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

FORM 8-K

**CURRENT REPORT
Pursuant to Section 13 or 15(d)
of the Securities Exchange Act of 1934**

Date of Report (Date of earliest event reported): December 7, 2018

MICROVISION, INC.
(Exact Name of Registrant as Specified in Charter)

Delaware
(State or Other Jurisdiction
of Incorporation)

001-34170
(Commission
File Number)

91-1600822
(IRS Employer
Identification No.)

6244 185th Ave NE, Suite 100
Redmond, Washington 98052
(Address of Principal Executive Offices) (Zip Code)

(425) 936-6847
(Registrant's telephone number, including area code)

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.

Item 1.01. Entry into a Material Definitive Agreement.

On December 7, 2018, MicroVision, Inc. (the “Company”) entered into an underwriting agreement (the “Underwriting Agreement”) with Ladenburg Thalmann & Co. Inc., as representative of the several underwriters named therein (collectively, the “Underwriters”). The Underwriting Agreement provides for the sale of 7,000,000 shares of common stock, par value \$0.001 per share (“Common Stock”), at a public offering price of \$0.60 per share, less an underwriting discount of \$0.0375 per share. The Company also granted the Underwriters a 30-day option to purchase up to an additional 1,050,000 shares of Common Stock to cover over-allotments, if any. The sale of the shares of Common Stock pursuant to the Underwriting Agreement is expected to close on or about December 11, 2018, subject to the satisfaction of customary closing conditions. The shares are being offered and sold pursuant to the Company’s registration statement on Form S-3 (Registration No. 333-228113) declared effective by the Securities and Exchange Commission (the “SEC”) on November 13, 2018. A prospectus supplement relating to the sale of the shares of Common Stock will be filed with the SEC.

The Company expects to receive net proceeds from the offering of approximately \$3.7 million, or approximately \$4.3 million if the Underwriters exercise their option to purchase additional shares in full, after deducting the underwriting discount and estimated offering expenses payable by the Company. The Company intends to use the net proceeds of the offering for general corporate purposes.

A copy of the opinion of Ropes & Gray LLP relating to the legality of the issuance and sale of the securities is attached as Exhibit 5.1 hereto. A copy of the Underwriting Agreement is attached hereto as Exhibit 1.1 and incorporated herein by reference. The foregoing description of the offering by the Company and the documentation related thereto does not purport to be complete and is qualified in its entirety by reference to such exhibits.

Item 9.01. Financial Statements and Exhibits.

(d) *Exhibits.*

- 1.1 [Underwriting Agreement by and between MicroVision, Inc. and Ladenburg Thalmann & Co. Inc., as representative of the several underwriters named therein, dated December 7, 2018.](#)
- 5.1 [Opinion of Ropes & Gray LLP.](#)
- 23.1 [Consent of Ropes & Gray LLP \(contained in Exhibit 5.1 above\).](#)

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.

MICROVISION, INC.

By: /s/ David J. Westgor
David J. Westgor
Vice President, General Counsel & Secretary

Date: December 10, 2018

7,000,000 Shares

MICROVISION, INC.

Common Stock, par value \$0.001 per share

UNDERWRITING AGREEMENT

December 7, 2018

LADENBURG THALMANN & CO. INC.
As Representative of the several
Underwriters named in Schedule I hereto
c/o LADENBURG THALMANN & CO. INC.
277 Park Avenue, 26th floor
New York, NY 10172

Ladies and Gentlemen:

MicroVision, Inc., a Delaware corporation (the "**Company**"), proposes to sell to you and the other underwriters named on Schedule I (the "**Underwriters**") to this Underwriting Agreement (this "**Agreement**"), for whom you are acting as the Representative (the "**Representative**"), an aggregate of 7,000,000 shares (the "**Firm Shares**") of Common Stock, par value \$0.001 per share (the "**Common Stock**"), of the Company. The Firm Shares consist of authorized but unissued shares of Common Stock to be issued and sold by the Company. The respective amounts of the Firm Shares to be purchased by each of the several Underwriters are set forth opposite their names on Schedule I hereto. The Company also has granted to the Underwriters an option to purchase up to 1,050,000 additional shares of Common Stock on the terms and for the purposes set forth in Section 3 hereof (the "**Option Shares**"). The Firm Shares and any Option Shares purchased pursuant to this Agreement are herein collectively called the "**Securities**."

The Company and the Underwriters hereby confirm their agreement with respect to the sale of the Securities by the Company to the Underwriters as follows:

1. **Registration Statement and Prospectus.** The Company has prepared and filed with the Securities and Exchange Commission (the "**Commission**") a registration statement on Form S-3 (File No. 333-228113) under the Securities Act of 1933, as amended (the "**Securities Act**" or the "**Act**"), and the rules and regulations (the "**Rules and Regulations**") of the Commission thereunder. Such registration statement has been declared effective by the Commission. Each part of such registration statement, including the amendments, exhibits and any schedules thereto, the documents incorporated by reference therein pursuant to Item 12 of Form S-3 under the Securities Act and the documents and information otherwise deemed to be a part thereof or included therein by Rule 430B under the Securities Act (the "**Rule 430B Information**") or otherwise pursuant to the Rules and Regulations, as of the time the Registration Statement became effective, is herein called the "**Registration Statement**." Any registration statement filed by the Company pursuant to Rule 462(b) under the Securities Act is called the "**Rule 462(b) Registration Statement**" and, from and after the date and time of filing of the Rule 462(b) Registration Statement, the term "Registration Statement" shall include the Rule 462(b) Registration Statement.

The prospectus in the form in which it has most recently been filed with the Commission on or prior to the date of this Agreement is herein called the "**Base Prospectus**." Each preliminary prospectus supplement to the Base Prospectus (including the Base Prospectus as so supplemented), that describes the Securities and the offering thereof, that omitted the Rule 430B Information and that was used prior to the filing of the final prospectus supplement referred to in the following sentence is herein called a "**Preliminary Prospectus**." The final prospectus supplement to the Base Prospectus relating to the Securities and the offering thereof (including the Base Prospectus as so supplemented), in the form filed with the Commission pursuant to Rule 424(b), is herein called the "**Prospectus**." Any reference herein to the Base Prospectus, any Preliminary Prospectus or the Prospectus shall be deemed to include the documents incorporated by reference therein pursuant to Item 12 of Form S-3 under the Securities Act as of the date of such prospectus.

All references in this Agreement to financial statements and schedules and other information which is "described," "contained," "included" or "stated" in the Registration Statement, the Base Prospectus, any Preliminary Prospectus or the Prospectus (or other references of like import) shall be deemed to mean and include all such financial statements and schedules and other information which is incorporated by reference in or otherwise deemed by the Rules and Regulations to be a part of or included in the Registration Statement, the Base Prospectus, any Preliminary Prospectus or the Prospectus, as the case may be; and all references in this Agreement to amendments or supplements to the Registration Statement, the Base Prospectus, any Preliminary Prospectus or the Prospectus shall be deemed to mean and include any document filed under the Securities Exchange Act of 1934, as amended (the "**Exchange Act**"), which is deemed to be incorporated by reference therein or otherwise deemed by the Rules and Regulations to be a part thereof.

2. **Representations and Warranties of the Company.**

(a) Representations and Warranties of the Company. The Company represents and warrants to each Underwriter as follows:

(i) Registration Statement and Prospectuses. No order preventing or suspending the use of any Preliminary Prospectus or the Prospectus (or any supplement thereto) has been issued by the Commission and no proceeding for that purpose has been initiated or is pending or, to the knowledge of the Company, threatened by the Commission. As of the time each part of the Registration Statement (or any post-effective amendment thereto) became or becomes effective (including each deemed effective date with respect to the Underwriters pursuant to Rule 430B or otherwise under the Securities Act), such part conformed or will conform in all material respects to the requirements of the Act and the Rules and Regulations. Upon the filing or first use within the meaning of the Rules and Regulations, the Preliminary Prospectus and the Prospectus conformed or will conform in all material respects to the requirements of the Act and the Rules and Regulations. The Registration Statement and any post-effective amendment thereto have become effective under the Securities Act. The Company has complied to the Commission's satisfaction with all requests of the Commission for additional or supplemental information. No stop order suspending the effectiveness of the Registration Statement, any post-effective amendment or any part thereof is in effect and no proceedings for such purpose have been instituted or are pending or, to the knowledge of the Company, are threatened by the Commission.

(ii) ***Accurate Disclosure***. Each Preliminary Prospectus, at the time of filing thereof or the time of first use within the meaning of the Rules and Regulations, did not contain an untrue statement of a material fact or omit to state a material fact required to be stated therein or necessary to make the statements therein, in the light of the circumstances under which they were made, not misleading. Neither the Registration Statement nor any amendment thereto, at the effective time of each part thereof, at the First Closing Date (as defined below) or at the Second Closing Date (as defined below), contained, contains or will contain an untrue statement of a material fact or omitted, omits or will omit to state a material fact required to be stated therein or necessary to make the statements therein not misleading. As of the Time of Sale (as defined below), neither (A) the Time of Sale Disclosure Package (as defined below) nor (B) any issuer free writing prospectus (as defined below), when considered together with the Time of Sale Disclosure Package, included an untrue statement of a material fact or omitted to state a material fact necessary in order to make the statements therein, in light of the circumstances under which they were made, not misleading. Neither the Prospectus nor any supplement thereto, as of its date, at the First Closing Date or at the Second Closing Date, included, includes or will include an untrue statement of a material fact or omitted, omits or will omit to state a material fact necessary in order to make the statements therein, in light of the circumstances under which they were made, not misleading. The representations and warranties in this Section 2(a)(ii) shall not apply to statements in or omissions from any Preliminary Prospectus, the Registration Statement (or any amendment thereto), the Time of Sale Disclosure Package or the Prospectus (or any supplement thereto) made in reliance upon, and in conformity with, written information furnished to the Company by the Representative on behalf of the several Underwriters specifically for use in the preparation of such document, it being understood and agreed that the only such information furnished by the Representative on behalf of the several Underwriters consists of the information described as such in Section 6(e).

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

“Time of Sale Disclosure Package” means the Preliminary Prospectus dated December 4, 2018, any free writing prospectus set forth on Schedule II and the information on Schedule III, all considered together.

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

“Time of Sale” means 8:20 a.m. (New York City time) on the date of this Agreement.

(iii) Issuer Free Writing Prospectuses. (A) Each issuer free writing prospectus does not include any information that conflicts with the information contained in the Registration Statement, any Preliminary Prospectus or the Prospectus. The foregoing sentence does not apply to statements in or omissions from any issuer free writing prospectus based upon and in conformity with written information furnished to the Company by the Representative on behalf of the several Underwriters specifically for use therein; it being understood and agreed that the only such information furnished by the Representative on behalf of the several Underwriters consists of the information described as such in Section 6(e).

(B)(1) At the earliest time after the filing of the Registration Statement that the Company or another offering participant made *abona fide* offer (within the meaning of Rule 164(h)(2) under the Securities Act) of the Securities and (2) at the date hereof, the Company was not and is not an “ineligible issuer,” as defined in Rule 405 under the Securities Act, including the Company in the preceding three years not having been convicted of a felony or misdemeanor or having been made the subject of a judicial or administrative decree or order as described in Rule 405 of the Rules and Regulations (without taking account of any determination by the Commission pursuant to Rule 405 of the Rules and Regulations that it is not necessary that the Company be considered an ineligible issuer), nor an “excluded issuer” as defined in Rule 164 under the Securities Act.

(C) Each issuer free writing prospectus satisfied, as of its issue date and at all subsequent times to the Time of Sale, all other conditions to use thereof as set forth in Rules 164 and 433 under the Securities Act.

(iv) No Other Offering Materials. The Company has not distributed and will not distribute any prospectus or other offering material in connection with the offering and sale of the Securities other than any Preliminary Prospectus, the Time of Sale Disclosure Package, the Prospectus, the roadshow (as defined in Rule 433 under the Securities Act) or investor presentations or other materials permitted by the Act to be distributed by the Company (the “**Marketing Materials**”); *provided, however*, that, except as set forth on Schedule II, the Company has not made and will not make any offer relating to the Securities that would constitute a free writing prospectus, except in accordance with the provisions of Section 4(a)(xvi) of this Agreement.

(v) Financial Statements. The financial statements of the Company, together with the related notes, set forth or incorporated by reference in the Registration Statement, the Time of Sale Disclosure Package and the Prospectus comply in all material respects with the requirements of the Securities Act and the Exchange Act and fairly present, in all material respects, the financial condition of the Company as of the dates indicated and the results of operations and changes in cash flows for the periods therein specified in conformity with generally accepted accounting principles in the United States (“**GAAP**”) consistently applied throughout the periods involved (in the case of unaudited interim financial statements, subject to normal year-end adjustments); and the supporting schedules included in the Registration Statement present fairly, in all material respects, the information required to be stated therein; and, except as disclosed in the Registration Statement, the Time of Sale Disclosure Package and the Prospectus, there are no material

off-balance sheet arrangements (as defined in Regulation S-K under the Act, Item 303(a)(4)(ii)) that have a material current or, to the Company's knowledge, are reasonably likely to have a material future effect on the Company's financial condition, results of operations, liquidity, capital expenditures, capital resources or significant components of revenue or expenses. No other financial statements or schedules are required to be included in the Registration Statement, the Time of Sale Disclosure Package or the Prospectus. To the Company's knowledge, Moss Adams LLP, which has expressed its opinion with respect to the financial statements and schedules filed as a part of the Registration Statement and included in the Registration Statement, the Time of Sale Disclosure Package and the Prospectus, is (x) an independent public accounting firm within the meaning of the Act and the Rules and Regulations, (y) a registered public accounting firm (as defined in Section 2(a)(12) of the Sarbanes-Oxley Act of 2002 (the "*Sarbanes-Oxley Act*") and (z) not in violation of the auditor independence requirements of the Sarbanes-Oxley Act.

(vi) *Organization and Good Standing.* The Company has been duly organized and is validly existing as a corporation in good standing under the laws of the State of Delaware. The Company has full corporate power and authority to own its properties and conduct its business as currently being carried on and as described in the Registration Statement, the Time of Sale Disclosure Package and the Prospectus, and is duly qualified to do business as a foreign corporation in good standing in each jurisdiction in which it owns or leases real property or in which the conduct of its business makes such qualification necessary, except where the failure to so qualify would have a material adverse effect upon the business, prospects, properties, financial condition or results of operations of the Company, taken as a whole ("*Material Adverse Effect*").

(vii) *Absence of Certain Events.* Except as contemplated in the Time of Sale Disclosure Package and in the Prospectus, subsequent to the respective dates as of which information is given in the Time of Sale Disclosure Package and the Prospectus, the Company has not incurred any material liabilities or obligations, direct or contingent, or entered into any material transactions, or declared or paid any dividends or made any distribution of any kind with respect to its capital stock; and there has not been any change in the capital stock (other than a change in the number of outstanding shares of Common Stock due to the issuance of shares upon the exercise of outstanding options or warrants, vesting of restricted stock units, or conversion of convertible securities), or any material change in the short-term or long-term debt (other than as a result of the conversion of convertible securities), or any issuance of options, warrants, convertible securities or other rights to purchase the capital stock, of the Company, or any material adverse change in the financial condition, business, prospects, properties or results of operations of the Company, taken as a whole ("*Material Adverse Change*").

(viii) *Absence of Proceedings.* Except as set forth in the Registration Statement, the Time of Sale Disclosure Package and the Prospectus, there is not pending or, to the knowledge of the Company, threatened or contemplated, any action, suit or proceeding (a) to which the Company is a party or (b) which has as the subject thereof any officer or director of the Company (in such capacity) or (c) to which any property or assets of the Company is the subject before or by any court or Governmental Authority (as

defined below), which, individually or in the aggregate, would reasonably be likely to result in a Material Adverse Change, or would materially and adversely affect the ability of the Company to perform its obligations under this Agreement. There are no current or, to the knowledge of the Company, pending, legal, governmental or regulatory actions, suits or proceedings (x) to which the Company is party or (y) which has as a party thereof any officer or director of the Company (in such capacity) or (z) of which any property or assets of the Company is the subject that are required to be described in the Registration Statement, Time of Sale Disclosure Package and Prospectus by the Act or by the Rules and Regulations and that have not been so described.

(ix) *Disclosure of Legal Matters*. There are no statutes, regulations, contracts or documents that are required to be described in the Registration Statement, in the Time of Sale Disclosure Package and in the Prospectus or required to be filed as exhibits to the Registration Statement by the Securities Act or by the Rules and Regulations that have not been so described or filed.

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

(xi) *Capitalization; the Securities; Registration Rights.* All of the issued and outstanding shares of capital stock of the Company, including the outstanding shares of Common Stock, are duly authorized and validly issued, fully paid and nonassessable, have been issued in compliance with all federal and state securities laws, were not issued in violation of or subject to any preemptive rights or other rights to subscribe for or purchase securities that have not been waived in writing (a copy of which has been delivered to counsel to the Underwriters), and the holders thereof are not subject to personal liability by reason of being such holders; the Securities which may be sold hereunder by the Company have been duly authorized and, when issued, delivered and paid for in accordance with the terms of this Agreement, will have been validly issued and will be fully paid and nonassessable, and the holders thereof will not be subject to personal liability by reason of being such holders; and the capital stock of the Company, including the Common Stock, conforms to the description thereof in the Registration Statement, in the Time of Sale Disclosure Package and in the Prospectus. Except as otherwise stated in the Registration Statement, in the Time of Sale Disclosure Package and in the Prospectus, (A) there are no preemptive rights or other rights to subscribe for or to purchase, or any restriction upon the voting or transfer of, any shares of Common Stock pursuant to the Company's charter, by-laws or any agreement or other instrument to which the Company is a party or by which the Company is bound; and (B) neither the filing of the Registration Statement nor the offering or sale of the Securities as contemplated by this Agreement gives rise to any rights for or relating to the registration of any shares of Common Stock or other securities of the Company (collectively "*Registration Rights*"). The Company has an authorized and outstanding capitalization as set forth in the Registration Statement, in the Time of Sale Disclosure Package and in the Prospectus. The Common Stock (including the Securities) conforms in all material respects to the description thereof contained in the Time of Sale Disclosure Package and the Prospectus.

(xii) *Stock Options.* Except as would not have a Material Adverse Effect, (A) except as described in the Registration Statement, in the Time of Sale Disclosure Package and in the Prospectus, there are no options, warrants, agreements, contracts or other rights in existence to purchase or acquire from the Company any shares of the capital stock of the Company, (B) the description of the Company's stock option, stock bonus and other stock plans or arrangements (the "*Company Stock Plans*"), and the options or other rights granted thereunder (collectively, the "*Awards*"), set forth in the Registration Statement, the Time of Sale Disclosure Package and the Prospectus accurately and fairly presents the information required to be shown with respect to such plans, arrangements and Awards, (C) each grant of an Award (i) was duly authorized no later than the date on which the grant of such Award was by its terms to be effective by all necessary corporate action, including, as applicable, approval by the board of directors of the Company (or a duly constituted and authorized committee thereof) and any required stockholder approval by the necessary number of votes or written consents, and the award agreement governing such grant (if any) was duly executed and delivered by each party thereto and (ii) was made in accordance with the terms of the applicable Company Stock Plan, and all applicable laws and regulatory rules or requirements, including all applicable federal securities laws.

(xiii) Compliance with Laws. The Company holds, and is operating in compliance in all material respects with, all franchises, grants, authorizations, licenses, permits, easements, consents, certificates and orders of any Governmental Authority or self-regulatory body required for the conduct of its business and all such franchises, grants, authorizations, licenses, permits, easements, consents, certifications and orders are valid and in full force and effect, except where non-compliance would not have a Material Adverse Effect; the Company has not received notice of any revocation or modification of any such franchise, grant, authorization, license, permit, easement, consent, certification or order, except as would not have a Material Adverse Effect; and the Company is in compliance in all material respects with all applicable federal, state, local and foreign laws, regulations, orders and decrees, except where non-compliance would not have a Material Adverse Effect.

(xiv) Ownership of Assets. The Company has good and marketable title to, or has valid rights to lease or otherwise use, all property (whether real or personal) described in the Registration Statement, in the Time of Sale Disclosure Package and in the Prospectus as being owned, leased or used by them (other than Intellectual Property, which is covered by subsection (xv) below), in each case free and clear of all liens, claims, security interests, other encumbrances or defects except such as are described in the Registration Statement, in the Time of Sale Disclosure Package and in the Prospectus, except as would not have a Material Adverse Effect. The property held under lease by the Company is held by them under valid, subsisting and enforceable leases with only such exceptions with respect to any particular lease as do not interfere in any material respect with the conduct of the business of the Company, except as would not have a Material Adverse Effect.

(xv) Intellectual Property.

(A) The Company owns or has the right to use pursuant to a valid and enforceable written license or other legally enforceable right, all Intellectual Property necessary for the conduct of the Company's business as now conducted or as described in the Registration Statement, the Time of Sale Disclosure Package and the Prospectus to be conducted (the "**Company IP**"), except as would not have a Material Adverse Effect. "**Intellectual Property**" means all patents, patent applications, trade and service marks, trade and service mark registrations, trade names, copyrights, licenses, inventions, trade secrets, domain names, technology, know-how and other intellectual property.

(B) (i) To the knowledge of the Company, there is no infringement, misappropriation or violation by third parties of any Company IP, (ii) there is no pending or, to the knowledge of the Company, threatened, action, suit, proceeding or claim by others challenging the Company's rights in or to any Company IP, and the Company is unaware of any facts which would form a reasonable basis for any such claim, (iii) the Intellectual Property owned by the Company, and to the knowledge of the Company, the Intellectual Property licensed to the Company, has not been adjudged invalid or unenforceable, in

whole or in part, and there is no pending or, to the knowledge of the Company, threatened action, suit, proceeding or claim by others challenging the validity or scope of any Company IP, and the Company is unaware of any facts which would form a reasonable basis for any such claim, (iv) there is no pending or, to the knowledge of the Company, threatened action, suit, proceeding or claim by others that the Company infringes, misappropriates or otherwise violates any Intellectual Property or other proprietary rights of others, and the Company has not received any notice of such claim and the Company is unaware of any other fact which would form a reasonable basis for any such claim, except, in each case, as would not have a Material Adverse Effect.

(C) To the Company's knowledge, no employee of the Company is in or has ever been in violation of any term of any employment contract, patent disclosure agreement, invention assignment agreement, non-competition agreement, non-solicitation agreement, nondisclosure agreement or any restrictive covenant to or with a former employer where the basis of such violation relates to such employee's employment with the Company or actions undertaken by the employee while employed with the Company, except, in each case, as would not have a Material Adverse Effect.

(D) The Company has taken reasonable security measures to protect the secrecy, confidentiality and value of all of its material Intellectual Property.

(E) All patent applications owned by the Company and filed with the U.S. Patent and Trademark Office (the "**PTO**") or any foreign or international patent authority that have resulted in patents or currently pending applications that describe inventions necessary to conduct the business of the Company as now conducted or as described in the Registration Statement, the Time of Sale Disclosure Package and the Prospectus to be conducted (collectively, the "**Company Patent Applications**") have been or were duly and properly filed, except, in each case, as would not have a Material Adverse Effect.

(F) The Company has complied in all material respects with its duty of candor and disclosure to the PTO for the Company Patent Applications. Except as would not have a Material Adverse Effect, (a) to the Company's knowledge, there are no facts required to be disclosed to the PTO that were not disclosed to the PTO and which would preclude the grant of a patent for the Company Patent Applications and (b) the Company has no knowledge of any facts which would preclude it from having clear title to the Company Patent Applications that have been identified by the Company as being exclusively owned by the Company.

(xvi) No Violations or Defaults. The Company is not (i) in violation of its charter or by-laws, or (ii) in breach of or otherwise in default, and no event has occurred which, with notice or lapse of time or both, would constitute such a default in the performance of any material obligation, agreement or condition contained in any bond, debenture, note, indenture, loan agreement or any other material contract, lease or other instrument to which it is subject or by which it may be bound, or to which any of the material property or assets of the Company is subject, other than, in the case of clause (ii) above, any conflict, breach or violation that would not have a Material Adverse Effect.

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

(xviii) Exchange Listing and Exchange Act Registration. The Common Stock is registered pursuant to Section 12(b) of the Exchange Act and is included or approved for listing on the Nasdaq Global Market and the Company has not taken any action designed to, or likely to have the effect of, terminating the registration of the Common Stock under the Exchange Act or delisting the Common Stock from the Nasdaq Global Market, and the Company has not received any notification that the Commission or the Nasdaq Global Market is contemplating terminating such registration or listing. The Company is in compliance in all material respects with the applicable requirements of the Nasdaq Global Market for maintenance of inclusion of the Common Stock thereon.

(xix) Ownership of Other Entities. The Company, directly or indirectly, owns no capital stock or other equity or ownership or proprietary interest in any corporation, partnership, association, trust or other entity that constitutes a "Subsidiary" of the Company as such term is defined in Rule 1-02(x) of Regulation S-X under the Securities Act.

(xx) Internal Controls. The Company maintains a system of internal accounting controls that have been designed to provide reasonable assurances that (i) transactions are executed in accordance with management's general or specific authorization; (ii) transactions are recorded as necessary to permit preparation of financial statements in conformity with GAAP and to maintain accountability for assets; (iii) access to assets is permitted only in accordance with management's general or specific authorization; (iv) the recorded accountability for assets is compared with existing assets at reasonable intervals and appropriate action is taken with respect to any differences; and (v) interactive data in eXtensible Business Reporting Language included or incorporated by reference in the Registration Statement fairly presents the information called for in all material respects and is prepared in accordance with the Commission's rules and guidelines applicable thereto. Except as disclosed in the Registration Statement, in the Time of Sale Disclosure Package and in the Prospectus, the Company's internal

control over financial reporting is effective and none of the Company, its board of directors and audit committee is aware of any “significant deficiencies” or “material weaknesses” (each as defined by the Public Company Accounting Oversight Board) in its internal control over financial reporting, or any fraud, whether or not material, that involves management or other employees of the Company who have a significant role in the Company’s internal controls which have adversely affected or are reasonably likely to adversely affect the Company’s ability to record, process, summarize and report financial information; and since the end of the latest audited fiscal year, there has been no change in the Company’s internal control over financial reporting (whether or not remediated) that has materially affected, or is reasonably likely to materially affect, the Company’s internal control over financial reporting. The Company’s board of directors has, subject to the exceptions, cure periods and the phase in periods specified in the applicable stock exchange rules (“**Exchange Rules**”), validly appointed an audit committee to oversee internal accounting controls whose composition satisfies the applicable requirements of the Exchange Rules and the Company’s board of directors and/or the audit committee has adopted a charter that satisfies the requirements of the Exchange Rules.

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

(xxii) Insurance. The Company carries, or is covered by, insurance in such amounts and covering such risks as in its reasonable determination is adequate for the conduct of its business and as is customary for companies engaged in similar businesses in similar industries; there are no material claims by the Company under any such policy or instrument as to which any insurance company is denying liability or defending under a reservation of rights clause; and the Company has no reason to believe that it will not be able to renew its existing insurance coverage as and when such coverage expires or to obtain similar coverage from similar insurers as may be necessary to continue its business at a cost that would not have a Material Adverse Effect.

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

(xxiv) Eligibility to Use Form S-3. The conditions for use of Form S-3, in connection with the offer and sale of the Securities, as set forth in the General Instructions thereto, including General Instruction I.B.1, have been satisfied.

(xxv) Incorporated Documents. The documents incorporated by reference in the Registration Statement, the Time of Sale Disclosure Package and the Prospectus, when they became effective or were filed with the Commission, as the case may be, conformed in all material respects to the requirements of the Securities Act or the Exchange Act, as applicable, and were filed on a timely basis with the Commission and none of such documents contained an untrue statement of a material fact or omitted to

state a material fact necessary to make the statements therein, in the light of the circumstances under which they were made, not misleading; any further documents so filed and incorporated by reference in the Registration Statement, the Time of Sale Disclosure Package or in the Prospectus, when such documents are filed with the Commission, will conform in all material respects to the requirements of the Exchange Act, and will not contain an untrue statement of a material fact or omit to state a material fact necessary to make the statements therein, in the light of the circumstances under which they were made, not misleading.

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

(xxvii) Disclosure Controls. The Company has established and maintains disclosure controls and procedures (as defined in Rules 13a-14 and 15d-14 under the Exchange Act) and such controls and procedures are effective in ensuring that material information relating to the Company is made known to the principal executive officer and the principal financial officer. The Company has utilized such controls and procedures in preparing and evaluating the disclosures in the Registration Statement, in the Time of Sale Disclosure Package and in the Prospectus.

(xxviii) Anti-Bribery and Anti-Money Laundering Laws. Neither the Company nor, to the Company's knowledge, any other person associated with or acting on behalf of the Company, including without limitation any director, officer, agent or employee of the Company has, directly or indirectly, while acting on behalf of the Company (i) used any corporate funds for unlawful contributions, gifts, entertainment or other unlawful expenses relating to political activity or failed to disclose fully any contribution in violation of law, (ii) made any payment to any federal or state governmental officer or official, or other person charged with similar public or quasi-public duties, other than payments required or permitted by the laws of the United States or any jurisdiction thereof, (iii) violated or is in violation of any provision of the U.S. Foreign Corrupt Practices Act of 1977, as amended, the Bribery Act 2010 of the United Kingdom or any applicable law or regulation implementing the OECD Convention on Combating Bribery of Foreign Public Official in International Business Transactions or (iv) made any bribe, rebate, payoff, influence payment, kickback or other unlawful payments. The Company has instituted and maintains policies and procedures designed to ensure continued compliance with applicable anti-money laundering laws.

(xxix) OFAC. Except as would not have a Material Adverse Effect, neither the Company nor, to the knowledge of the Company, any director, officer, agent, or employee of the Company is currently subject to any U.S. sanctions (the "**Sanctions**") administered by the Office of Foreign Assets Control of the U.S. Treasury Department ("**OFAC**"); and the Company will not directly or indirectly use the proceeds of the offering, or lend, contribute or otherwise make available such proceeds to any subsidiary, joint venture partner or other person or entity: (i) to fund or facilitate any activities or business of or with any individual or entity or in any country or territory that, at the time

of such funding or facilitation, is the subject of Sanctions; or (ii) in any other manner that will result in a violation of Sanctions by any individual or entity (including any individual or entity participating in the offering, whether as underwriter, advisor, investor or otherwise). The Company is not now knowingly engaged in any dealings or transactions with any individual or entity, or in any country or territory, that is the subject of Sanctions.

(xxx) Compliance with Environmental Laws. Except as disclosed in the Registration Statement, the Time of Disclosure Package and the Prospectus, the Company is not in violation of any statute, any rule, regulation, decision or order of any Governmental Authority or any court, domestic or foreign, relating to the use, disposal or release of hazardous or toxic substances or relating to the protection or restoration of the environment or human exposure to hazardous or toxic substances, in each case which are applicable to its business (collectively, "**Environmental Laws**"), owns or operates any real property contaminated with any substance that is subject to any Environmental Laws, is liable for any off-site disposal or contamination pursuant to any Environmental Laws, or is subject to any claim relating to any Environmental Laws, which violation, contamination, liability or claim would, individually or in the aggregate, have a Material Adverse Effect; and the Company is not aware of any pending investigation which might lead to such a claim, except as would not have a Material Adverse Effect.

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

(xxxiii) Defined Benefit Plans. The Company has not maintained or contributed to a defined benefit plan as defined in Section 3(35) of Employee Retirement Income Security Act of 1974, as amended ("**ERISA**"). No plan maintained or contributed to by the Company that is subject to ERISA (an "**ERISA Plan**") (or any trust created thereunder) has engaged in a "prohibited transaction" within the meaning of Section 406 of ERISA or Section 4975 of the Code that could subject the Company to any tax penalty on prohibited transactions and that has not adequately been corrected except as would not have a Material Adverse Effect. Each ERISA Plan is in compliance in all material respects with all reporting, disclosure and other requirements of the Code

and ERISA as they relate to such ERISA Plan, except for any noncompliance which would not result in the imposition of a material tax or monetary penalty. With respect to each ERISA Plan that is intended to be “qualified” within the meaning of Section 401(a) of the Code, either (i) a determination letter has been issued by the Internal Revenue Service stating that such ERISA Plan and the attendant trust are qualified thereunder, or (ii) the remedial amendment period under Section 401(b) of the Code with respect to the establishment of such ERISA Plan has not ended and a determination letter application will be filed with respect to such ERISA Plan prior to the end of such remedial amendment period. The Company has never completely or partially withdrawn from a “multiemployer plan,” as defined in Section 3(37) of ERISA.

(xxxiii) Business Arrangements. Except as disclosed in the Registration Statement, the Time of Sale Disclosure Package and the Prospectus, and except for grants that are not material, the Company has not granted exclusive rights to develop, manufacture, produce, assemble, distribute, license, market or sell its products to any other person and is not bound by any agreement that materially affects the exclusive right of the Company to develop, manufacture, produce, assemble, distribute, license, market or sell its products.

(xxxiv) Labor Matters. No labor problem or dispute with the employees of the Company exists or, to the Company’s knowledge, is threatened or imminent, which would reasonably be expected to have a Material Adverse Effect. The Company is not aware of any existing or imminent labor disturbance by the employees of any of its principal suppliers, contractors or customers, except as would not have a Material Adverse Effect.

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

(xxxvi) Minute Books. The minute books of the Company, representing all existing records of all meetings and actions of the board of directors (including, Audit, Compensation and Nomination/Corporate Governance Committees) and stockholders of the Company (collectively, the “**Corporate Records**”) through the date of the latest meeting and action have been made available to the Underwriters or counsel for the Underwriters. All such Corporate Records are substantially complete and accurately reflect, in all material respects, all transactions referred to in such Corporate Records. There are no material transactions, agreements or other actions that have been consummated by the Company that are not properly approved and/or recorded in the Corporate Records of the Company.

(xxxvii) No Undisclosed Relationships. No relationship, direct or indirect, exists between or among the Company on the one hand and the directors, officers, stockholders, customers or suppliers of the Company or any of its affiliates on the other hand, which is required to be described in the Registration Statement, the Time of Sale Disclosure Package or the Prospectus or a document incorporated by reference therein and which has not been so described.

(xxxviii) Shareholder Approval. No approval of the stockholders of the Company under the applicable requirements of the Exchange Rules is required for the Company to issue and deliver the Securities to the Underwriters.

(xxxix) FINRA Matters. Except as disclosed to the Representative in writing, the Company has not made any direct or indirect payments (in cash, securities or otherwise) to (i) any person, as a finder's fee, investing fee or otherwise, in consideration of such person raising capital for the Company or introducing to the Company persons who 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 12-month period prior to the date on which the Registration Statement was filed with the Commission ("Filing Date") or thereafter. None of the net proceeds of the offering will be paid by the Company to any participating FINRA member or any affiliate or associate of any participating FINRA member, except as specifically authorized herein. To the Company's knowledge and except as disclosed to the Representative in writing, no (i) officer or director of the Company, (ii) owner of 5% or more of any class of the Company's securities or (iii) owner of any amount of the Company's unregistered securities acquired within the 180-day period prior to the Filing Date, has any direct or indirect affiliation or association with any FINRA member. The Company will advise the Representative and counsel to the Underwriters if it becomes aware that any officer, director of the Company or any owner of 5% or more of any class of the Company's securities is or becomes an affiliate or associated person of a FINRA member participating in the offering.

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

(xli) eXtensible Business Reporting Language. The interactive data in eXtensible Business Reporting Language included or incorporated by reference in the Registration Statement fairly presents the information called for in all material respects and has been prepared in accordance with the Commission's rules and guidelines applicable thereto.

(b) Effect of Certificates. Any certificate signed by any officer of the Company and delivered to the Representative on behalf of the several Underwriters or to counsel for the Underwriters shall be deemed a representation and warranty by the Company to the Underwriters and counsel for the Underwriters as to the matters covered thereby.

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

(a) **Firm Shares.** On the basis of the representations, warranties and agreements herein contained, but subject to the terms and conditions herein set forth, the Company agrees to issue and sell to each of the Underwriters, and each of the Underwriters agrees, severally and not jointly, to purchase from the Company the number of Firm Shares set forth opposite the name of such Underwriter under the column "Number of Firm Shares to be Purchased from the Company" on Schedule I to this Agreement, subject to adjustment in accordance with Section 9 hereof. The purchase price for each Firm Share shall be \$0.5625 per share.

The Firm Shares, in book-entry form in such authorized denominations and registered in such names as the Representative may request upon at least forty-eight hours' prior notice to the Company, shall be delivered by or on behalf of the Company to the Representative, through the facilities of the Depository Trust Company ("**DTC**"), for the respective accounts of the Underwriters, with any transfer taxes payable in connection with the transfer of the Firm Shares to the Underwriters duly paid, against payment by the Underwriters of the purchase price therefor by wire transfer of Federal (same-day) funds to the account specified by the Company to the Representative at least forty-eight hours in advance. The time and date of such delivery and payment shall be 9:00 a.m. New York City time on December 11, 2018, or at such other time and date as the Representative and the Company determine pursuant to Rule 15c6-1(a) under the Exchange Act, such time and date of delivery being herein referred to as the "**First Closing Date.**"

(b) **Option Shares.** On the basis of the representations, warranties and agreements herein contained, but subject to the terms and conditions herein set forth, the Company hereby grants to the several Underwriters an option to purchase, severally and not jointly, all or any portion of the Option Shares at the same purchase price as the Firm Shares, for use solely in covering any over-allotments made by the Underwriters in the sale and distribution of the Firm Shares. The number of Option Shares to be purchased by each Underwriter shall be the same percentage (adjusted by the Representative to eliminate fractions) of the total number of Option Shares to be purchased by the Underwriters as such Underwriter is purchasing of the Firm Shares. The option granted hereunder may be exercised in whole or in part at any time (but not more than once) within 30 days after the date of this Agreement upon notice (confirmed in writing) by the Representative to the Company setting forth the aggregate number of Option Shares as to which the Underwriters are exercising the option, the names and denominations in which the certificates for the Option Shares are to be registered and the date and time, as determined by the Representative, when the Option Shares are to be delivered, such time and date being herein referred to as the "**Second Closing**" and "**Second Closing Date**", respectively; *provided, however*, that the Second Closing Date shall not be earlier than the First Closing Date nor earlier than the second business day after the date on which the option shall have been exercised. No Option Shares shall be sold and delivered unless the Firm Shares previously have been, or simultaneously are, sold and delivered.

The Option Shares to be purchased by the Underwriters hereunder, in book-entry form in such authorized denominations and registered in such names as the Representative may request upon at least forty-eight hours' prior notice to the Company, shall be delivered by or on behalf of the Company to the Representative, through the facilities of DTC, for the respective accounts of the Underwriters, with any transfer taxes payable in connection with the transfer of the Option Shares to the Underwriters duly paid, against payment by the Underwriters of the purchase price therefor by wire transfer of Federal (same-day) funds to the account specified by the Company to the Representative at least forty-eight hours in advance. The time and date of such delivery and payment shall be 9:00 a.m. New York City time on the Second Closing Date.

4. *Covenants.*

(a) *Covenants of the Company.* The Company covenants and agrees with each Underwriter as follows:

(i) *Required Filings.* During the period beginning on the date hereof and ending on the later of the Second Closing Date or such date, as in the opinion of counsel for the Underwriters, the Prospectus is no longer required by law to be delivered (assuming the absence of Rule 172 under the Securities Act), in connection with sales by the Underwriters or a dealer (the "*Prospectus Delivery Period*"), prior to amending or supplementing the Registration Statement (including any Rule 462(b) Registration Statement), the Time of Sale Disclosure Package or the Prospectus, the Company shall furnish to the Representative for review a copy of each such proposed amendment or supplement, and the Company shall not file any such proposed amendment or supplement to which the Representative or counsel to the Underwriters reasonably object. Subject to this Section 4(a)(i), following execution of this Agreement, the Company will prepare the Prospectus containing the Rule 430B Information and other selling terms of the Securities, the plan of distribution thereof and such other information as may be required by the Securities Act or the Rules and Regulations or as the Representative and the Company may deem appropriate, and if requested by the Representative on behalf of the several Underwriters, an issuer free writing prospectus containing the selling terms of the Securities and such other information as the Company and the Representative may deem appropriate, and will file or transmit for filing with the Commission, in accordance with Rule 424(b) or Rule 433, as the case may be, copies of the Prospectus and each issuer free writing prospectus.

(ii) *Notification of Certain Commission Actions.* After the date of this Agreement, the Company shall promptly advise the Representative in writing (A) of the receipt of any comments of, or requests for additional or supplemental information from, the Commission, (B) of the time and date of any filing of any post-effective amendment to the Registration Statement or any amendment or supplement to any Preliminary Prospectus, the Time of Sale Disclosure Package or the Prospectus, (C) of the time and date that any post-effective amendment to the Registration Statement becomes effective, (D) of the issuance by the Commission of any stop order suspending the effectiveness of the Registration Statement or any post-effective amendment thereto or of any order preventing or suspending its use or the use of any Preliminary Prospectus, the Time of Sale Disclosure Package, the Prospectus or any issuer free writing prospectus, or (E) of any proceedings to remove, suspend or terminate from listing or quotation the Common Stock from any securities exchange upon which it is listed for trading or included or designated for quotation, or of the threatening or initiation of any proceedings for any of such purposes. If the Commission shall enter any such stop order at any time, the Company will use its best efforts to obtain as soon as possible the withdrawal of such order. Additionally, the Company agrees that it shall comply with the provisions of Rules 424(b) and 430B, as applicable, under the Securities Act and will use its reasonable efforts to confirm that any filings made by the Company under Rule 424(b), Rule 433 or Rule 462 were received in a timely manner by the Commission (without reliance on Rule 424(b)(8) or Rule 164(b)).

(iii) Continued Compliance with Securities Laws (A) During the Prospectus Delivery Period, the Company will comply with all requirements imposed upon it by the Securities Act, as now and hereafter amended, and by the Rules and Regulations, as from time to time in force, and by the Exchange Act so far as necessary to permit the continuance of sales of or dealings in the Securities as contemplated by the provisions hereof, the Time of Sale Disclosure Package and the Prospectus. If during such period any event occurs as a result of which the Prospectus (or if the Prospectus is not yet available to prospective purchasers, the Time of Sale Disclosure Package) would include an untrue statement of a material fact or omit to state a material fact necessary to make the statements therein, in the light of the circumstances then existing, not misleading, or if during such period it is necessary to amend the Registration Statement or supplement the Prospectus (or, if the Prospectus is not yet available to prospective purchasers, the Time of Sale Disclosure Package) to comply with the Securities Act or to file under the Exchange Act any document which would be deemed to be incorporated by reference in the Prospectus (or if the Prospectus is not yet available to prospective purchasers, the Time of Sale Disclosure Package) in order to comply with the Securities Act or the Exchange Act, the Company promptly will (x) notify the Representative of such untrue statement or omission, (y) amend the Registration Statement or supplement the Prospectus (or, if the Prospectus is not yet available to prospective purchasers, the Time of Sale Disclosure Package) or file such document (at the expense of the Company) so as to correct such statement or omission or effect such compliance, and (z) notify the Representative when any amendment to the Registration Statement is filed or becomes effective or when any supplement to the Prospectus (or, if the Prospectus is not yet available to prospective purchasers, the Time of Sale Disclosure Package) is filed.

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

(iv) Blue Sky Qualifications. The Company will use reasonable efforts, in cooperation with the Representative, to take or cause to be taken all necessary action required by law to qualify the Securities for sale under the securities laws of such jurisdictions as the Representative reasonably designates and to continue such qualifications in effect so long as required for the distribution of the Securities, except that the Company shall not be required in connection therewith to qualify as a foreign corporation or to execute a general consent to service of process in any state.

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

(vi) Rule 158. The Company will make generally available to its security holders and to the Representative as soon as practicable, but in no event later than 15 months after the end of the Company's current fiscal quarter, an earnings statement (which need not be audited) covering a 12-month period that shall satisfy the provisions of Section 11(a) of the Securities Act and Rule 158 of the Rules and Regulations, provided that the Company will be deemed to have complied with such requirement by filing such earning statement on the Commission's Electronic Data Gather, Analysis and Retrieval System (or any successor system).

(vii) Payment and Reimbursement of Expenses. The Company, whether or not the transactions contemplated hereunder are consummated or this Agreement is terminated, will pay or cause to be paid (A) all expenses (including transfer taxes allocated to the respective transferees) incurred in connection with the delivery to the Underwriters of the Securities, (B) all expenses and fees (including, without limitation, fees and expenses of the Company's accountants and counsel but, except as otherwise provided below, not including fees of the Underwriters' counsel) in connection with the preparation, printing, filing, delivery, and shipping of the Registration Statement (including the financial statements therein and all amendments, schedules, and exhibits thereto), the Securities, each Preliminary Prospectus, the Time of Sale Disclosure Package, the Prospectus, any issuer free writing prospectus and any amendment thereof or supplement thereto, and the printing, delivery, and shipping of this Agreement and other underwriting documents, including Blue Sky Memoranda (covering the states and other applicable jurisdictions), (C) all filing fees incurred in connection with the qualification of the Securities for offering and sale by the several Underwriters or by dealers under the securities or blue sky laws of the states and other jurisdictions which the Representative shall designate, (D) the fees and expenses of the transfer agent or registrar, (E) the filing fees incident to any required review and approval by FINRA of the terms of the sale of the Securities, (F) listing fees, if any, (G) the cost and expenses of the Company relating to investor presentations or any "roadshow" undertaken in connection with marketing of the Securities, (H) all reasonable and documented, out-of-pocket expenses incurred by the Underwriters (including, but not limited to, travel, databases, fees and disbursements of counsel, and of other consultants and advisors retained by the Underwriters) incurred in connection with the Underwriters' investigation of the Company, preparing to market and marketing the Securities, sale of the Securities or in contemplation of performing its obligations hereunder, which amount will not exceed \$100,000 in the aggregate (less the advance to the Representative in the amount of \$50,000 (the "*Advance*"), the receipt of which the Representative hereby acknowledges), and (I) all other costs and expenses of the Company incident to the performance of its obligations hereunder that are not otherwise specifically provided for herein. The Representative shall promptly reimburse the Company for the portion, if any, of the Advance not used for actual out-of-pocket expenses if the offering contemplated hereby is not consummated.

(viii) Use of Proceeds. The Company will apply the net proceeds from the sale of the Securities to be sold by it hereunder for the purposes set forth in the Registration Statement, in the Time of Sale Disclosure Package and in the Prospectus.

(ix) Company Lock Up. The Company will not, without the prior written consent of the Representative, from the date of execution of this Agreement and continuing to and including the date ninety (90) days after the date of the Prospectus (the "**Lock-Up Period**"), (A) offer, pledge, announce the intention to sell, sell, contract to sell, sell any option or contract to purchase, purchase any option or contract to sell, grant any option, right or warrant to purchase or otherwise transfer or dispose of, directly or indirectly, any shares of Common Stock or any securities convertible into or exercisable or exchangeable for Common Stock or (B) enter into any swap or other agreement that transfers, in whole or in part, any of the economic consequences of ownership of the Common Stock, whether any such transaction described in clause (A) or (B) above is to be settled by delivery of Common Stock or such other securities, in cash or otherwise, except, in each case, for (v) the sale of the Securities as contemplated by this Agreement, (w) issuances of shares of Common Stock upon the exercise or conversion of options, warrants or convertible securities disclosed or vesting of restricted stock units as outstanding in the Registration Statement, the Time of Sale Disclosure Package and the Prospectus, (x) the sale of Common Stock to cover the exercise price of stock options or tax liability in connection with the exercise of stock vesting or settlement of stock options, restricted stock or restricted stock units, and (y) the issuance of employee stock options or other equity-based awards not exercisable during the Lock-Up Period pursuant to the Company's stock option, stock bonus and other stock plans or arrangements, as in effect on the date hereof in the ordinary course of business consistent with past practices.

(x) [RESERVED]

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

(xii) No Market Stabilization or Manipulation. The Company has not taken and will not take, directly or indirectly, any action designed to or which might reasonably be expected to cause or result in, or which has constituted, the stabilization or manipulation of the price of any security of the Company to facilitate the sale or resale of the Securities in violation of applicable law.

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

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

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

(xvi) Free Writing Prospectuses. The Company represents and agrees that, unless it obtains the prior written consent of the Representative, it has not made and will not make any offer relating to the Securities that would constitute an issuer free writing prospectus or that would otherwise constitute a free writing prospectus required to be filed with the Commission; provided that the prior written consent of the Representative shall be deemed to have been given in respect of the free writing prospectuses included in Schedule II. Any such free writing prospectus consented to by the Representative is hereinafter referred to as a "**Permitted Free Writing Prospectus**." The Company represents that it has treated or agrees that it will treat each Permitted Free Writing Prospectus as an issuer free writing prospectus and has complied and will comply with the requirements of Rule 164 and Rule 433 applicable to any Permitted Free Writing Prospectus.

5. **Conditions of Underwriters' Obligations**. The obligations of the Underwriters under this Agreement are several and not joint. The respective obligations of the Underwriters hereunder are subject to the following conditions:

(a) Representations, Warranties and Agreements. The representations and warranties of the Company in this Agreement shall be true and correct as if made at and as of the First Closing Date and the Second Closing Date, as applicable, and the Company shall have complied with all the agreements and satisfied all the conditions on its part to be performed or satisfied at or prior to such Closing Date.

(b) Required Filings: Absence of Certain Commission Actions. If filing of the Prospectus, or any amendment or supplement thereto, or any issuer free writing prospectus, is required under the Securities Act or the Rules and Regulations, the Company shall have filed the Prospectus (or such amendment or supplement) or such issuer free writing prospectus with the Commission in the manner and within the time period so required (without reliance on Rule 424(b)(8) or Rule 164(b)); the Registration Statement shall remain effective; no stop order suspending the effectiveness of the Registration Statement or any part thereof, any Rule 462(b) Registration Statement, or any amendment thereof, nor suspending or preventing the use of the Time of Sale Disclosure Package, the Prospectus or any issuer free writing prospectus shall have been issued; no proceedings for the issuance of such an order shall have been initiated or, to the Company's knowledge threatened, by the Commission; any request of the Commission for additional information (to be included in the Registration Statement, the Time of Sale Disclosure Package, the Prospectus, any issuer free writing prospectus or otherwise) shall have been complied with to the satisfaction of the Representative.

(c) Absence of Certain Events. Except as contemplated in the Registration Statement, the Time of Sale Disclosure Package and the Prospectus, there shall not have occurred any Material Adverse Change, the effect of which, in the Representative's judgment, makes it impractical or inadvisable to offer or deliver the Securities on the terms and in the manner contemplated in the Time of Sale Disclosure Package and in the Prospectus.

(d) Opinion of Company Counsel. On each Closing Date, there shall have been furnished to the Representative (i) the opinion and negative assurance letter of Ropes & Gray LLP, counsel for the Company, and (ii) the opinion of Kevin Wills, the Company's internal Patent Counsel, each dated such Closing Date and addressed to the Underwriters, in the form and substance satisfactory to the Representative.

(e) Opinion of Underwriters' Counsel. On each Closing Date, there shall have been furnished to the Representative the opinion and negative assurance letter of Lowenstein Sandler LLP, counsel for the Underwriters, dated such Closing Date and addressed to the Underwriters, with respect to such matters as the Representative reasonably may request, and such counsel shall have received such papers and information as they request to enable them to pass upon such matters.

(f) Comfort Letter. On the date hereof and on each Closing Date the Representative shall have received an accountant's "comfort" letter of Moss Adams LLP, dated such date and addressed to the Representative, in form and substance satisfactory to the Representative.

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

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

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

(iii) Affirms the accuracy of the matters set forth in subsection (c) of this Section 5.

(h) Lock-Up Agreement. The Representative shall have received all of the Lock-Up Agreements referenced in Section 4(xi) and the Lock-Up Agreements shall remain in full force and effect

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

(j) Other Documents. The Company shall have furnished to the Representative and counsel for the Underwriters such additional documents, certificates and evidence as the Representative or counsel for the Underwriters may have reasonably requested.

(k) Exchange Listing. The Securities to be delivered on such Closing Date have been approved for listing on the Nasdaq Global Market, subject to official notice of issuance.

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

6. ***Indemnification and Contribution.***

(a) Indemnification by the Company. The Company agrees to indemnify and hold harmless each Underwriter, its affiliates, directors and officers, and each person, if any, who controls any Underwriter within the meaning of Section 15 of the Act or Section 20 of the Exchange Act, from and against any losses, claims, damages or liabilities, joint or several, to which any of them may become subject, under the Act or otherwise (including any reasonable investigation, legal and other expenses incurred in connection with, and any amount paid in settlement of, any action, suit or proceeding or any claim asserted), insofar as such losses, claims, damages or liabilities (or actions in respect thereof) arise out of or are based upon an untrue statement or alleged untrue statement of a material fact contained in the Registration Statement, including the 430B Information and any other information deemed to be a part of the Registration Statement at the time of effectiveness and at any subsequent time pursuant to the Rules and

Regulations, if applicable, any Preliminary Prospectus, the Time of Sale Disclosure Package, the Prospectus, or any amendment or supplement thereto, any issuer free writing prospectus, the Marketing Materials or any issuer information that the Company has filed or is required to file pursuant to Rule 433(d) of the Rules and Regulations, or arise out of or are based upon the omission or alleged omission to state therein a material fact required to be stated therein or necessary to make the statements therein not misleading, and will reimburse any of them for any legal or other expenses reasonably incurred by any of them in connection with investigating or defending against such loss, claim, damage, liability or action as such expenses are incurred; *provided, however*, that the Company will not be liable in any such case to the extent that any such loss, claim, damage, liability or action arises out of or is based upon an untrue statement or alleged untrue statement or omission or alleged omission made in reliance upon and in conformity with written information furnished to the Company by the Representative on behalf of the several Underwriters specifically for use in the preparation thereof, it being understood and agreed that the only information furnished by the Underwriters consists of the information described as such in Section 6(e).

(b) *Indemnification by the Underwriters.* Each Underwriter, severally and not jointly, will indemnify and hold harmless the Company, its affiliates, directors and officers and each person, if any, who controls the Company within the meaning of Section 15 of the Act and Section 20 of the Exchange Act, from and against any losses, claims, damages or liabilities, joint or several, to which any of them may become subject, under the Act or otherwise (including any reasonable investigation, legal and other expenses incurred in connection with, and any amount paid in settlement of, any action, suit or proceeding or any claim asserted), insofar as such losses, claims, damages or liabilities (or actions in respect thereof) arise out of or are based upon an untrue statement or alleged untrue statement of a material fact contained in the Registration Statement, including the 430B Information and any other information deemed to be a part of the Registration Statement at the time of effectiveness and at any subsequent time pursuant to the Rules and Regulations, if applicable, any Preliminary Prospectus, the Time of Sale Disclosure Package, the Prospectus, or any amendment or supplement thereto, or any issuer free writing prospectus, or any issuer information that the Company has filed or is required to file pursuant to Rule 433(d) of the Rules and Regulations, or arise out of or are based upon the omission or alleged omission to state therein a material fact required to be stated therein or necessary to make the statements therein not misleading, in each case to the extent, but only to the extent, that such untrue statement or alleged untrue statement or omission or alleged omission was made in reliance upon and in conformity with written information furnished to the Company by the Representative on behalf of the several Underwriters specifically for use in the preparation thereof (it being understood and agreed that the only information furnished by the Underwriters consists of the information described as such in Section 6(e)), and will reimburse any of them for any legal or other expenses reasonably incurred by any of them in connection with investigating or defending against any such loss, claim, damage, liability or action as such expenses are incurred; *provided, however*, that the obligation of each Underwriter to indemnify the Company (including controlling person, director or officer thereof) shall be limited to the amount of the underwriting discount and commissions applicable to the Securities to be purchased by such Underwriter hereunder.

(c) *Notice and Procedures.* Promptly after receipt by an indemnified party under subsection (a) or (b) above of notice of the commencement of any action, such indemnified party shall, if a claim in respect thereof is to be made against the indemnifying party under such subsection, notify the indemnifying party in writing of the commencement thereof; but the omission so to notify the indemnifying party shall not relieve the indemnifying party from any liability that it may have to any indemnified party except to the extent such indemnifying party has been materially prejudiced by such failure (through the forfeiture of substantive rights or defenses). In case any such action shall be brought against any indemnified party, and it shall notify the indemnifying party of the commencement thereof, the indemnifying party shall be entitled to participate in, and, to the extent that it shall wish, jointly with any other indemnifying party similarly notified, to assume the defense thereof, with counsel reasonably satisfactory to such indemnified party, and after notice from the indemnifying party to such indemnified party of the indemnifying party's election so to assume the defense thereof, the indemnifying party shall not be liable to such indemnified party for any legal or other expenses subsequently incurred by such indemnified party in connection with the defense thereof other than reasonable costs of investigation. The indemnified party shall have the right to employ its counsel in any such action, but the fees and expenses of such counsel shall be at the expense of such indemnified party unless the employment of counsel by such indemnified party has been authorized in writing by the indemnifying party. An indemnifying party shall not be obligated under any settlement agreement relating to any action under this Section 6 to which it has not agreed in writing. In addition, no indemnifying party shall, without the prior written consent of the indemnified party (which consent shall not be unreasonably withheld or delayed), effect any settlement of any pending or threatened proceeding unless such settlement includes an unconditional release of such indemnified party for all liability on claims that are the subject matter of such proceeding and does not include a statement as to, or an admission of, fault, culpability or a failure to act by or on behalf of an indemnified party. Notwithstanding the foregoing, if at any time an indemnified party shall have requested an indemnifying party to reimburse the indemnified party for fees and expenses of counsel pursuant to this Section 6(c), such indemnifying party agrees that it shall be liable for any settlement effected without its written consent if (i) such settlement is entered into more than 45 days after receipt by such indemnifying party of the aforesaid request, (ii) such indemnifying party shall have received notice of the terms of such settlement at least 30 days prior to such settlement being entered into and (iii) such indemnifying party shall not have reimbursed such indemnified party in accordance with such request prior to the date of such settlement; provided that an indemnifying party shall not be liable for any such settlement effected without its consent if such indemnifying party, prior to the date of such settlement, (1) reimburses such indemnified party in accordance with such request for the amount of such fees and expenses of counsel as the indemnifying party believes in good faith to be reasonable and (2) provides written notice to the indemnified party that the indemnifying party disputes in good faith the reasonableness of the unpaid balance of such fees and expenses.

(d) *Contribution; Limitations on Liability; Non-Exclusive Remedy.* If the indemnification provided for in Section 6(a) or (b) is due in accordance with its terms but for any reason is unavailable or insufficient to hold harmless an indemnified party under subsection (a) or (b) above, then each indemnifying party shall contribute to the amount paid or payable by such indemnified party as a result of the losses, claims, damages or liabilities referred to in subsection (a) or (b) above, (i) in such proportion as is appropriate to reflect the relative benefits received by the Company on the one hand and the Underwriters on the other from the offering of the Securities or (ii) if the allocation provided by clause (i) above is not permitted by applicable law, in such proportion as is appropriate to reflect not only the relative benefits referred to in clause (i) above but also the relative fault of the Company on the one hand and the Underwriters on the other in connection with the statements or omissions that resulted in such losses, claims, damages or

liabilities, as well as any other relevant equitable considerations. The relative benefits received by the Company on the one hand and the Underwriters on the other shall be deemed to be in the same proportion as the total net proceeds from the offering (before deducting expenses) received by the Company bear to the total underwriting discount received by the Underwriters, in each case as set forth in the table on the cover page of the Prospectus. The relative fault shall be determined by reference to, among other things, whether the untrue or alleged untrue statement of a material fact or the omission or alleged omission to state a material fact relates to information supplied by the Company or the Underwriters and the parties' relevant intent, knowledge, access to information and opportunity to correct or prevent such untrue statement or omission. The Company and the Underwriters agree that it would not be just and equitable if contributions pursuant to this subsection (d) were to be determined by pro rata allocation or by any other method of allocation which does not take account of the equitable considerations referred to in the first sentence of this subsection (d). The amount paid by an indemnified party as a result of the losses, claims, damages or liabilities referred to in the first sentence of this subsection (d) shall be deemed to include any legal or other expenses reasonably incurred by such indemnified party in connection with investigating or defending against any action or claim which is the subject of this subsection (d). Notwithstanding the provisions of this subsection (d), no Underwriter shall be required to contribute any amount in excess of the amount by which the total underwriting discount received by such Underwriter with respect to the Securities purchased by it hereunder exceeds the amount of any damages that such Underwriter has otherwise been required to pay by reason of such untrue or alleged untrue statement or omission or alleged omission. No person guilty of fraudulent misrepresentation (within the meaning of Section 11(f) of the Act) shall be entitled to contribution from any person who was not guilty of such fraudulent misrepresentation. No party shall be liable for contribution with respect to any action, suit, proceeding or claim settled without its written consent. The remedies provided for in this Section 6 are not exclusive and shall not limit any rights or remedies that might otherwise be available to any indemnified party at law or in equity.

(e) *Information Provided by the Underwriters.* The Representative confirms and the Company acknowledges that the statements with respect to the public offering of the Securities by the Representative on behalf of the several Underwriters set forth under the caption "Underwriting" in the Registration Statement, in the Time of Sale Disclosure Package and in the Prospectus only insofar as such statements relate to the amount of selling concession and re-allowance, if any, or to over-allotment, stabilization and related activities that may be undertaken by the Underwriters are correct and constitute the only information concerning the Underwriters furnished in writing to the Company by the Representative on behalf of the several Underwriters specifically for inclusion in the Registration Statement, any Preliminary Prospectus, the Time of Sale Disclosure Package, the Prospectus or any issuer free writing prospectus.

7. *Representations and Agreements to Survive Delivery.* All representations, warranties, and agreements of the Company and the several Underwriters herein or in certificates delivered pursuant hereto, or made by or on behalf of them, including but not limited to the agreement of the Company and the Representative contained in Section 6 hereof, shall remain operative and in full force and effect regardless of any investigation made by or on behalf of any Underwriter or any controlling person thereof, or the Company or any of its officers, directors, or controlling persons, and shall survive delivery of, and payment for, the Securities to and by the Underwriters hereunder and any termination of this Agreement.

8. **Termination of this Agreement.**

(a) **Right to Terminate.** The Representative shall have the right to terminate this Agreement by giving notice to the Company as hereinafter specified at any time at or prior to the First Closing Date, and the option referred to in Section 3(b), if exercised, may be cancelled at any time prior to the Second Closing Date, if (i) the Company shall have failed, refused or been unable, at or prior to such Closing Date, to perform any agreement on its part to be performed hereunder (other than, prior to the First Closing Date or the Second Closing Date, agreements that are intended to be performed on such date), (ii) any condition of the Underwriters' obligations hereunder is not fulfilled (other than, prior to the First Closing Date or the Second Closing Date, conditions that are intended to be satisfied on such date), (iii) trading in the Company's Common Stock shall have been suspended by the Commission or the Nasdaq Global Market or trading in securities generally on the NYSE American, NASDAQ Stock Market or New York Stock Exchange shall have been suspended, (iv) minimum or maximum prices for trading shall have been fixed, or maximum ranges for prices for securities shall have been required, on the NYSE American, NASDAQ Stock Market or New York Stock Exchange, by such Exchange or by order of the Commission, FINRA or any other Governmental Authority having jurisdiction, (v) a banking moratorium shall have been declared by federal or New York state authorities or a material disruption in commercial banking or securities settlement or clearance services in the United States, or (vi) there shall have occurred any attack on, outbreak or escalation of hostilities or act of terrorism involving the United States, any declaration by the United States of a national emergency or war, any material adverse change in financial markets, any substantial change or development involving a prospective substantial change in United States or international political, financial or economic conditions, or any other calamity or crisis that, in the judgment of the Representative, is material and adverse and makes it impractical or inadvisable to proceed with the completion of the sale of and payment for the Securities.

(b) **Notice of Termination.** If the Representative elects to terminate this Agreement as provided in this Section, the Company shall be notified promptly by the Representative by telephone, confirmed by letter.

(c) **Effect of Termination.** No party shall be relieved of any liability under this Agreement arising from any breach of its obligations hereunder occurring prior to termination of this Agreement as a result of the termination of this Agreement.

9. **Substitution of Underwriters.** If any Underwriter shall default in its obligation to purchase on any Closing Date the Securities agreed to be purchased hereunder on such Closing Date, the Representative shall have the right, within 36 hours thereafter, to make arrangements for one or more of the non-defaulting Underwriters, or any other underwriters, to purchase such Securities on the terms contained herein. If, however, the Representative shall not have completed such arrangements within such 36-hour period, then the Company shall be entitled to a further period of thirty-six hours within which to procure another party or other parties satisfactory to the Underwriters to purchase such Securities on such terms. If, after giving effect to any arrangements for the purchase of the Securities of a defaulting Underwriter or Underwriters by the Representative and the Company as provided above, the aggregate number

of Securities which remains unpurchased on such Closing Date does not exceed one-eleventh of the aggregate number of all the Securities that all the Underwriters are obligated to purchase on such date, then the Company shall have the right to require each non-defaulting Underwriter to purchase the number of Securities which such Underwriter agreed to purchase hereunder at such date and, in addition, to require each non-defaulting Underwriter to purchase its pro rata share (based on the number of Securities which such Underwriter agreed to purchase hereunder) of the Securities of such defaulting Underwriter or Underwriters for which such arrangements have not been made; but nothing herein shall relieve a defaulting Underwriter from liability for its default. In any such case, either the Representative or the Company shall have the right to postpone the applicable Closing Date for a period of not more than seven days in order to effect any necessary changes and arrangements (including any necessary amendments or supplements to the Registration Statement or Prospectus or any other documents), and the Company agrees to file promptly any amendments to the Registration Statement or the Prospectus which in the opinion of the Company and the Underwriters and their counsel may thereby be made necessary.

If, after giving effect to any arrangements for the purchase of the Securities of a defaulting Underwriter or Underwriters by the Representative and the Company as provided above, the aggregate number of such Securities which remains unpurchased exceeds 10% of the aggregate number of all the Securities to be purchased at such date, then this Agreement, or, with respect to a Closing Date which occurs after the First Closing Date, the obligations of the Underwriters to purchase and of the Company to sell the Option Shares to be purchased and sold on such date, shall terminate, without liability on the part of any non-defaulting Underwriter to the Company, and without liability on the part of the Company, except as provided in Sections 4(a)(vii), 6 and 8. The provisions of this Section 9 shall not in any way affect the liability of any defaulting Underwriter to the Company or the non-defaulting Underwriters arising out of such default. The term "Underwriter" as used in this Agreement shall include any person substituted under this Section 9 with like effect as if such person had originally been a party to this Agreement with respect to such Securities.

10. **Notices.** Except as otherwise provided herein, all communications hereunder shall be in writing and, if to the Representative, shall be mailed via overnight delivery service or hand delivered via courier to Ladenburg Thalmann & Co. Inc., 277 Park Avenue, 26th floor, New York, NY 10172 Attention: General Counsel; if to the Company, shall be mailed or delivered to it at 6244 185th Avenue NE, Suite 100, Redmond, Washington 98052, Attention: General Counsel, with a copy to Ropes & Gray LLP, Prudential Tower, 800 Boylston Street, Boston, Massachusetts 02199, Attention: Joel F. Freedman, Esq.; or in each case to such other address as the person to be notified may have requested in writing. Any party to this Agreement may change such address for notices by sending to the parties to this Agreement written notice of a new address for such purpose.

11. **Persons Entitled to Benefit of Agreement.** This Agreement shall inure to the benefit of and be binding upon the parties hereto and their respective successors and assigns and the controlling persons, officers and directors referred to in Section 6. Nothing in this Agreement is intended or shall be construed to give to any other person, firm or corporation any legal or equitable remedy or claim under or in respect of this Agreement or any provision herein contained. The term "successors and assigns" as herein used shall not include any purchaser, as such purchaser, of any of the Securities from the Underwriters.

12. **Absence of Fiduciary Relationship.** The Company acknowledges and agrees that: (a) each of the Underwriters have been retained solely to act as an underwriter in connection with the sale of the Securities and that no fiduciary, advisory or agency relationship between the Company and the Underwriters has been created in respect of any of the transactions contemplated by this Agreement, irrespective of whether the Underwriters have advised or are advising the Company on other matters; (b) the 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 Underwriters 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 Underwriters and their affiliates are engaged in a broad range of transactions which may involve interests that differ from those of the Company and that the Underwriters have no obligation to disclose such interest and transactions to the Company by virtue of any fiduciary, advisory or agency relationship; (d) it has been advised that each of the Underwriters is acting, in respect of the transactions contemplated by this Agreement, solely for the benefit of such Underwriter, and not on behalf of the Company; (e) it waives to the fullest extent permitted by law, any claims it may have against each of the Underwriters for breach of fiduciary duty or alleged breach of fiduciary duty in respect of any of the transactions contemplated by this Agreement and agrees that no Underwriter shall have any liability (whether direct or indirect) to the Company in respect of such a fiduciary duty claim on behalf of or in right of the Company, including stockholders, employees or creditors of the Company.

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

14. **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.

15. **General Provisions.** This Agreement constitutes the entire agreement of the parties to this Agreement and supersedes all prior written or oral and all contemporaneous oral agreements, understandings and negotiations with respect to the subject matter hereof, including that certain engagement letter, dated November 9, 2018, by and between the Company and the Representative, except as to the provisions contained in Sections 2, 5 and 6 and Exhibit A thereto that shall survive and remain in full force and effect. This Agreement may not be amended or modified unless in writing by all of the parties hereto, and no condition herein (express or implied) may be waived unless waived in writing by each party whom the condition is meant to benefit. The Section headings herein are for the convenience of the parties only and shall not affect the construction or interpretation of this Agreement. The invalidity or unenforceability of any Section, paragraph or provision of this Agreement shall not affect the validity or enforceability of any other Section, paragraph or provision hereof. If any Section, paragraph or provision of this Agreement is for any reason determined to be invalid or unenforceable, there shall be deemed to be made such minor changes (and only such minor changes) as are necessary to make it valid and enforceable.

[Remainder of page intentionally left blank. Signature page follows.]

Please sign and return to the Company the enclosed duplicates of this letter whereupon this letter will become a binding agreement between the Company and the Underwriters in accordance with its terms.

Very truly yours,

MICROVISION, INC.

By /s/ Perry M. Mulligan

Name Perry M. Mulligan

Title Chief Executive Officer

Confirmed as of the date first
above mentioned

LADENBURG THALMANN & CO. INC.

By: /s/ Barry Steiner

Name: Barry Steiner

Title: Managing Director

Acting severally on behalf of itself and as representative
of the several Underwriters named in Schedule I annexed hereto.

[Signature Page to Underwriting Agreement]

SCHEDULE I

<u>Name</u>	<u>Number of Firm Shares to Be Purchased</u>
Ladenburg Thalmann & Co. Inc.	5,250,000
Craig-Hallum Capital Group LLC	1,050,000
H.C. Wainwright & Co., LLC	700,000
Total	<u>7,000,000</u>

SCHEDULE II

Certain Permitted Free Writing Prospectuses

None.

SCHEDULE III

Pricing Information

Firm Shares: 7,000,000 shares

Option Shares: 1,050,000 shares

Price to the public: \$0.60 per share

Price to the Underwriters: \$0.5625 per share

SCHEDULE IV

List of Individuals Executing Lock-Up Agreements

Robert P. Carlile
Col. Yalon Farhi
Slade Gorton
Stephen P. Holt
Perry M. Mulligan
Sumit Sharma
Bernie D.L. Strom
Brian Turner
Thomas M. Walker
David J. Westgor

EXHIBIT A

Form of Common Stock Lock-Up Agreement

Date: _____

Ladenburg Thalmann & Co. Inc.
277 Park Avenue, 26th floor
New York, NY 10172

Ladies and Gentlemen:

As an inducement to the underwriters (the "**Underwriters**") for whom Ladenburg Thalmann & Co. Inc. is acting as the representative (the "**Representative**") to enter into an underwriting agreement (the "**Underwriting Agreement**") providing for a public offering (the "**Offering**") of common stock, par value \$0.001 per share (the "**Common Stock**"), or other securities, of MicroVision, Inc., a Delaware corporation (the "**Company**"), the undersigned hereby agrees that, without the prior written consent of the Representative, during the period commencing on the date of this Agreement and ending on the date ninety (90) days after the date of the final prospectus used to sell Common Stock in the Offering pursuant to the Underwriting Agreement (the "**Lock-Up Period**"), the undersigned will not: (1) offer, pledge, announce the intention to sell, sell, contract to sell, sell any option or contract to purchase, purchase any option or contract to sell, grant any option, right or warrant to purchase, make any short sale or otherwise transfer or dispose of, directly or indirectly, any shares of the Company's Common Stock or any securities convertible into, exercisable or exchangeable for or that represent the right to receive Common Stock (including without limitation, Common Stock which may be deemed to be beneficially owned by the undersigned in accordance with the rules and regulations of the Securities and Exchange Commission and securities which may be issued upon exercise of a stock option or warrant) whether now owned or hereafter acquired (the "**Undersigned's Securities**"); (2) enter into any swap or other agreement that transfers, in whole or in part, any of the economic consequences of ownership of the Undersigned's Securities, whether any such transaction described in clause (1) or (2) above is to be settled by delivery of Common Stock or such other securities, in cash or otherwise; (3) make any demand for or exercise any right with respect to, the registration of any Common Stock or any security convertible into or exercisable or exchangeable for Common Stock; or (4) publicly disclose the intention to do any of the foregoing.

Notwithstanding the foregoing, the undersigned may transfer the Undersigned's Securities (i) as a *bona fide* gift or gifts, (ii) to any trust for the direct or indirect benefit of the undersigned or the immediate family of the undersigned, (iii) if the undersigned is a corporation, partnership, limited liability company, trust or other business entity (1) transfers to another corporation, partnership, limited liability company, trust or other business entity that is a direct or indirect affiliate (as defined in Rule 405 promulgated under the Securities Act of 1933, as amended) of the undersigned or (2) distributions of shares of Common Stock or any security convertible into or exercisable for Common Stock to limited partners, limited liability company

members or stockholders of the undersigned, (iv) if the undersigned is a trust, transfers to the beneficiary of such trust, (v) transfers by testate succession or intestate succession, or (vi) pursuant to the Underwriting Agreement; *provided*, in the case of clauses (i) through (v), that (x) such transfer shall not involve a disposition for value, (y) the transferee agrees in writing with the Underwriter to be bound by the terms of this Agreement, and (z) no filing by any party under Section 16(a) of the Securities Exchange Act of 1934, as amended (the "*Exchange Act*"), shall be required or shall be made voluntarily (in either case, during the Lock-Up Period) in connection with such transfer. For purposes of this Agreement, "immediate family" shall mean any relationship by blood, marriage or adoption, no more remote than first cousin.

In addition, the foregoing restrictions shall not apply to (i) the exercise of stock options granted pursuant to the Company's equity incentive plans; *provided* that they shall apply to any of the Undersigned's Securities issued upon such exercise, (ii) the sale of Common Stock to the Company to cover the exercise price of stock options or tax liability in connection with the exercise of stock vesting or settlement of stock options, restricted stock or restricted stock units, or (iii) the establishment of any contract, instruction or plan (a "*Plan*") that satisfies all of the requirements of Rule 10b5-1(c)(1)(i)(B) under the Exchange Act; *provided* that no sales of the Undersigned's Securities shall be made pursuant to such a Plan prior to the expiration of the Lock-Up Period, and such a Plan may only be established if no public announcement of the establishment or existence thereof and no filing with the Securities and Exchange Commission or other regulatory authority in respect thereof or transactions thereunder or contemplated thereby, by the undersigned or the Company, shall be required, and no such announcement or filing is made voluntarily, by the undersigned or the Company, prior to the expiration of the Lock-Up Period.

In furtherance of the foregoing, the Company and its transfer agent and registrar are hereby authorized to decline to make any transfer of shares of Common Stock if such transfer would constitute a violation or breach of this Agreement.

The undersigned hereby represents and warrants that the undersigned has full power and authority to enter into this Agreement and that upon request, the undersigned will execute any additional documents necessary to ensure the validity or enforcement of this Agreement. All authority herein conferred or agreed to be conferred and any obligations of the undersigned shall be binding upon the successors, assigns, heirs or personal representatives of the undersigned.

The undersigned understands that the undersigned shall be released from all obligations under this Agreement if (i) the Company notifies the Representative that it does not intend to proceed with the Offering, (ii) the Underwriting Agreement does not become effective, or if the Underwriting Agreement (other than the provisions thereof which survive termination) shall terminate or be terminated prior to payment for and delivery of the Common Stock to be sold thereunder, or (iii) the Offering is not completed by December 14, 2018.

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

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

Very truly yours,

Printed Name of Holder

Signature

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



December 10, 2018

MicroVision, Inc.
6244 185th Ave NE, Suite 100
Redmond, WA 98052

Re: Registration Statement on Form S-3 (File No. 333-228113)

Ladies and Gentlemen:

This opinion is furnished to you in connection with the above-referenced registration statement (the "Registration Statement"), the base prospectus dated November 13, 2018 (the "Base Prospectus") and the prospectus supplement dated December 7, 2018 (collectively with the Base Prospectus, the "Prospectus"). The Prospectus relates to the offering by MicroVision, Inc. (the "Company") of up to 8,050,000 shares (the "Shares") of the Company's common stock, par value \$0.001 per share (the "Common Stock"). We understand that the Shares are to be offered and sold in the manner described in the Prospectus.

We have acted as counsel for the Company in connection with the issuance of the Shares. For purposes of this opinion, we have examined and relied upon such documents, records, certificates and other instruments as we have deemed necessary. The opinions expressed below are limited to the Delaware General Corporation Law.

Based upon and subject to the foregoing, we are of the opinion that the Shares have been duly authorized and, when issued and paid for as described in the Prospectus, will be validly issued, fully paid and non-assessable.

We hereby consent to your filing this opinion as an exhibit to a Current Report on Form 8-K to be incorporated by reference in the Registration Statement and to the use of our name under the caption "Legal Matters" in the Prospectus contained therein. Our consent shall not be deemed an admission that we are experts whose consent is required under Section 7 of the Securities Act of 1933, as amended, or the rules and regulations of the Securities and Exchange Commission thereunder.

Very truly yours,

/s/ Ropes & Gray LLP

Ropes & Gray LLP