Shares subject to such exercise (based on the VWAP of the Common Stock on the date of the applicable Notice of Exercise), \$10 per Trading Day for each Trading Day after such Warrant Share Delivery Date until such Warrant Shares are delivered or Holder rescinds such exercise. The Company agrees to maintain a transfer agent that is a participant in the FAST program so long as this Warrant remains outstanding and exercisable. As used herein, “Standard Settlement Period” means the standard settlement period, expressed in a number of Trading Days, on the Company’s primary Trading Market with respect to the Common Stock as in effect on the date of delivery of the Notice of Exercise.

ii. Delivery of New Warrants Upon Exercise. If this Warrant shall have been exercised in part, the Company shall, at the request of a Holder and upon surrender of this Warrant, at the time of delivery of the Warrant Shares, deliver to the Holder a new Warrant evidencing the rights of the Holder to purchase the unpurchased Warrant Shares called for by this Warrant, which new Warrant shall in all other respects be identical with this Warrant.

iii. Rescission Rights. If the Company fails to cause the Transfer Agent to transmit to the Holder the Warrant Shares pursuant to Section 2(d)(i) by the Warrant Share Delivery Date, then the Holder will have the right to rescind such exercise.

iv. Compensation for Buy-In on Failure to Timely Deliver Warrant Shares Upon Exercise. In addition to any other rights available to the Holder, if the Company fails to cause the Transfer Agent to transmit to the Holder the Warrant Shares in accordance with the provisions of Section 2(d)(i) above pursuant to an exercise on or before the Warrant Share Delivery Date, and if after such date the Holder is required by its broker to purchase (in an open market transaction or otherwise) or the Holder's brokerage firm otherwise purchases, shares of Common Stock to deliver in satisfaction of a sale by the Holder of the Warrant Shares which the Holder anticipated receiving upon such exercise (a "Buy-In"), then the Company shall (A) pay in cash to the Holder the amount, if any, by which (x) the Holder's total purchase price (including brokerage commissions, if any) for the shares of Common Stock so purchased exceeds (y) the amount obtained by multiplying (1) the number of Warrant Shares that the Company was required to deliver to the Holder in connection with the exercise at issue times (2) the price at which the sell order giving rise to such purchase obligation was executed, and (B) at the option of the Holder, either reinstate the portion of the Warrant and equivalent number of Warrant Shares for which such exercise was not honored (in which case such exercise shall be deemed rescinded) or deliver to the Holder the number of shares of Common Stock that would have been issued had the Company timely complied with its exercise and delivery obligations hereunder. For example, if the Holder purchases Common Stock having a total purchase price of \$11,000 to cover a Buy-In with respect to an attempted exercise of shares of Common Stock with an aggregate sale price giving rise to such purchase obligation of \$10,000, under clause (A) of the immediately preceding sentence the Company shall be required to pay the Holder \$1,000. The Holder shall provide the Company written notice indicating the amounts payable to the Holder in respect of the Buy-In and, upon request of the Company, evidence of the amount of such loss. Nothing herein shall limit a Holder's right to pursue any other remedies available to it hereunder, at law or in equity including, without limitation, a decree of specific performance and/or injunctive relief with respect to the Company's failure to timely deliver shares of Common Stock upon exercise of the Warrant as required pursuant to the terms hereof.

v. No Fractional Shares or Scrip. No fractional shares or scrip representing fractional shares shall be issued upon the exercise of this Warrant. As to any fraction of a share which the Holder would otherwise be entitled to purchase upon such exercise, the Company shall, at its election, either pay a cash adjustment in respect of such final fraction in an amount equal to such fraction multiplied by the Exercise Price or round up to the next whole share.

vi. Charges, Taxes and Expenses. Issuance of Warrant Shares shall be made without charge to the Holder for any issue or transfer tax or other incidental expense in respect of the issuance of such Warrant Shares, all of which taxes and expenses shall be paid by the Company, and such Warrant Shares shall be issued in the name of the Holder or in such name or names as may be directed by the Holder; provided, however, that in the event that Warrant Shares are to be issued in a name other than the name of the Holder, this Warrant when surrendered for exercise shall be accompanied by the Assignment Form attached hereto duly executed by the Holder and the Company may require, as a condition thereto, the payment of a sum sufficient to reimburse it for any transfer tax incidental thereto. The Company shall pay all Transfer Agent fees required for same-day processing of any Notice of Exercise and all fees to the Depository Trust Company (or another established clearing corporation performing similar functions) required for same-day electronic delivery of the Warrant Shares.

vii. Closing of Books. The Company will not close its stockholder books or records in any manner which prevents the timely exercise of this Warrant, pursuant to the terms hereof.

e) [Holder's Exercise Limitations. The Company shall not effect any exercise of this Warrant, and a Holder shall not have the right to exercise any portion of this Warrant, pursuant to Section 2 or otherwise, to the extent that after giving effect to such issuance after exercise as set forth on the applicable Notice of Exercise, the Holder (together with the Holder's Affiliates, and any other Persons acting as a group together with the Holder or any of the Holder's Affiliates (such Persons, "Attribution Parties")), would beneficially own in excess of the Beneficial Ownership Limitation (as defined below). For purposes of the foregoing sentence, the number of shares of Common Stock beneficially owned by the Holder and its Affiliates and Attribution Parties shall include the number of shares of Common Stock issuable upon exercise of this Warrant with respect to which such determination is being made, but shall exclude the number of shares of Common Stock which would be issuable upon (i) exercise of the remaining, nonexercised portion of this Warrant beneficially owned by the Holder or any of its Affiliates or Attribution Parties and (ii) exercise or conversion of the unexercised or nonconverted portion of any other securities of the Company (including, without limitation, any other Common Stock Equivalents) subject to a limitation on conversion or exercise analogous to the limitation contained herein beneficially owned by the Holder or any of its Affiliates or Attribution Parties. Except as set forth in the preceding sentence, for purposes of this Section 2(e), beneficial ownership shall be calculated in accordance with Section 13(d) of the Exchange Act and the rules and regulations promulgated thereunder, it being acknowledged by the Holder that the Company is not representing to the Holder that such calculation is in compliance with Section 13(d) of the Exchange Act and the Holder is solely responsible for any schedules required to be filed in accordance therewith. To the extent that the limitation contained in this Section 2(e) applies, the determination of whether this Warrant is exercisable (in relation to other securities owned by the Holder together with any Affiliates and Attribution Parties) and of which portion of this Warrant is exercisable shall be in the sole discretion of the Holder, and the submission of a Notice of Exercise shall be deemed to be the Holder's determination of whether this Warrant is exercisable (in relation to other securities owned by the Holder together with any Affiliates and Attribution Parties) and of which portion of this Warrant is exercisable, in each case subject to the Beneficial Ownership Limitation, and the Company shall have no obligation to verify or confirm the accuracy of such determination. In addition, a determination as to any group status as contemplated above shall be determined in accordance with Section 13(d) of the Exchange Act and the rules and regulations promulgated thereunder. For purposes of this Section 2(e), in determining the number of outstanding shares of Common Stock, a Holder may rely on the number of outstanding shares of Common Stock as reflected in (A) the Company's most recent periodic or annual report filed with the Commission, as the case may be, (B) a more recent public announcement by the Company or (C) a more recent written notice by the Company or the Transfer Agent setting forth the number of shares of Common Stock outstanding. Upon the written or oral request of a Holder, the Company shall within one Trading Day confirm orally and in writing to the Holder the number of shares of Common Stock then outstanding. In any case, the number of outstanding shares of Common Stock shall be determined after giving effect to the conversion or exercise of securities of the Company, including this Warrant, by the Holder or its Affiliates or Attribution Parties since the date as of which such number of outstanding shares of Common Stock was reported. The "Beneficial Ownership Limitation" shall be 4.99% (or, upon election by a Holder prior to the issuance of any Warrants, 9.99%) of the number of shares of the Common Stock outstanding immediately after giving effect to the issuance of shares of Common Stock issuable upon exercise of this Warrant. The Holder, upon notice to the Company, may increase or decrease the Beneficial Ownership Limitation provisions of this Section 2(e), provided that the Beneficial Ownership Limitation in no event exceeds 9.99% of the number of shares of the Common Stock outstanding immediately after giving effect to the issuance of shares of Common Stock upon exercise of this Warrant held by the Holder and the provisions of this Section 2(e) shall continue to apply. Any increase in the Beneficial Ownership Limitation will not be effective until the 61<sup>st</sup> day after such notice is delivered to the Company. The provisions of this paragraph shall be construed and implemented in a manner otherwise than in strict conformity with the terms of this Section 2(e) to correct this paragraph (or any portion hereof) which may be defective or inconsistent with the intended Beneficial Ownership Limitation herein contained or to make changes or supplements necessary or desirable to properly give effect to such limitation. The limitations contained in this paragraph shall apply to a successor holder of this Warrant.]

Section 3. Certain Adjustments.

a) Stock Dividends and Splits. If the Company, at any time while this Warrant is outstanding: (i) pays a stock dividend or otherwise makes a distribution or distributions on shares of its Common Stock or any other equity or equity equivalent securities payable in shares of Common Stock (which, for avoidance of doubt, shall not include any shares of Common Stock issued by the Company upon exercise of this Warrant), (ii) subdivides outstanding shares of Common Stock into a larger number of shares, (iii) combines (including by way of reverse stock split) outstanding shares of Common Stock into a smaller number of shares or (iv) issues by reclassification of shares of the Common Stock any shares of capital stock of the Company, then in each case the Exercise Price shall be multiplied by a fraction of which the numerator shall be the number of shares of Common Stock (excluding treasury shares, if any) outstanding immediately before such event and of which the denominator shall be the number of shares of Common Stock outstanding immediately after such event, and the number of shares issuable upon exercise of this Warrant shall be proportionately adjusted such that the aggregate Exercise Price of this Warrant shall remain unchanged. Any adjustment made pursuant to this Section 3(a) shall become effective immediately after the record date for the determination of stockholders entitled to receive such dividend or distribution and shall become effective immediately after the effective date in the case of a subdivision, combination or re-classification.

b) Subsequent Rights Offerings. In addition to any adjustments pursuant to Section 3(a) above, if at any time the Company grants, issues or sells any Common Stock Equivalents or rights to purchase stock, warrants, securities or other property pro rata to the record holders of any class of shares of Common Stock (the "Purchase Rights"), then the Holder will be entitled to acquire, upon the terms applicable to such Purchase Rights, the aggregate Purchase Rights which the Holder could have acquired if the Holder had held the number of shares of Common Stock acquirable upon complete exercise of this Warrant (without regard to any limitations on exercise hereof, including without limitation, the Beneficial Ownership Limitation) immediately before the date on which a record is taken for the grant, issuance or sale of such Purchase Rights, or, if no such record is taken, the date as of which the record holders of shares of Common Stock are to be determined for the grant, issue or sale of such Purchase Rights (provided, however, to the extent that the Holder's right to participate in any such Purchase Right would result in the Holder exceeding the Beneficial Ownership Limitation, then the Holder shall not be entitled to participate in such Purchase Right to such extent (or beneficial ownership of such shares of Common Stock as a result of such Purchase Right to such extent) and such Purchase Right to such extent shall be held in abeyance for the Holder until such time, if ever, as its right thereto would not result in the Holder exceeding the Beneficial Ownership Limitation).

c) Pro Rata Distributions. During such time as this Warrant is outstanding, if the Company shall declare or make any dividend or other distribution of its assets (or rights to acquire its assets) to holders of shares of Common Stock, by way of return of capital or otherwise (including, without limitation, any distribution of cash, stock or other securities, property or options by way of a dividend, spin off, reclassification, corporate rearrangement, scheme of arrangement or other similar transaction) (a "Distribution"), at any time after the issuance of this Warrant, then, in each such case, the Holder shall be entitled to participate in such Distribution to the same extent that the Holder would have participated therein if the Holder had held the number of shares of Common Stock acquirable upon complete exercise of this Warrant (without regard to any limitations on exercise hereof, including without limitation, the Beneficial Ownership Limitation) immediately before the date of which a record is taken for such Distribution, or, if no such record is taken, the date as of which the record holders of shares of Common Stock are to be determined for the participation in such Distribution (provided, however, to the extent that the Holder's right to participate in any such Distribution would result in the Holder exceeding the Beneficial Ownership Limitation, then the Holder shall not be entitled to participate in such Distribution to such extent (or in the beneficial ownership of any shares of Common Stock as a result of such Distribution to such extent) and the portion of such Distribution shall be held in abeyance for the benefit of the Holder until such time, if ever, as its right thereto would not result in the Holder exceeding the Beneficial Ownership Limitation. To the extent that this Warrant has not been partially or completely exercised at the time of such Distribution, such portion of the Distribution shall be held in abeyance for the benefit of the Holder until the Holder has exercised this Warrant). To the extent that this Warrant has not been partially or completely exercised at the time of such Distribution, such portion of the Distribution shall be held in abeyance for the benefit of the Holder until the Holder has exercised this Warrant.

d) Fundamental Transaction. If, at any time while this Warrant is outstanding, (i) the Company, directly or indirectly, in one or more related transactions effects any merger or consolidation of the Company with or into another Person, (ii) the Company, directly or indirectly, effects any sale, lease, license, assignment, transfer, conveyance or other disposition of all or substantially all of its assets in one or a series of related transactions, (iii) any, direct or indirect, purchase offer, tender offer or exchange offer (whether by the Company or another Person) is completed pursuant to which holders of Common Stock are permitted to sell, tender or exchange their shares for other securities, cash or property and has been accepted by the holders of 50% or more of the outstanding Common Stock, (iv) the Company, directly or indirectly, in one or more related transactions effects any reclassification, reorganization or recapitalization of the Common Stock or any compulsory share exchange pursuant to which the Common Stock is effectively converted into or exchanged for other securities, cash or property, or (v) the Company, directly or indirectly, in one or more related transactions consummates a stock or share purchase agreement or other business combination (including, without limitation, a reorganization, recapitalization, spin-off or scheme of arrangement) with another Person or group of Persons whereby such other Person or group acquires more than 50% of the outstanding shares of Common Stock (not including any shares of Common Stock held by the other Person or other Persons making or party to, or associated or affiliated with the other Persons making or party to, such stock or share purchase agreement or other business combination) (each a "Fundamental Transaction"), then, upon any subsequent exercise of this Warrant, the Holder shall have the right to receive, for each Warrant Share that would have been issuable upon such exercise immediately prior to the occurrence of such Fundamental Transaction, at the option of the Holder (without regard to any limitation in Section 2(e) on the exercise of this Warrant), the number of shares of Common Stock of the successor or acquiring corporation or of the Company, if it is the surviving corporation, and any additional consideration (the "Alternate Consideration") receivable as a result of such Fundamental Transaction by a holder of the number of shares of Common Stock for which this Warrant is exercisable immediately prior to such Fundamental Transaction (without regard to any limitation in Section 2(e) on the exercise of this Warrant). For purposes of any such exercise, the determination of the Exercise Price shall be appropriately adjusted to apply to such Alternate Consideration based on the amount of Alternate Consideration issuable in respect of one share of Common Stock in such Fundamental Transaction, and the Company shall apportion the Exercise Price among the Alternate Consideration in a reasonable manner reflecting the relative value of any different components of the Alternate Consideration. If holders of Common Stock are given any choice as to the securities, cash or property to be received in a Fundamental Transaction, then the Holder shall be given the same choice as to the Alternate Consideration it receives upon any exercise of this Warrant following such Fundamental Transaction. Notwithstanding anything to the contrary, in the event of a Fundamental Transaction other than one in which a Successor Entity (as defined below) that is a publicly traded corporation whose stock is quoted or listed on a Trading Market assumes this Warrant such that the Warrant shall be exercisable for the publicly traded common stock of such Successor Entity and only if such Fundamental Transaction is within the Company's control, the Company or any Successor Entity shall, at the Holder's option, exercisable at any time concurrently with, or within 30 days after, the consummation of the Fundamental Transaction, purchase this Warrant from the Holder by paying to the Holder an amount of cash equal to the Black Scholes Value of the remaining unexercised portion of this Warrant on the date of the consummation of such Fundamental Transaction; provided, however, if the Fundamental Transaction is not within the Company's control, including not approved by the Company's Board of Directors, Holder shall have the option to require the Company or any Successor Entity to purchase its Warrant for the Black Scholes Value of the unexercised portion of this Warrant as of the date of consummation of such Fundamental Transaction using the same type or form of consideration (and in the same proportion) that is being offered and paid to the holders of Common Stock of the Company in connection with the Fundamental Transaction, whether that consideration be in the form of cash, stock or any combination thereof, or whether the holders of Common Stock are given the choice to receive from among alternative forms of consideration in

connection with the Fundamental Transaction. Any cash payment will be made by wire transfer of immediately available funds within five Business Days of the Holder's election (or, if later, on the effective date of the Fundamental Transaction). "Black Scholes Value" means the value of this Warrant based on the Black and Scholes Option Pricing Model obtained from the "OV" function on Bloomberg, L.P. ("Bloomberg") determined as of the day of consummation of the applicable Fundamental Transaction for pricing purposes and reflecting (A) a risk-free interest rate corresponding to the U.S. Treasury rate for a period equal to the time between the date of the public announcement of the applicable Fundamental Transaction and the Termination Date, (B) an expected volatility equal to the greater of 100% and the 100 day volatility obtained from the HVT function on Bloomberg as of the Trading Day immediately following the public announcement of the applicable Fundamental Transaction, (C) the underlying price per share used in such calculation shall be the sum of the price per share being offered in cash, if any, plus the value of any non-cash consideration, if any, being offered in such Fundamental Transaction and (D) a remaining option time equal to the time between the date of the public announcement of the applicable Fundamental Transaction and the Termination Date. The Company shall cause any successor entity in a Fundamental Transaction in which the Company is not the survivor (the "Successor Entity") to assume in writing all of the obligations of the Company under this Warrant in accordance with the provisions of this Section 3(d) pursuant to written agreements prior to such Fundamental Transaction and shall, at the option of the Holder, deliver to the Holder in exchange for this Warrant a security of the Successor Entity evidenced by a written instrument substantially similar in form and substance to this Warrant which is exercisable for a corresponding number of shares of capital stock of such Successor Entity (or its parent entity) equivalent to the shares of Common Stock acquirable and receivable upon exercise of this Warrant (without regard to any limitations on the exercise of this Warrant) prior to such Fundamental Transaction, and with an exercise price which applies the exercise price hereunder to such shares of capital stock (but taking into account the relative value of the shares of Common Stock pursuant to such Fundamental Transaction and the value of such shares of capital stock, such number of shares of capital stock and such exercise price being for the purpose of protecting the economic value of this Warrant immediately prior to the consummation of such Fundamental Transaction). Upon the occurrence of any such Fundamental Transaction, the Successor Entity shall succeed to, and be substituted for (so that from and after the date of such Fundamental Transaction, the provisions of this Warrant referring to the "Company" shall refer instead to the Successor Entity), and may exercise every right and power of the Company and shall assume all of the obligations of the Company under this Warrant with the same effect as if such Successor Entity had been named as the Company herein. For the avoidance of doubt, if, at any time while this Warrant is outstanding, a Fundamental Transaction occurs, pursuant to the terms of this Section 5(e), the Holder shall not be entitled to receive more than one of (i) the consideration receivable as a result of such Fundamental Transaction by a holder of the number of shares of Common Stock for which this Warrant is exercisable immediately prior to such Fundamental Transaction, (ii) an amount of cash equal to the Black Scholes Value of the remaining unconverted portion of this Warrant on the date of the consummation of such Fundamental Transaction, or (iii) the assumption by the Successor Entity of all of the obligations of the Company under this Warrant and the option to receive a security of the Successor Entity evidenced by a written instrument substantially similar in form and substance to this Warrant.



e) Calculations. All calculations under this Section 3 shall be made to the nearest cent or the nearest 1/100th of a share, as the case may be. For purposes of this Section 3, the number of shares of Common Stock deemed to be issued and outstanding as of a given date shall be the sum of the number of shares of Common Stock (excluding treasury shares, if any) issued and outstanding.

f) Notice to Holder.

i. Adjustment to Exercise Price. Whenever the Exercise Price is adjusted pursuant to any provision of this Section 3, the Company shall promptly deliver to the Holder by facsimile or e-mail a notice setting forth the Exercise Price after such adjustment and any resulting adjustment to the number of Warrant Shares and setting forth a brief statement of the facts requiring such adjustment.

ii. Notice to Allow Exercise by Holder. If (A) the Company shall declare a dividend (or any other distribution in whatever form) on the Common Stock, (B) the Company shall declare a special nonrecurring cash dividend on or a redemption of the Common Stock, (C) the Company shall authorize the granting to all holders of the Common Stock rights or warrants to subscribe for or purchase any shares of capital stock of any class or of any rights, (D) the approval of any stockholders of the Company shall be required in connection with any reclassification of the Common Stock, any consolidation or merger to which the Company is a party, any sale or transfer of all or substantially all of the assets of the Company, or any compulsory share exchange whereby the Common Stock is converted into other securities, cash or property, or (E) the Company shall authorize the voluntary or involuntary dissolution, liquidation or winding up of the affairs of the Company, then, in each case, the Company shall cause to be delivered by facsimile or e-mail to the Holder at its last facsimile number or email address as it shall appear upon the Warrant Register of the Company, at least 20 calendar days prior to the applicable record or effective date hereinafter specified, a notice stating (x) the date on which a record is to be taken for the purpose of such dividend, distribution, redemption, rights or warrants, or if a record is not to be taken, the date as of which the holders of the Common Stock of record to be entitled to such dividend, distributions, redemption, rights or warrants are to be determined or (y) the date on which such reclassification, consolidation, merger, sale, transfer or share exchange is expected to become effective or close, and the date as of which it is expected that holders of the Common Stock of record shall be entitled to exchange their shares of the Common Stock for securities, cash or other property deliverable upon such reclassification, consolidation, merger, sale, transfer or share exchange; provided that the failure to deliver such notice or any defect therein or in the delivery thereof shall not affect the validity of the corporate action required to be specified in such notice. To the extent that any notice provided in this Warrant constitutes, or contains, material, non-public information regarding the Company or any of the Subsidiaries, the Company shall simultaneously file such notice with the Commission pursuant to a Current Report on Form 8-K. The Holder shall remain entitled to exercise this Warrant during the period commencing on the date of such notice to the effective date of the event triggering such notice except as may otherwise be expressly set forth herein.

Section 4. Transfer of Warrant.

a) Transferability. This Warrant and all rights hereunder are transferable, in whole or in part, upon surrender of this Warrant at the principal office of the Company or its designated agent, together with a written assignment of this Warrant substantially in the form attached hereto duly executed by the Holder or its agent or attorney and funds sufficient to pay any transfer taxes payable upon the making of such transfer. Upon such surrender and, if required, such payment, the Company shall execute and deliver a new Warrant or Warrants in the name of the assignee or assignees, as applicable, and in the denomination or denominations specified in such instrument of assignment, and shall issue to the assignor a new Warrant evidencing the portion of this Warrant not so assigned, and this Warrant shall promptly be cancelled. Notwithstanding anything herein to the contrary, the Holder shall not be required to physically surrender this Warrant to the Company unless the Holder has assigned this Warrant in full, in which case, the Holder shall surrender this Warrant to the Company within three (3) Trading Days of the date the Holder delivers an assignment form to the Company assigning this Warrant full. The Warrant, if properly assigned in accordance herewith, may be exercised by a new holder for the purchase of Warrant Shares without having a new Warrant issued.

b) New Warrants. If this Warrant is not held in global form through DTC (or any successor depository), this Warrant may be divided or combined with other Warrants upon presentation hereof at the aforesaid office of the Company, together with a written notice specifying the names and denominations in which new Warrants are to be issued, signed by the Holder or its agent or attorney. Subject to compliance with Section 4(a), as to any transfer which may be involved in such division or combination, the Company shall execute and deliver a new Warrant or Warrants in exchange for the Warrant or Warrants to be divided or combined in accordance with such notice. All Warrants issued on transfers or exchanges shall be dated the original Initial Exercise Date and shall be identical with this Warrant except as to the number of Warrant Shares issuable pursuant thereto.

c) Warrant Register. The Company shall register this Warrant, upon records to be maintained by the Company for that purpose (the "Warrant Register"), in the name of the record Holder (which shall include the initial Holder or, as the case may be, any registered assignee to which this Warrant is permissibly assigned hereunder) from time to time. The Company may deem and treat the registered Holder of this Warrant as the absolute owner hereof for the purpose of any exercise hereof or any distribution to the Holder, and for all other purposes, absent actual notice to the contrary

Section 5. Miscellaneous.

a) No Rights as Stockholder Until Exercise. This Warrant does not entitle the Holder to any voting rights, dividends or other rights as a stockholder of the Company prior to the exercise hereof as set forth in Section 2(d)(i), except as expressly set forth in Section 3.

b) Loss, Theft, Destruction or Mutilation of Warrant. The Company covenants that upon receipt by the Company of evidence reasonably satisfactory to it of the loss, theft, destruction or mutilation of this Warrant or any stock certificate relating to the Warrant Shares, and in case of loss, theft or destruction, of indemnity or security reasonably satisfactory to it (which, in the case of the Warrant, shall not include the posting of any bond), and upon surrender and cancellation of such Warrant or stock certificate, if mutilated, the Company will make and deliver a new Warrant or stock certificate of like tenor and dated as of such cancellation, in lieu of such Warrant or stock certificate.

c) Saturdays, Sundays, Holidays, etc. If the last or appointed day for the taking of any action or the expiration of any right required or granted herein shall not be a Business Day, then, such action may be taken or such right may be exercised on the next succeeding Business Day.

d) Authorized Shares.

The Company covenants that, during the period the Warrant is outstanding, it will reserve from its authorized and unissued Common Stock a sufficient number of shares to provide for the issuance of the Warrant Shares upon the exercise of any purchase rights under this Warrant. The Company further covenants that its issuance of this Warrant shall constitute full authority to its officers who are charged with the duty of issuing the necessary Warrant Shares upon the exercise of the purchase rights under this Warrant. The Company will take all such reasonable action as may be necessary to assure that such Warrant Shares may be issued as provided herein without violation of any applicable law or regulation, or of any requirements of the Trading Market upon which the Common Stock may be listed. The Company covenants that all Warrant Shares which may be issued upon the exercise of the purchase rights represented by this Warrant will, upon exercise of the purchase rights represented by this Warrant and payment for such Warrant Shares in accordance herewith, be duly authorized, validly issued, fully paid and nonassessable and free from all taxes, liens and charges created by the Company in respect of the issue thereof (other than taxes in respect of any transfer occurring contemporaneously with such issue).

Except and to the extent as waived or consented to by the Holder, the Company shall not by any action, including, without limitation, amending its certificate of incorporation or through any reorganization, transfer of assets, consolidation, merger, dissolution, issue or sale of securities or any other voluntary action, avoid or seek to avoid the observance or performance of any of the terms of this Warrant, but will at all times in good faith assist in the carrying out of all such terms and in the taking of all such actions as may be necessary or appropriate to protect the rights of Holder as set forth in this Warrant against impairment. Without limiting the generality of the foregoing, the Company will (i) not increase the par value of any Warrant Shares above the amount payable therefor upon such exercise immediately prior to such increase in par value, (ii) take all such action as may be necessary or appropriate in order that the Company may validly and legally issue fully paid and nonassessable Warrant Shares upon the exercise of this Warrant and (iii) use commercially reasonable efforts to obtain all such authorizations, exemptions or consents from any public regulatory body having jurisdiction thereof, as may be, necessary to enable the Company to perform its obligations under this Warrant.

Before taking any action which would result in an adjustment in the number of Warrant Shares for which this Warrant is exercisable or in the Exercise Price, the Company shall obtain all such authorizations or exemptions thereof, or consents thereto, as may be necessary from any public regulatory body or bodies having jurisdiction thereof.

e) Governing Law. All questions concerning the construction, validity, enforcement and interpretation of this Warrant shall be governed by and construed and enforced in accordance with the internal laws of the State of New York, without regard to the principles of conflict of laws thereof. Each party agrees that all legal proceedings concerning the interpretation, enforcement and defense of this Warrant shall be commenced in the state and federal courts sitting in the City of New York, Borough of Manhattan (the "New York Courts"). Each party hereto hereby irrevocably submits to the exclusive jurisdiction of the New York Courts for the adjudication of any dispute hereunder or in connection herewith or with any transaction contemplated hereby or discussed herein, and hereby irrevocably waives, and agrees not to assert in any suit, action or proceeding, any claim that it is not personally subject to the jurisdiction of such New York Courts, or such New York Courts are improper or inconvenient venue for such proceeding. Each party hereto hereby irrevocably waives, to the fullest extent permitted by applicable law, any and all right to trial by jury in any legal proceeding arising out of or relating to this Warrant. If any party shall commence an action or proceeding to enforce any provisions of this Warrant, then the prevailing party in such action or proceeding shall be reimbursed by the other party for its attorneys' fees and other costs and expenses incurred in the investigation, preparation and prosecution of such action or proceeding.

f) Restrictions. The Holder acknowledges that the Warrant Shares acquired upon the exercise of this Warrant, if not registered and the Holder does not utilize cashless exercise, will have restrictions upon resale imposed by state and federal securities laws.

g) Nonwaiver and Expenses. No course of dealing or any delay or failure to exercise any right hereunder on the part of Holder shall operate as a waiver of such right or otherwise prejudice the Holder's rights, powers or remedies. If the Company willfully and knowingly fails to comply with any provision of this Warrant, which results in any material damages to the Holder, the Company shall pay to the Holder such amounts as shall be sufficient to cover any costs and expenses including, but not limited to, reasonable attorneys' fees, including those of appellate proceedings, incurred by the Holder in collecting any amounts due pursuant hereto or in otherwise enforcing any of its rights, powers or remedies hereunder.

h) Notices. Any and all notices or other communications or deliveries to be provided by the Holders hereunder including, without limitation, any Notice of Exercise, shall be in writing and delivered personally, by facsimile, by e-mail or sent by a nationally recognized overnight courier service, addressed to the Company, at 2915 Commers Drive, Suite 900, Eagan, MN 55121, Attention: Bob Myers, Chief Financial Officer, facsimile number (651) 389-4807, E-mail: bmyers@skylinemedical.com, or such other facsimile number, email address or address as the Company may specify for such purposes by notice to the Holders. Any and all notices or other communications or deliveries to be provided by the Company hereunder shall be in writing and delivered personally, by facsimile, by e-mail or sent by a nationally recognized overnight courier service addressed to each Holder at the facsimile number or address of such Holder appearing on the books of the Warrant Agent. Any notice or other communication or deliveries hereunder shall be deemed given and effective on the earliest of (i) the date of transmission, if such notice or communication is delivered via facsimile at the facsimile number or e-mail at the e-mail address set forth in this Section prior to 5:30 p.m. (New York City time) on any date, (ii) the next Trading Day after the date of transmission, if such notice or communication is delivered via facsimile at the facsimile number or e-mail at the e-mail address set forth in this Section on a day that is not a Trading Day or later than 5:30 p.m. (New York City time) on any Trading Day, (iii) the second Trading Day following the date of mailing, if sent by U.S. nationally recognized overnight courier service, or (iv) upon actual receipt by the party to whom such notice is required to be given.

i) Warrant Agent. The Company shall serve as warrant agent under this Warrant. Upon thirty (30) days' notice to the Holder, the Company may appoint a new warrant agent. Any corporation into which the Company or any new warrant agent may be merged or any corporation resulting from any consolidation to which the Company or any new warrant agent shall be a party or any corporation to which the Company or any new warrant agent transfers substantially all of its corporate trust or shareholders services business shall be a successor warrant agent under this Warrant without any further act. Any such successor warrant agent shall promptly cause notice of its succession as warrant agent to be mailed (by first class mail, postage prepaid) to the Holder at the Holder's last address as shown on the Warrant Register.

j) Limitation of Liability. No provision hereof, in the absence of any affirmative action by the Holder to exercise this Warrant to purchase Warrant Shares, and no enumeration herein of the rights or privileges of the Holder, shall give rise to any liability of the Holder for the purchase price of any Common Stock or as a stockholder of the Company, whether such liability is asserted by the Company or by creditors of the Company.

k) Remedies. The Holder, in addition to being entitled to exercise all rights granted by law, including recovery of damages, will be entitled to specific performance of its rights under this Warrant. The Company agrees that monetary damages would not be adequate compensation for any loss incurred by reason of a breach by it of the provisions of this Warrant and hereby agrees to waive and not to assert the defense in any action for specific performance that a remedy at law would be adequate.

l) Successors and Assigns. Subject to applicable securities laws, this Warrant and the rights and obligations evidenced hereby shall inure to the benefit of and be binding upon the successors and permitted assigns of the Company and the successors and permitted assigns of Holder. The provisions of this Warrant are intended to be for the benefit of any Holder from time to time of this Warrant and shall be enforceable by the Holder or holder of Warrant Shares.

m) Amendment. This Warrant may be modified or amended or the provisions hereof waived with the written consent of the Company, on the one hand, and the Holder or the beneficial owner of this Warrant, on the other hand.

n) Severability. Wherever possible, each provision of this Warrant shall be interpreted in such manner as to be effective and valid under applicable law, but if any provision of this Warrant shall be prohibited by or invalid under applicable law, such provision shall be ineffective to the extent of such prohibition or invalidity, without invalidating the remainder of such provisions or the remaining provisions of this Warrant.

o) Headings. The headings used in this Warrant are for the convenience of reference only and shall not, for any purpose, be deemed a part of this Warrant.

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*(Signature Page Follows)*

IN WITNESS WHEREOF, the Company has caused this Warrant to be executed by its officer thereunto duly authorized as of the date first above indicated.

**PRECISION THERAPEUTICS INC.**

By: \_\_\_\_\_  
Name: Bob Myers  
Title: Chief Financial Officer

**NOTICE OF EXERCISE**

TO: PRECISION THERAPEUTICS INC.

(1) The undersigned hereby elects to purchase \_\_\_\_\_ Warrant Shares of the Company pursuant to the terms of the attached Warrant (only if exercised in full), and tenders herewith payment of the exercise price in full, together with all applicable transfer taxes, if any.

(2) Payment shall take the form of (check applicable box):

in lawful money of the United States; or

if permitted the cancellation of such number of Warrant Shares as is necessary, in accordance with the formula set forth in subsection 2(c), to exercise this Warrant with respect to the maximum number of Warrant Shares purchasable pursuant to the cashless exercise procedure set forth in subsection 2(c).

(3) Please issue said Warrant Shares in the name of the undersigned or in such other name as is specified below:

\_\_\_\_\_

If the Warrant being exercised is held in global form through DTC (or any successor depository) the Warrant Shares shall be delivered to the following DWAC Account Number:

\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

If the Warrant being exercised is not held in global form through DTC (or any successor depository), the Warrant Shares shall be delivered to the following address:

\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

[SIGNATURE OF HOLDER]

Name of Investing Entity: \_\_\_\_\_

Signature of Authorized Signatory of Investing Entity: \_\_\_\_\_

Name of Authorized Signatory: \_\_\_\_\_

Title of Authorized Signatory: \_\_\_\_\_

Date: \_\_\_\_\_





ASSIGNMENT FORM

*(To assign the foregoing Warrant, execute this form and supply required information. Do not use this form to purchase shares.)*

FOR VALUE RECEIVED, the foregoing Warrant and all rights evidenced thereby are hereby assigned to

Name: \_\_\_\_\_  
(Please Print)

Address: \_\_\_\_\_  
(Please Print)

Phone Number: \_\_\_\_\_

Email Address: \_\_\_\_\_

Dated: \_\_\_\_\_, \_\_\_\_\_

Holder's Signature: \_\_\_\_\_

Holder's Address: \_\_\_\_\_

THE REGISTERED HOLDER OF THIS UNIT PURCHASE OPTION BY ITS ACCEPTANCE HEREOF, AGREES THAT THE SECURITIES EVIDENCED BY THIS UNIT PURCHASE OPTION MAY NOT BE SOLD, TRANSFERRED OR ASSIGNED EXCEPT AS HEREIN PROVIDED AND THE REGISTERED HOLDER OF THIS UNIT PURCHASE OPTION AGREES THAT THE SECURITIES EVIDENCED BY THIS UNIT PURCHASE OPTION WILL NOT BE SOLD, TRANSFERRED, ASSIGNED, PLEDGED OR HYPOTHECATED, OR BE THE SUBJECT OF ANY HEDGING, SHORT SALE, DERIVATIVE, PUT, OR CALL TRANSACTION THAT WOULD RESULT IN THE EFFECTIVE ECONOMIC DISPOSITION OF THIS UNIT PURCHASE OPTION OR THE SECURITIES EVIDENCED BY THIS UNIT PURCHASE OPTION, FOR A PERIOD OF ONE HUNDRED EIGHTY (180) DAYS FOLLOWING THE EFFECTIVE DATE (DEFINED BELOW) TO ANYONE OTHER THAN TO ANY MEMBER PARTICIPATING IN THE OFFERING AND THE OFFICERS OR PARTNERS THEREOF, IF ALL SECURITIES SO TRANSFERRED REMAIN SUBJECT TO THE LOCK-UP RESTRICTION SET FORTH ABOVE FOR THE REMAINDER OF THE TIME PERIOD.

UNIT PURCHASE OPTION  
FOR THE PURCHASE OF UNITS  
OF PRECISION THERAPEUTICS, INC.

**1. Unit Purchase Option.**

THIS CERTIFIES THAT, in consideration of [ $\$$ •]<sup>1</sup> duly paid by or on behalf of [ $\bullet$ ] (“Holder”), as registered owner of this Unit Purchase Option, to Precision Therapeutics, Inc. (the “Company”), Holder is entitled, at any time or from time to time commencing on the 180<sup>th</sup> day after the commencement of sales in the public offering (the “Effective Date”) being conducted pursuant to the registration statement (the “Registration Statement”) pursuant to which certain units of securities are offered for sale to the public (the “Offering”) (the “Commencement Date”), and at or before 5:00 p.m., Eastern Time, on the fifth anniversary of the Effective Date (the “Expiration Date”), but not thereafter, to subscribe for, purchase and receive, in whole or in part, up to [ $\bullet$ ] units (the “Units”) of the Company, each Unit consisting of one share of the Company’s common stock, par value \$0.001 per share (the “Common Stock” or “Shares”), and warrants to purchase 0.5 share of Common Stock (the “Warrant(s)”). The Warrants are the same as the warrants included in the units of securities being sold in the Offering (the “Public Warrants”) under the Securities Act of 1933, as amended (the “Act”). If the Expiration Date is a day on which banking institutions are authorized by law to close, then this Unit Purchase Option may be exercised on the next succeeding day which is not such a day in accordance with the terms herein. During the period ending on the Expiration Date, the Company agrees not to take any action that would terminate the Unit Purchase Option. This Unit Purchase Option is initially exercisable at \$1.00 per Unit (or 125% of the public offering price of the unit of securities being sold in the Offering) so purchased; provided, however, that upon the occurrence of any of the events specified in Section 5 hereof, the rights granted by this Unit Purchase Option, including the exercise price per Unit and the number of Units to be received upon such exercise, shall be adjusted as therein specified. The term “Exercise Price” shall mean the initial exercise price or the adjusted exercise price, depending on the context.

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<sup>1</sup> Aggregate consideration paid for all unit purchase options is \$100.00.

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**2. Exercise.**

(a) *Exercise Procedure.* In order to exercise this Unit Purchase Option, the exercise form attached hereto must be duly executed and completed and delivered to the Company, together with this Unit Purchase Option and payment of the Exercise Price for the Units being purchased payable in cash or by certified check or official bank check. If the subscription rights represented hereby shall not be exercised at or before 5:00 p.m., Eastern time, on the Expiration Date, this Unit Purchase Option shall become and be void without further force or effect, and all rights represented hereby shall cease and expire.

(b) *Legend.* If required by applicable law at the time of any exercise, each certificate for the securities purchased under this Unit Purchase Option shall bear a legend as follows unless such securities have been registered under the Act:

“The securities represented by this certificate have not been registered under the Securities Act of 1933, as amended (the “Act”) or applicable state law. The securities may not be offered for sale, sold or otherwise transferred except pursuant to an effective registration statement under the Act, or pursuant to an exemption from registration under the Act and applicable state law.”

(c) *Cashless Exercise.*

(i) In lieu of the payment of the Exercise Price multiplied by the number of Units for which this Unit Purchase Option is exercisable (and in lieu of being entitled to receive Shares and Warrants) in the manner required by Section 2(a), the Holder shall have the right (but not the obligation) to convert any exercisable but unexercised portion of this Unit Purchase Option into Units consisting of Shares and Warrants (the “Conversion Right”) as follows:

(A) Upon exercise of the Conversion Right, the Company shall deliver to the Holder (without payment by the Holder of any of the Exercise Price in cash) that number of Shares equal to the quotient obtained by dividing (x) the Value of the portion of the Unit Purchase Option being converted by (y) the Current Market Price of a Share.

(B) The “Value” of the portion of the Unit Purchase Option being converted shall equal the remainder derived by subtracting (a) (i) the Exercise Price multiplied by (ii) the number of Units underlying the portion of this Unit Purchase Option being converted, from (b) the Current Market Value of a Unit multiplied by the number of Units underlying the portion of the Unit Purchase Option being converted.

(C) As used herein, the term “Current Market Value” per Unit at any date means the remainder derived by subtracting (x) the exercise price of the Warrants multiplied by the number of Shares issuable upon exercise of the Warrants underlying one Unit from (y) the Current Market Price of the Shares multiplied by the number of Shares included within one Unit and underlying the Warrants included within one Unit.

(D) The “Current Market Price” of a Share shall mean (i) if the Shares are listed on a national securities exchange or quoted on the OTCQB or OTCQX (or any successor exchange or entity), the closing or last sale price of the Shares in the principal trading market for the Shares on the last trading day preceding the day in question as reported by the exchange, the OTCQB or OTCQX, as the case may be; (ii) if the Shares are not listed on a national securities exchange or quoted on the OTCQB or OTCQX, but are traded in the residual over-the-counter market, the closing bid price for the Shares on the last trading day preceding the date in question for which such quotations are reported in the “Pink Sheets” published by OTC Markets Group, Inc. or similar publisher of such quotations; and (iii) if the fair market value of the Shares cannot be determined pursuant to clause (i) or (ii) above, such price as the Board of Directors of the Company shall determine, in good faith.

(ii) The Cashless Exercise Right may be exercised by the Holder on any business day on or after the Commencement Date and not later than the Expiration Date by delivering the Unit Purchase Option with the duly executed exercise form attached hereto with the cashless exercise section completed to the Company, exercising the Cashless Exercise Right and specifying the total number of Units the Holder will purchase pursuant to such Cashless Exercise Right.

(d) *Resale of Shares.* Holder and the Company acknowledge that as of the date hereof the Staff of the Division of Corporation Finance of the SEC has published Compliance & Disclosure Interpretation 528.04 in the Securities Act Rules section thereof, stating that the holder of securities issued in connection with a public offering may not rely upon Rule 144 promulgated under the Act to establish an exemption from registration requirements under Section 4(1) under the Act, but may nonetheless apply Rule 144 constructively for the resale of such shares in the following manner: (a) provided that six months has elapsed since the last sale under the registration statement, an underwriter or finder may resell the securities in accordance with the provisions of Rule 144(c), (e), and (f), except for the notice requirement; (b) a purchaser of the shares from an underwriter receives restricted securities unless the sale is made with an appropriate, current prospectus, or unless the sale is made pursuant to the conditions contained in (a) above; (c) a purchaser of the shares from an underwriter who receives restricted securities may include the underwriter’s holding period, provided that the underwriter or finder is not an affiliate of the issuer; and (d) if an underwriter transfers the shares to its employees, the employees may tack the firm’s holding period for purposes of Rule 144(d), but they must aggregate sales of the distributed shares with those of other employees, as well as those of the underwriter or finder, for a six-month period from the date of the transfer to the employees. Holder and the Company also acknowledge that the Staff of the Division of Corporation Finance of the SEC has advised in various no-action letters that the holding period associated with securities issued without registration to a service provider commences upon the completion of the services, which the Company agrees and acknowledges shall be the closing of the Offering, and that Rule 144(d)(3)(ii) provides that securities acquired from the issuer solely in exchange for other securities of the same issuer shall be deemed to have been acquired at the same time as the securities surrendered for conversion (which the Company agrees is the date of the initial issuance of this Unit Purchase Option). In the event that following a request by Holder to transfer the Shares in accordance with Compliance & Disclosure Interpretation 528.04 counsel for the Company reasonably concludes that Compliance & Disclosure Interpretation 528.04 no longer may be relied upon as a result of changes in applicable laws, regulations, or interpretations of the SEC Division of Corporation Finance, or as a result of judicial interpretations not known by the Company or its counsel on the date hereof (either, a “Registration Trigger Event”), then the Company shall promptly, and in any event within five (5) business days following the request, provide written notice to Holder of such determination. As a condition to giving such notice, the Company shall offer Holder a single demand registration right pursuant to an agreement in form reasonably acceptable to the Holder; provided that notwithstanding anything to the contrary, the obligations of the Company pursuant to this Section 2 shall terminate on the fifth anniversary of the Effective Date. In the absence of such conclusion by counsel for the Company, the Company shall, upon request of Holder given no earlier than six months after the final closing of the Offering, instruct its transfer agent to permit the transfer of such shares in accordance with Compliance & Disclosure Interpretation 528.04, provided that Holder has provided such documentation as shall be reasonably be requested by the Company to establish compliance with the conditions of Compliance & Disclosure Interpretation 528.04. Notwithstanding anything to the contrary, pursuant to FINRA Rule 5110(f)(2)(G)(iv), the Holder shall not be entitled to more than one demand registration right hereunder and the duration of the registration rights hereunder shall not exceed five years from the Effective Date.

**3. Transfer.**

(a) *Restrictions—General.* The securities evidenced by this Unit Purchase Option shall not be sold, transferred, assigned, pledged or hypothecated, or be the subject of any hedging, short sale, derivative, put, or call transaction that would result in the effective economic disposition of, this Unit Purchase Option (or any securities underlying this Unit Purchase Option) for a period of one hundred eighty (180) days following the Effective Date to anyone other than to any member participating in the offering and the officers or partners thereof, if all securities so transferred remain subject to the lock-up restriction set forth above for the remainder of the time period. In order to make any permitted assignment, the Holder must deliver to the Company the assignment form attached hereto duly executed and completed, together with the Unit Purchase Option and payment of all transfer taxes, if any, payable in connection therewith. The Company shall within three business days transfer this Unit Purchase Option on the books of the Company and shall execute and deliver a new Unit Purchase Option or Unit Purchase Options of like tenor to the appropriate assignee(s) expressly evidencing the right to purchase the aggregate number of Units purchasable hereunder or such portion of such number as shall be contemplated by any such assignment.

(b) *Restrictions—Securities.* The securities evidenced by this Unit Purchase Option shall not be transferred unless and until (i) the Company has received the opinion of counsel for the Holder that the securities may be transferred pursuant to an exemption from registration under the Act and applicable state securities laws, the availability of which is established to the reasonable satisfaction of the Company, or (ii) a registration statement or a post-effective amendment to the Registration Statement relating to such securities has been filed by the Company and declared effective by the Securities and Exchange Commission (the "Commission") and compliance with applicable state securities law has been established.

**4. New Unit Purchase Options to be Issued.**

(a) *Partial Exercise.* Subject to the restrictions in Section 3 hereof, this Unit Purchase Option may be exercised or assigned in whole or in part. In the event of the exercise or assignment hereof in part only, upon surrender of this Unit Purchase Option for cancellation, together with the duly executed exercise or assignment form and funds sufficient to pay any Exercise Price, the Company shall cause to be delivered to the Holder without charge a new Unit Purchase Option of like tenor to this Unit Purchase Option in the name of the Holder evidencing the right of the Holder to purchase the number of Units purchasable hereunder as to which this Unit Purchase Option has not been exercised or assigned.

(b) *Loss, Theft, Destruction.* Upon receipt by the Company of evidence satisfactory to it of the loss, theft, destruction or mutilation of this Unit Purchase Option and of reasonably satisfactory indemnification or the posting of a bond, the Company shall execute and deliver a new Unit Purchase Option of like tenor and date. Any such new Unit Purchase Option executed and delivered as a result of such loss, theft, mutilation or destruction shall constitute a substitute contractual obligation on the part of the Company.

**5. Adjustments.**

(a) *Exercise Price and Number of Securities.* The Exercise Price and the number of Units underlying the Unit Purchase Option shall be subject to adjustment from time to time as hereinafter set forth:

(i) If after the date hereof, and subject to the provisions of Section 5(c) below, the number of outstanding Shares is increased by a stock dividend payable in Shares or by a split-up of Shares or other similar event, then, on the effective date thereof, the number of Shares underlying each of the Units purchasable hereunder shall be increased in proportion to such increase in outstanding shares. In such case, the number of Shares, and the exercise price applicable thereto, underlying the Warrants underlying each of the Units purchasable hereunder shall be adjusted in accordance with the terms of the Warrants. For example, if the Company declares a two-for-one stock dividend and immediately prior to such dividend this Unit Purchase Option is for the purchase of one Unit at \$10.00 per whole Unit (with each Warrant underlying the Units being exercisable for \$12.00 per share), upon effectiveness of the dividend, this Unit Purchase Option will be adjusted to allow for the purchase of one Unit at \$10.00 per Unit, each Unit entitling the holder to receive two Shares and two Warrants (each Warrant exercisable for \$6.00 per share).

(ii) If after the date hereof, and subject to the provisions of Section 5(c), the number of outstanding Shares is decreased by a consolidation, combination or reclassification of the Shares or other similar event, then, on the effective date thereof, the number of Shares underlying each of the Units purchasable hereunder shall be decreased in proportion to such decrease in outstanding shares. In such case, the number of Shares, and the exercise price applicable thereto, issuable upon exercise of the Warrants included in each of the Units purchasable hereunder shall be adjusted in accordance with the terms of the Warrants. For example, if the Company effects a one-for-two stock reverse stock split and immediately prior to such stock split this Unit Purchase Option is for the purchase of one Unit at \$10.00 per whole Unit (with each Warrant underlying the Units being exercisable for \$12.00 per share), upon effectiveness of the stock split, this Unit Purchase Option will be adjusted to allow for the purchase of one Unit at \$10.00 per Unit, each Unit entitling the holder to receive 0.5 Shares and 0.5 Warrants (each Warrant exercisable for \$24.00 per share).

(iii) In case of any reclassification or reorganization of the outstanding Shares other than a change covered by Section 5(a)(i) or 5(a)(ii) hereof or that solely affects the par value of such Shares, or in the case of any merger or consolidation of the Company with or into another corporation (other than a consolidation or merger in which the Company is the continuing corporation and that does not result in any reclassification or reorganization of the outstanding Shares), or in the case of any sale or conveyance to another corporation or entity of the property of the Company as an entirety or substantially as an entirety in connection with which the Company is dissolved, the Holder of this Unit Purchase Option shall have the right thereafter (until the expiration of the right of exercise of this Unit Purchase Option) to receive upon the exercise hereof, for the same aggregate Exercise Price payable hereunder immediately prior to such event plus the aggregate exercise price of the Shares underlying the Warrants immediately prior to such event, the kind and amount of shares of stock or other securities or property (including cash) receivable upon such reclassification, reorganization, merger or consolidation, or upon a dissolution following any such sale or transfer, by a Holder of the number of Shares of the Company obtainable upon exercise of this Unit Purchase Option and the underlying Warrants immediately prior to such event; and if any reclassification also results in a change in Shares covered by Section 5(a)(i) or 5(a)(ii), then such adjustment shall be made pursuant to Sections 5(a)(i) or 5(a)(ii) and this Section 5(a)(iii). The provisions of this Section 5(a)(iii) shall similarly apply to successive reclassifications, reorganizations, mergers or consolidations, sales or other transfers.

(iv) This form of Unit Purchase Option need not be changed because of any change pursuant to this Section 5, and Unit Purchase Options issued after such change may state the same Exercise Price and the same number of Units as are stated in the Unit Purchase Options initially issued pursuant to this Agreement. The acceptance by any Holder of the issuance of new Unit Purchase Options reflecting a required or permissive change shall not be deemed to waive any rights to an adjustment occurring after the Commencement Date or the computation thereof.

(b) *Substitute Unit Purchase Option.* In case of any consolidation of the Company with, or merger of the Company with, or merger of the Company into, another corporation (other than a consolidation or merger which does not result in any reclassification or change of the outstanding Shares), the corporation formed by such consolidation or merger shall execute and deliver to the Holder a supplemental Unit Purchase Option providing that the holder of each Unit Purchase Option then outstanding or to be outstanding shall have the right thereafter (until the stated expiration of such Unit Purchase Option) to receive, upon exercise of such Unit Purchase Option, the kind and amount of shares of stock and other securities and property receivable upon such consolidation or merger, by a holder of the number of Shares of the Company for which such Unit Purchase Option might have been exercised immediately prior to such consolidation, merger, sale or transfer. Such supplemental Unit Purchase Option shall provide for adjustments which shall be identical to the adjustments provided in this Section 5. The above provision of this Section 5 shall similarly apply to successive consolidations or mergers.

(c) *Fractional Interests.* The Company shall not be required to issue certificates representing fractions of Shares or Warrants upon the exercise of the Unit Purchase Option, nor shall it be required to issue scrip or pay cash in lieu of any fractional interests, it being the intent of the parties that all fractional interests shall be eliminated by rounding any fraction up to the nearest whole number of Warrants, Shares or other securities, properties or rights.

**6. Reservation and Listing.** The Company shall at all times reserve and keep available out of its authorized Shares, solely for the purpose of issuance upon exercise of the Warrants underlying the Unit Purchase Option, such number of Shares or other securities, properties or rights as shall be issuable upon the conversion or exercise thereof. The Company further covenants and agrees that upon exercise of the Warrants underlying the Unit Purchase Option and payment of the respective Warrant exercise price therefor, all Shares and other securities issuable upon such exercise shall be duly and validly issued, fully paid and non-assessable and not subject to preemptive rights of any stockholder. As long as the Unit Purchase Option shall be outstanding, the Company shall use its best efforts to cause all (i) Units issuable upon exercise of the Unit Purchase Option, and (ii) Shares issuable upon exercise of the Warrants included in the Units issuable upon exercise of the Unit Purchase Option to be listed (subject to official notice of issuance) on all securities exchanges (or, if applicable on the OTC Bulletin Board or any successor trading market) on which the Shares issued to the public in connection with the Offering may then be listed and/or quoted; provided, however, that the Company shall only be required to comply with (i) above to the extent the Units issued to the public in the Offering are still listed on a securities exchange.

**7. Certain Notice Requirements.**

(a) *Right to Notice.* Nothing herein shall be construed as conferring upon the Holders the right to vote or consent as a stockholder for the election of directors or any other matter, or as having any rights whatsoever as a stockholder of the Company. If, however, at any time prior to the expiration of the Unit Purchase Option and its exercise, any of the events described in Section 7(b) shall occur, then, in one or more of said events, the Company shall give written notice of such event at least fifteen days prior to the date fixed as a record date or the date of closing the transfer books for the determination of the stockholders entitled to such dividend, distribution, conversion or exchange of securities or subscription rights, or entitled to vote on such proposed dissolution, liquidation, winding up or sale. Such notice shall specify such record date or the date of the closing of the transfer books, as the case may be. Notwithstanding the foregoing, the Company shall deliver to each Holder a copy of each notice given to the other stockholders of the Company with respect to the events enumerated in Section 7(b) at the same time and in the same manner that such notice is given to all stockholders, even if less than fifteen days.

(b) *Enumerated Events.* The Company shall be required to give the notice described in this Section 7 upon one or more of the following events: (i) if the Company shall take a record of the holders of its Shares for the purpose of entitling them to receive a dividend or distribution payable otherwise than in cash, or a cash dividend or distribution payable otherwise than out of retained earnings, as indicated by the accounting treatment of such dividend or distribution on the books of the Company, or (ii) the Company shall offer to all the holders of its Shares any additional shares of capital stock of the Company or securities convertible into or exchangeable for shares of capital stock of the Company, or any option, right or warrant to subscribe therefor, or (iii) a dissolution, liquidation or winding up of the Company (other than in connection with a consolidation or merger) or a sale of all or substantially all of its property, assets and business shall be proposed.



(c) *Change in Exercise Price.* The Company shall, promptly after an event requiring a change in the Exercise Price pursuant to Section 5 hereof, send notice to the Holders of such event and change (the “Price Notice”). The Price Notice shall describe the event causing the change and the method of calculating same and shall be certified as being true and accurate by the Company’s President and Chief Financial Officer.

(d) *Notice Delivery.* All notices, requests, consents and other communications under this Unit Purchase Option shall be in writing and shall be deemed to have been duly made when hand delivered, or mailed by express mail or private courier service: (i) If to the registered Holder of the Unit Purchase Option, to the address of such Holder as shown on the books of the Company, or (ii) If to the Company, to the following address or to such other address as the Company may designate by notice to the Holders:

Precision Therapeutics, Inc.  
2915 Commers Drive,  
Suite 900  
Eagan, MN 55121  
Attn: Chief Executive Officer

**8. Registration Rights.**

(a) *Covenant to Register the Shares.*

(i) If requested in writing by the Holder, the Company agrees to register for resale the Shares underlying the Units (including the Shares underlying the Warrants included in the Units) (collectively, the “Registrable Securities”); *provided, however*, that Registrable Securities shall not include any Shares, the offer and sale of which have previously been registered or which have been sold to the public either pursuant to a registration statement or Rule 144, or which are eligible for resale pursuant to Rule 144 of the Act without volume or manner-of-sale restriction pursuant to Rule 144 of the Act and without the requirement for the Company to be in compliance with the current public information requirements under Rule 144(c)(1) of the Act. The Holder may only make one demand request pursuant to this Section 8(a). The Company will use commercially reasonable efforts to file a short-form registration statement on Form S-3 (the “Form S-3”) with the Commission covering the resale of the Registrable Securities pursuant to Rule 415(a)(1)(i) within thirty (30) days after the Company is eligible to use such Form S-3. The Company shall bear all fees and expenses attendant to the registration of the Registrable Securities pursuant to this Section. The Company agrees to use its commercially reasonable efforts to cause the Form S-3 filing required herein to become effective promptly. Notwithstanding anything to the contrary, the obligations of the Company pursuant to this Section 8 shall terminate on the fifth anniversary of the effective date of the Registration Statement pursuant to which the Offering is being made.

(b) *General Terms.*

(i) Indemnification. The Company shall indemnify the Holder(s) of the Registrable Securities to be sold pursuant to any registration statement hereunder and each person, if any, who controls such Holders within the meaning of Section 15 of the Act or Section 20 (a) of the Securities Exchange Act of 1934, as amended ("Exchange Act"), against all loss, claim, damage, expense or liability (including all reasonable attorneys' fees and other expenses reasonably incurred in investigating, preparing or defending against any claim whatsoever) to which any of them may become subject under the Act, the Exchange Act or otherwise, arising from such registration statement but only to the same extent and with the same effect as the provisions pursuant to which the Company has agreed to indemnify Dawson James Securities, Inc. ("Dawson") contained in the Placement Agency Agreement between Dawson and the Company entered into in connection with the Offering ("Placement Agreement"). The Holder(s) of the Registrable Securities to be sold pursuant to such registration statement, and their successors and assigns, shall severally, and not jointly, indemnify the Company, its directors, its officers who signed the registration statement and persons who control the Company within the meaning of Section 15 of the Securities Act or Section 20 of the Exchange Act against all loss, claim, damage, expense or liability (including all reasonable attorneys' fees and other expenses reasonably incurred in investigating, preparing or defending against any claim whatsoever) to which they may become subject under the Act, the Exchange Act or otherwise, arising from information furnished by or on behalf of such Holders, or their successors or assigns, in writing, for specific inclusion in such registration statement to the same extent and with the same effect as the provisions contained in the Placement Agreement pursuant to which Dawson has agreed to indemnify the Company.

(ii) Exercise of Unit Purchase Option. Nothing contained in this Unit Purchase Option shall be construed as requiring the Holder(s) to exercise their Unit Purchase Option prior to or after the initial filing of any registration statement or the effectiveness thereof.

(iii) Documents Delivered to Holders. The Company shall deliver promptly to each Holder participating in the offering requesting the correspondence and memoranda described below and to the managing underwriter, if any, copies of all correspondence between the Commission and the Company, its counsel or auditors and all memoranda relating to discussions with the Commission or its staff with respect to the registration statement and permit each Holder and underwriter to do such investigation, upon reasonable advance notice, with respect to information contained in or omitted from the registration statement as it deems reasonably necessary to comply with applicable securities laws or rules of FINRA. Such investigation shall include access to books, records and properties and opportunities to discuss the business of the Company with its officers and independent auditors, all to such reasonable extent and at such reasonable times, during normal business hours, as any such Holder shall reasonably request.

(iv) Underwriting Agreement. The Company shall enter into an underwriting agreement with the managing underwriter(s), if any, selected by any Holders whose Registrable Securities are being registered pursuant to this Section 8, which managing underwriter shall be reasonably satisfactory to the Company. Such agreement shall be reasonably satisfactory in form and substance to the Company, each Holder and such managing underwriters, and shall contain such representations, warranties and covenants by the Company and such other terms as are customarily contained in agreements of that type used by the managing underwriter. The Holders shall be parties to any underwriting agreement relating to an underwritten sale of their Registrable Securities. Such Holders shall not be required to make any representations or warranties to or agreements with the Company or the underwriters except as they may relate to such Holders, their Shares and their intended methods of distribution.

(v) Documents to be Delivered by Holder(s). Each of the Holder(s) participating in any of the foregoing offerings shall furnish to the Company a completed and executed questionnaire provided by the Company requesting information customarily sought of selling security holders.

(vi) Damages. Should the registration or the effectiveness thereof required by Section 8 hereof be delayed by the Company or the Company otherwise fails to comply with such provisions, the Holder(s) shall, in addition to any other legal or other relief available to the Holder(s), be entitled to obtain specific performance or other equitable (including injunctive) relief against the threatened breach of such provisions or the continuation of any such breach, without the necessity of proving actual damages and without the necessity of posting bond or other security.

**9. Miscellaneous.**

(a) *Amendments*. The Company and Dawson may from time to time supplement or amend this Unit Purchase Option without the approval of any of the Holders in order to cure any ambiguity, to correct or supplement any provision contained herein that may be defective or inconsistent with any other provisions herein, or to make any other provisions in regard to matters or questions arising hereunder that the Company and Dawson may deem necessary or desirable and that the Company and Dawson deem shall not adversely affect the interest of the Holders. All other modifications or amendments shall require the written consent of and be signed by the party against whom enforcement of the modification or amendment is sought.

(b) *Headings*. The headings contained herein are for the sole purpose of convenience of reference, and shall not in any way limit or affect the meaning or interpretation of any of the terms or provisions of this Unit Purchase Option.

(c) *Entire Agreement*. This Unit Purchase Option (together with the other agreements and documents being delivered pursuant to or in connection with this Unit Purchase Option) constitutes the entire agreement of the parties hereto with respect to the subject matter hereof, and supersedes all prior agreements and understandings of the parties, oral and written, with respect to the subject matter hereof.

(d) *Binding Effect*. This Unit Purchase Option shall inure solely to the benefit of, and shall be binding upon, the Holder and the Company and their permitted assignees, respective successors, legal representative and assigns, and no other person shall have or be construed to have any legal or equitable right, remedy or claim under or in respect of or by virtue of this Unit Purchase Option or any provisions herein contained.

(e) *Governing Law.* This Unit Purchase Option shall be governed by and construed and enforced in accordance with the laws of the State of New York, without giving effect to conflict of laws. The Company hereby agrees that any action, proceeding or claim against it arising out of, or relating in any way to this Unit Purchase Option shall be brought and enforced in the courts of the State of New York or of the United States of America for the Southern District of New York, and irrevocably submits to such jurisdiction, which jurisdiction shall be exclusive. The Company hereby waives any objection to such exclusive jurisdiction and that such courts represent an inconvenient forum. Any process or summons to be served upon the Company may be served by transmitting a copy thereof by registered or certified mail, return receipt requested, postage prepaid, addressed to it at the address set forth in Section 7 hereof. Such mailing shall be deemed personal service and shall be legal and binding upon the Company in any action, proceeding or claim. The Company and the Holder agree that the prevailing party(ies) in any such action shall be entitled to recover from the other party(ies) all of its reasonable attorneys' fees and expenses relating to such action or proceeding and/or incurred in connection with the preparation therefor.

(f) *Waivers.* The failure of the Company or the Holder to at any time enforce any of the provisions of this Unit Purchase Option shall not be deemed or construed to be a waiver of any such provision, nor to in any way affect the validity of this Unit Purchase Option or any provision hereof or the right of the Company or any Holder to thereafter enforce each and every provision of this Unit Purchase Option. No waiver of any breach, non-compliance or non-fulfillment of any of the provisions of this Unit Purchase Option shall be effective unless set forth in a written instrument executed by the party or parties against whom or which enforcement of such waiver is sought; and no waiver of any such breach, non-compliance or non-fulfillment shall be construed or deemed to be a waiver of any other or subsequent breach, non-compliance or non-fulfillment.

(g) *Counterparts.* This Unit Purchase Option may be executed in one or more counterparts, and by the different parties hereto in separate counterparts, each of which shall be deemed to be an original, but all of which taken together shall constitute one and the same agreement, and shall become effective when one or more counterparts has been signed by each of the parties hereto and delivered to each of the other parties hereto. Such counterparts may be delivered by facsimile transmission or other electronic transmission.

(h) *Exchange Agreement.* As a condition of the Holder's receipt and acceptance of this Unit Purchase Option, Holder agrees that, at any time prior to the complete exercise of this Unit Purchase Option by Holder, if the Company and Dawson enter into an agreement (the "Exchange Agreement") pursuant to which they agree that all outstanding Unit Purchase Options will be exchanged for securities or cash or a combination of both, then Holder shall agree to such exchange and become a party to the Exchange Agreement.

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IN WITNESS WHEREOF, the Company has caused this Unit Purchase Option to be signed by its duly authorized officer as of the 29th day of March, 2019.

**Precision Therapeutics, Inc.**

By: \_\_\_\_\_  
Name: Bob Myers  
Title: Chief Financial Officer



**Form To Be Used To Exercise Unit Purchase Option**

Precision Therapeutics, Inc.  
2915 Commers Drive,  
Suite 900  
Eagan, MN 55121  
Attn: Chief Executive Officer

Date: \_\_\_\_\_, 201

The undersigned hereby elects irrevocably to exercise all or a portion of the within Unit Purchase Option and to purchase \_\_\_\_\_ Units of Precision Therapeutics, Inc., and hereby makes payment of \$ \_\_\_\_\_ (at the rate of \$ \_\_\_\_\_ per Unit) in payment of the Exercise Price pursuant thereto. Please issue the Shares and Warrants comprising the Units as to which this Unit Purchase Option is exercised in accordance with the instructions given below.

or

The undersigned hereby elects irrevocably to convert its right to purchase \_\_\_\_\_ Units purchasable under the within Unit Purchase Option by surrender of the unexercised portion of the attached Unit Purchase Option (with a "Value" based of \$ \_\_\_\_\_ based on a "Market Price" of \$ \_\_\_\_\_). Please issue the securities comprising the Units as to which this Unit Purchase Option is exercised in accordance with the instructions given below.

\_\_\_\_\_  
Signature

INSTRUCTIONS FOR REGISTRATION OF SECURITIES

Name: \_\_\_\_\_  
(Print in Block Letters)

Address: \_\_\_\_\_

NOTICE: THE SIGNATURE TO THIS FORM MUST CORRESPOND WITH THE NAME AS WRITTEN UPON THE FACE OF THE WITHIN UNIT PURCHASE OPTION IN EVERY PARTICULAR WITHOUT ALTERATION OR ENLARGEMENT OR ANY CHANGE WHATSOEVER, AND MUST BE GUARANTEED BY A BANK, OTHER THAN A SAVINGS BANK, OR BY A TRUST COMPANY OR BY A FIRM HAVING MEMBERSHIP ON A REGISTERED NATIONAL SECURITIES EXCHANGE.



**Form To Be Used To Assign Unit Purchase Option**

**ASSIGNMENT**

(To be executed by the registered Holder to effect a transfer of the within Unit Purchase Option)

FOR VALUE RECEIVED, \_\_\_\_\_ does hereby sell, assign and transfer unto \_\_\_\_\_ the right to purchase \_\_\_\_\_ Units of Precision Therapeutics, Inc., (the "Company") evidenced by the within Unit Purchase Option and does hereby authorize the Company to transfer such right on the books of the Company.

Dated: \_\_\_\_\_, 201

\_\_\_\_\_  
Signature

NOTICE: THE SIGNATURE TO THIS FORM MUST CORRESPOND WITH THE NAME AS WRITTEN UPON THE FACE OF THE WITHIN UNIT PURCHASE OPTION IN EVERY PARTICULAR WITHOUT ALTERATION OR ENLARGEMENT OR ANY CHANGE WHATSOEVER, AND MUST BE GUARANTEED BY A BANK, OTHER THAN A SAVINGS BANK, OR BY A TRUST COMPANY OR BY A FIRM HAVING MEMBERSHIP ON A REGISTERED NATIONAL SECURITIES EXCHANGE.

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## MASLON LLP

March 29, 2019

Precision Therapeutics Inc.  
2915 Commers Drive, Suite 900  
Eagan, Minnesota 55121

Re: Registration Statement on Form S-3

Ladies and Gentlemen:

We have acted as counsel to Precision Therapeutics Inc., a Delaware corporation (the "Company"), in connection with (i) the issuance and sale of an aggregate of 1,478,750 units ("Units") of securities, each such Unit consisting of (a) one share of the Company's common stock, par value \$0.01 per share (the "Common Stock") and (b) a warrant to purchase 0.5 of a share of Common Stock (the "Warrants"). The Common Stock and the Warrants are included in a registration statement on Form S-3 filed by the Company with the Securities and Exchange Commission (the "Commission") and declared effective on October 4, 2016 (File No. 333-213766), as amended (the "Registration Statement"), under the Securities Act of 1933, as amended (the "Securities Act"), and a prospectus supplement dated March 27, 2019 filed with the Commission pursuant to Rule 424(b) under the Securities Act (the "Prospectus"). The shares of Common Stock and Warrants are being sold pursuant to a Placement Agency Agreement (the "Placement Agency Agreement") dated March 27, 2019 by and between the Company and Dawson James Securities, Inc., as placement agent (the "Placement Agency Agreement").

In connection with this opinion, we have examined and relied upon the Registration Statement and the Prospectus, including the exhibits thereto, the Placement Agency Agreement, the Certificate of Incorporation and Bylaws of the Company, each as amended to date, and such other documents, corporate records and instruments, and have examined such laws and regulations, as we have deemed necessary for purposes of rendering the opinions set forth herein. In rendering this opinion, we have assumed the genuineness and authenticity of all signatures on original documents; the genuineness and authenticity of all documents submitted to us as originals; the conformity to originals of all documents submitted to us as copies; the accuracy, completeness and authenticity of certificates of public officials; and the due authorization, execution and delivery of all documents where due authorization, execution and delivery are prerequisites to the effectiveness of such documents. As to any facts material to the opinions expressed herein which we have not independently established or verified, we have relied upon statements and representations of officers and other representatives of the Company and others.

Subject to the foregoing and the other matters set forth herein, it is our opinion that, as of the date hereof,

1. When the shares of Common Stock shall have been duly registered on the books of the transfer agent and registrar therefor in the name or on behalf of the purchasers, and have been issued by the Company against payment therefor in the circumstances contemplated by the Placement Agency Agreement, the issue and sale of such shares will have been duly authorized by all necessary corporate action of the Company, and such shares will be validly issued, fully paid and nonassessable.
  2. When the Warrants have been duly executed and issued by the Company delivered against payment therefor in the manner contemplated by the Placement Agency Agreement, the Warrants will constitute valid and binding obligations of the Company, enforceable against the Company in accordance with their terms, subject to applicable bankruptcy, insolvency, reorganization, moratorium and other laws affecting the enforceability of creditors' rights generally and to court decisions with respect thereto and to general principles of equity (regardless of whether such enforceability is considered in a proceeding in equity or at law).
  3. The shares of Common Stock issuable upon exercise of the Warrants have been duly authorized and if, as, and, when such shares are issued and delivered by the Company upon exercise of such Warrants in accordance with the terms thereof and the Certificate of Incorporation, including, without limitation, the payment in full of applicable consideration, such shares of Common Stock, will be validly issued, fully paid, and non-assessable.
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This opinion is being furnished in connection with the requirements of Item 601(b)(5) of Regulation S-K promulgated under the Act, and no opinion is expressed herein as to any matter pertaining to the contents of the Registration Statement or the Prospectus, other than as expressly stated herein with respect to the issue of Shares.

The opinions expressed herein are limited to the federal laws of the United States and the General Corporation Law of the State of Delaware. Our opinion is based on these laws as in effect on the date hereof. We express no opinion as to whether the laws of any particular jurisdiction are applicable to the subject matter hereof.

The opinions and statements expressed herein are as of the date hereof. We assume no obligation to update or supplement this opinion letter to reflect any facts or circumstances that may hereafter come to our attention or any changes in applicable law which may hereafter occur.

This opinion is for your benefit in connection with the Registration Statement and may be relied upon only by you and by persons entitled to rely upon it pursuant to the applicable provisions of the Act. We consent to your filing this opinion as an exhibit to a Current Report of Form 8-K to be incorporated by reference in the Registration Statement, and to the reference to our firm in the Prospectus under the heading "Legal Matters." In giving such consent, we do not thereby admit that we are in the category of persons whose consent is required under Section 7 of the Act or the rules and regulations of the Commission thereunder.

Very truly yours,

/s/ Maslon LLP  
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MASLON LLP





## Precision Therapeutics Inc. Announces Proposed Public Offering of Securities

MINNEAPOLIS, March 26, 2019 (GLOBE NEWSWIRE) -- Precision Therapeutics Inc. (NASDAQ: AIPT) ("Precision" or "the Company") today announced a proposed public offering of its common stock and warrants to purchase common stock. The offering is subject to market and other conditions, and there can be no assurance as to whether or when the offering may be completed, or as to the actual size or terms of the offering.

Dawson James Securities, Inc. is acting as exclusive placement agent for the offering.

Precision intends to use the net proceeds from the offering, if completed, for working capital and general corporate purposes. Precision may also use a portion of the net proceeds to repay indebtedness.

The offering is being made by Precision pursuant to a shelf registration statement previously filed with the Securities and Exchange Commission (the "SEC") and declared effective on October 4, 2016. The offering of the securities will be made only by means of a prospectus supplement and accompanying prospectus. A preliminary prospectus supplement and accompanying prospectus related to the offering has been filed with the SEC and is available on the SEC's website at <http://www.sec.gov>. Copies of the preliminary prospectus supplement and accompanying prospectus may also be obtained by contacting Dawson James Securities, Inc., Attention: Prospectus Department, 1 North Federal Highway, 5th Floor, Boca Raton, FL 33432, or by telephone toll free at (866) 928-0928, or by email at [mmaclaren@dawsonjames.com](mailto:mmaclaren@dawsonjames.com).

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

### About Precision Therapeutics Inc.

Precision Therapeutics (NASDAQ:AIPT) operates in two business areas: first, applying artificial intelligence to personalized medicine and drug discovery to provide personalized medicine solutions for patients and clinicians as well as clients in the pharmaceutical, diagnostic, and biotech industries, and second, production of the FDA-approved STREAMWAY® System for automated, direct-to-drain medical fluid disposal.

### Forward-looking Statements

This press release contains forward-looking statements, including statements related to Precision's public offering of common stock and warrants and the completion of the offering that involve risks and uncertainties. These forward-looking statements are based upon Precision's current expectations. Actual results and the timing of events could differ materially from those anticipated in such forward-looking statements as a result of risks and uncertainties, which include, without limitation, risks and uncertainties associated with market conditions and the satisfaction of customary closing conditions related to the proposed offering and other risks detailed in Precision's filings with the Securities and Exchange Commission. You are cautioned not to place undue reliance on these forward-looking statements, which speak only as of the date of this press release. All forward-looking statements are qualified in their entirety by this cautionary statement, and Precision undertakes no obligation to revise or update any forward-looking statements to reflect events or circumstances after the date of this press release.

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## Precision Therapeutics Inc. Announces Pricing of Public Offering of Up to \$1.2 Million of Units

MINNEAPOLIS, March 27, 2019 (GLOBE NEWSWIRE) -- Precision Therapeutics Inc. (NASDAQ: AIPT) ("Precision" or "the Company") today announced the pricing of its previously announced public offering of its common stock and warrants to purchase common stock, with anticipated gross proceeds of up to \$1,200,000, before deducting placement agent fees and expenses and offering expenses payable by the Company. The Company is offering 1,500,000 units on a "best efforts" basis, with each unit consisting of one share of common stock and a warrant to purchase 0.5 of a share of common stock, at a price of \$0.80 per unit. The warrants are immediately exercisable at a price of \$1.00 per share of common stock and will expire on the fifth anniversary of the date of issuance. The offering is expected to close on or about March 29, 2019, subject to customary closing conditions.

Dawson James Securities, Inc. is acting as exclusive placement agent for the offering.

The offering is being made by Precision pursuant to a shelf registration statement previously filed with the Securities and Exchange Commission (the "SEC") and declared effective on October 4, 2016. The securities described above will be made only by means of a prospectus supplement and accompanying prospectus. A preliminary prospectus supplement and accompanying prospectus related to the offering have been filed with the SEC and are available on the SEC's website located at <http://www.sec.gov>. A final prospectus supplement and accompanying prospectus relating to the offering will be filed with the SEC and will be available on the SEC's website at [www.sec.gov](http://www.sec.gov). Copies of the final prospectus supplement and accompanying prospectus relating to the offering, when available, may also be obtained by contacting Dawson James Securities, Inc., Attention: Prospectus Department, 1 North Federal Highway, 5th Floor, Boca Raton, FL 33432, or by telephone toll free at 866-928-0928, or by e-mail at [mmaclaren@dawsonjames.com](mailto:mmaclaren@dawsonjames.com).

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

### About Precision Therapeutics Inc.

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