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): September 19, 2013

SUNSHINE HEART, INC.

(Exact Name of Registrant as Specified in its Charter)

Delaware

(State or other jurisdiction of incorporation)

001-35312

(Commission File No.)

68-0533453

(IRS Employer Identification No.)

12988 Valley View Road Eden Prairie, Minnesota 55344

(Address of Principal Executive Offices) (Zip Code)

(952) 345-4200

(Registrant's Telephone Number, Including Area Code)

Not Applicable

(Former Name or Former Address, if Changed Since Last Report)

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

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

Item 1.01 Entry into a Material Definitive Agreement.

On September 19, 2013, Sunshine Heart, Inc. (the "Company") entered into an Underwriting Agreement (the "Underwriting Agreement") with Piper Jaffray & Co. ("Piper Jaffray") and Cowen and Company, LLC ("Cowen and Company", and together with Piper Jaffray, the "Representatives"), as representatives of the underwriters identified therein (collectively, the "Underwriters"), pursuant to which the Company agreed to issue and sell 3,810,000 shares of its common stock, \$0.0001 par value per share, at a public offering price of \$10.50 per share (the "Offering"). Under the terms of the Underwriting Agreement, the Company granted the Underwriters a 30-day option to purchase up to an additional 571,500 shares of the Company's common stock solely to cover over-allotments, if any. The Company expects to receive approximately \$37.0 million in net proceeds from the Offering (excluding the over-allotment option), after underwriting discounts and estimated expenses. The offering is scheduled to close on or about September 24, 2013, subject to customary closing conditions.

The Underwriting Agreement contains representations, warranties and covenants made by the Company that are customary for transactions of this type. Under the terms of the Underwriting Agreement, the Company has agreed to indemnify the Underwriters against certain liabilities, including liabilities under the Securities Act of 1933, as amended (the "Securities Act"). In addition, pursuant to the terms of the Underwriting Agreement, the Company and its executive officers and directors have entered into agreements with the Underwriters providing that the Company and each of these persons may not, without the prior written approval of the Representatives, subject to limited exceptions, offer, sell, transfer or otherwise dispose of the Company's securities for a period of 90 days following the Offering.

The Offering was made pursuant to the Company's Registration Statement on Form S-3 (Registration No. 333-187273), filed with the Securities and Exchange Commission (the "SEC") on March 15, 2013 and declared effective by the SEC on April 5, 2013, and the related prospectus supplement dated September 19, 2013.

A copy of the Underwriting Agreement is filed as Exhibit 1.1 and is incorporated herein by reference. The foregoing description of the Underwriting Agreement does not purport to be complete and is qualified in its entirety by reference to such exhibit.

The opinion of the Company's counsel regarding the legality of the shares issued pursuant to the Offering is also filed as Exhibit 5.1.

Item 8.01 Other Events.

On September 19, 2013, the Company issued a press release announcing the terms of the Offering. A copy of the press release dated September 19, 2013 is attached hereto as Exhibit 99.1 and is incorporated herein by reference.

Item 9.01 Financial Statements and Exhibits.

Exhibit No.	Description	
1.1	Underwriting Agreement among the Company, Piper Jaffray & Co. and Cowen and Company, LLC dated September 19, 2013	
5.1	Opinion of Honigman Miller Schwartz and Cohn LLP	
23.1	Consent of Honigman Miller Schwartz and Cohn LLP (contained in Exhibit 5.1)	
99.1	Press release of Sunshine Heart, Inc. dated September 19, 2013	
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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.

Dated: September 19, 2013 SUNSHINE HEART, INC.

By: /S/ JEFFREY S. MATHIESEN
Name: Jeffrey S. Mathiesen

Title:

Chief Financial Officer

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EXHIBIT INDEX

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3.810.000 Shares⁽¹⁾

Sunshine Heart, Inc.

Common Stock, \$0.0001 par value per share

UNDERWRITING AGREEMENT

September 19, 2013

PIPER JAFFRAY & CO.
COWEN AND COMPANY, LLC
As Representatives of the several
Underwriters named in Schedule I hereto

c/o Piper Jaffray & Co. U.S. Bancorp Center 800 Nicollet Mall Minneapolis, Minnesota 55402

c/o Cowen and Company, LLC 599 Lexington Avenue New York, New York 10022

Ladies and Gentlemen:

Sunshine Heart, Inc., a Delaware corporation (the "Company"), proposes to sell to the several Underwriters named in Schedule I hereto (the "Underwriters") an aggregate of 3,810,000 shares (the "Firm Shares") of Common Stock, \$0.0001 par value per share (the "Common Stock"), of the Company. The Company has also granted to the several Underwriters an option to purchase up to 571,500 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 Underwriting Agreement are herein collectively called the "Securities."

The Company hereby confirms its agreement with respect to the sale of the Securities to the several Underwriters, for whom you are acting as representatives (the "*Representatives*").

- 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. 333-187273) under the Securities Act of 1933, as amended (the **"Securities Act"** or **"Act"**) and the rules and regulations (the **"Rules and Regulations"**) of the Commission thereunder,
 - (1) Plus an option to purchase up to 571,500 additional shares to cover over-allotments.

and such amendments to such registration statement as may have been required to the date of this Agreement. Such registration statement has been declared effective by the Commission. Such registration statement, at any given time, including amendments thereto to such time, the exhibits and any schedules thereto at such time, the documents incorporated by reference therein pursuant to Item 12 of Form S-3 under the Securities Act at such time 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 at such time, is herein called the "Registration Statement." The Registration Statement at the time it originally became effective is herein called the "Original 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 appeared in the Original Registration Statement, as such prospectus has been amended to the date of this Agreement by means of one or more prospectus supplements filed pursuant to Rule 424(c) under the Securities Act, 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." Promptly after execution and delivery of this Agreement, the Company will prepare and file with the Commission a final prospectus supplement to the Base Prospectus relating to the Securities and the offering thereof in accordance with the provisions Rule 430B and Rule 424(b) of the Rules and Regulations. Such final supplemental form of prospectus (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 refer 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.

For purposes of this Agreement, all references to the Registration Statement, the Rule 462(b) Registration Statement, the Base Prospectus, any Preliminary Prospectus, the Prospectus or any amendment or supplement to any of the foregoing shall be deemed to include the copy filed with the Commission pursuant to its Electronic Data Gathering, Analysis and Retrieval System ("EDGAR"). 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 the subsequent filing of any document under the Securities Exchange Act of 1934, as amended (the "Exchange Act") and which is deemed to be incorporated

2. Representations and Warranties of the Company.

therein by reference therein or otherwise deemed by the Rules and Regulations to be a part thereof.

- (a) The Company represents and warrants to, and agrees with, the several Underwriters as follows:
- (i) No order preventing or suspending the use of any Preliminary Prospectus has been issued by the Commission and each Preliminary Prospectus, at the time of filing or the time of first use within the meaning of the Rules and Regulations, complied in all material respects with the requirements of the Securities Act and the Rules and Regulations and 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; except that the foregoing shall not apply to statements in or omissions from any Preliminary Prospectus in reliance upon, and in conformity with, written information furnished to the Company by you, or by any Underwriter through you, specifically for use in the preparation thereof.
- (ii) The Registration Statement and any Rule 462(b) Registration Statement were initially declared effective by the Commission under the Securities Act on April 5, 2013. 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 or any Rule 462(b) Registration Statement is in effect and no proceedings for such purpose have been instituted or are pending or, to the best knowledge of the Company, are contemplated or threatened by the Commission.
- (iii) Each part of the Registration Statement, any Rule 462(b) Registration Statement and any post-effective amendment thereto, at the time such part became effective (including each deemed effective date with respect to the Underwriters pursuant to Rule 430B or otherwise under the Securities Act), at all other subsequent times until the expiration of the Prospectus Delivery Period (as defined below), and at the First Closing Date and Second Closing Date (as hereinafter defined), and the Prospectus (or any amendment or supplement to the Prospectus), at the time of filing or the time of first use within the meaning of the Rules and Regulations, at all subsequent times until expiration of the Prospectus Delivery Period, and at the First Closing Date and Second Closing Date complied and will comply in all material respects with the applicable requirements and provisions of the Securities Act, the Rules and Regulations and the Exchange Act and did not and will not contain any untrue statement of a material fact or omit to state a material fact required to be stated therein or necessary to make the statements therein not misleading. The Prospectus, as amended or supplemented, as of its date, or the time of first use within the meaning of the Rules and Regulations, at all subsequent times until the expiration of the Prospectus Delivery Period, and at the First Closing Date and Second Closing Date, did not and will not contain any untrue statement of a material fact or omit to state a material fact necessary in order to make the statements therein, in the light of the circumstances under which they were made, not misleading. The representations and warranties set forth in the

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two immediately preceding sentences do not apply to statements in or omissions from the Registration Statement, any Rule 462(b) Registration Statement, or any post-effective amendment thereto, or the Prospectus, or any amendments or supplements thereto, made in reliance upon and in conformity with written information relating to an Underwriter furnished to the Company by you or by any Underwriter through you, specifically for use in the preparation thereof.

- (iv) Neither (A) the Issuer General Free Writing Prospectus(es) issued at or prior to the Time of Sale and set forth on Schedule III, the information set forth on Schedule III, and the Statutory Prospectus, all considered together (collectively, the "Time of Sale Disclosure Package"), nor (B) any individual Issuer Limited-Use Free Writing Prospectus, when considered together with the Time of Sale Disclosure Package, includes or included as of the Time of Sale any untrue statement of a material fact or omits or omitted as of the Time of Sale to state any material fact necessary in order to make the statements therein, in the light of the circumstances under which they were made, not misleading. The preceding sentence does not apply to statements in or omissions from any Statutory Prospectus or any Issuer Free Writing Prospectus based upon and in conformity with written information furnished to the Company by you or by any Underwriter through you specifically for use therein; it being understood and agreed that the only such information furnished by any Underwriter consists of the information described as such in Section 6(f). As used in this paragraph and elsewhere in this Agreement:
 - (1) "Time of Sale" means 8:30 a.m. (Eastern time) on the date of this Agreement
 - (2) "Statutory Prospectus" as of any time means the Preliminary Prospectus that is included in the Registration Statement immediately prior to that time. For purposes of this definition, 430B Information contained in a form of prospectus that is deemed retroactively to be a part of the Registration Statement shall be considered to be included in the Statutory Prospectus as of the actual time that form of prospectus is filed with the Commission pursuant to Rule 424(b) under the Securities Act.
 - (3) "Issuer Free Writing Prospectus" means any "issuer free writing prospectus," as defined in Rule 433 under the Securities Act, relating to the Securities that (A) is required to be filed with the Commission by the Company, or (B) is exempt from filing pursuant to Rule 433(d)(5)(i) under the Securities Act because it contains a description of the Securities or of the offering that does not reflect the final terms, or is a "bona fide electronic roadshow," as defined in Rule 433 of the Rules and Regulations, in each case in the form filed or required to be filed with the Commission or, if not required to be filed, in the form retained in the Company's records pursuant to Rule 433(g) under the Securities Act.
 - (4) "Issuer General Free Writing Prospectus" means any Issuer Free Writing Prospectus that is intended for general distribution to prospective investors,

as evidenced by its being specified in Schedule II to this Agreement.

- (5) *"Issuer Limited-Use Free Writing Prospectus"* means any Issuer Free Writing Prospectus that is not an Issuer General Free Writing Prospectus.
- (v) (A) Each Issuer Free Writing Prospectus, as of its issue date and at all subsequent times through the Prospectus Delivery Period or until any earlier date that the Company notified or notifies the Representatives as described in Section 4(a)(iii)(B), did not, does not and will not include any information that conflicted, conflicts or will conflict with the information contained in the Registration Statement, any Statutory 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 you or by any Underwriter through you specifically for use therein; it being understood and agreed that the only such information furnished by any Underwriter consists of the information described as such in Section 6(f).
- (B) (1) At the earliest time after the filing of the Registration Statement that the Company or another offering participant made a *bona 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 or any subsidiary 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 (without taking account of any determination by the Commission pursuant to Rule 405 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 through the Prospectus Delivery Period, all other conditions to use thereof as set forth in Rules 164 and 433 under the Securities Act.
- (vi) The consolidated financial statements of the Company and Sunshine Heart Company Pty. Limited, a proprietary limited company registered under the Australian Corporations Act 2001 (Cth) (the "Corporations Act") and a wholly owned subsidiary of the Company (the "Subsidiary"), 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 the financial condition of the Company and its consolidated Subsidiary 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 consistently applied throughout the periods involved; the supporting schedules included or incorporated by reference in the Registration Statement present fairly the information required to be stated therein; all non-GAAP financial information included or incorporated by reference in the Registration Statement, the Time of Sale Disclosure Package and the Prospectus complies with the requirements of Regulation G and Item 10 of Regulation S-K under the Act; and, except as disclosed in the

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Time of Sale Disclosure Package and the Prospectus, there are no material off-balance sheet arrangements (as defined in Regulation S-K under the Act, Item 303(a)(4)(ii)) or any other relationships with unconsolidated entities or other persons, that may have a material current or, to the Company's knowledge, material future effect on the Company's financial condition, results of operations, liquidity, capital expenditures, capital resources or significant components of revenue or expenses. No other financial statements or schedules are required to be included or incorporated by reference in the Registration Statement, the Time of Sale Disclosure Package or the Prospectus. Ernst & Young LLP, which has expressed its opinion with respect to the financial statements and schedules filed as a part of or incorporated by reference in the Registration Statement and included or incorporated by reference in the Registration Statement, the Time of Sale Disclosure Package and the Prospectus, is (x) an independent public accounting firm with respect to the Company 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) in performing its work for the Company, not in violation of the auditor independence requirements of the Sarbanes-Oxley Act.

- (vii) Each of the Company and the Subsidiary has been duly organized and is validly existing as a corporation or similar entity in good standing under the laws of its jurisdiction of incorporation (to the extent such status is possible in the jurisdiction of incorporation). Each of the Company and the Subsidiary 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 or registered to do business as a foreign corporation in good standing (to the extent such status is possible in the relevant foreign jurisdiction) in each jurisdiction in which it owns or leases real property or in which the conduct of its business makes such qualification or registration necessary and in which the failure to so qualify or register would have a material adverse effect upon the business, prospects, management, properties, operations, condition (financial or otherwise) or results of operations of the Company and the Subsidiary, taken as a whole ("Material Adverse Effect").
- (viii) 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, neither the Company nor the Subsidiary has incurred any material liabilities or obligations, other than those incurred in the ordinary course of business, direct or contingent, or entered into any material transactions, or declared or paid any dividends or made any distribution of any kind with respect to its capital stock; and there has not been any change in the capital stock (other than a change in the number of outstanding shares of Common Stock due to the issuance of shares upon the exercise of outstanding options or warrants), or any material change in the short-term or long-term debt, or any issuance of options, warrants, convertible securities or other rights to purchase the capital stock, other than pursuant to the Company's Amended and Restated 2002 Stock Plan, 2011 Equity Incentive Plan, 2013 Non-Employee Director's Equity Incentive Plan or New-Hire Equity Incentive Plan, of the Company or the Subsidiary, or any material adverse change in the business, prospects, management, properties, operations, condition (financial

or otherwise) or results of operations of the Company and the Subsidiary, taken as a whole ("Material Adverse Change") or any development which would reasonably be expected to result in any Material Adverse Change.

- (ix) Except as set forth in the Time of Sale Disclosure Package and in the Prospectus, there is not pending or, to the knowledge of the Company, threatened, any action, suit or proceeding (a) to which the Company or the Subsidiary is or would be a party or (b) which has as the subject thereof any officer or director of the Company or the Subsidiary, any employee benefit plan sponsored by the Company or the Subsidiary or any property or assets owned or leased by the Company or the Subsidiary before or by any court or Governmental Authority (as defined below), or any arbitrator, which, individually or in the aggregate, would reasonably be expected to result in any Material Adverse Change, or would reasonably be expected to materially and adversely affect the ability of the Company or the Subsidiary to perform its obligations under this Agreement or which are otherwise material in the context of the sale of the Securities. There are no current or pending or, to the knowledge of the Company, contemplated or threatened, legal, governmental or regulatory actions, suits or proceedings (x) to which the Company or the Subsidiary is subject or (y) which has as the subject thereof any officer or director of the Company or the Subsidiary, any employee plan sponsored by the Company or the Subsidiary or any property or assets owned or leased by the Company or the Subsidiary, 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.
- (x) 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.
- (xi) This Agreement has been duly authorized, executed and delivered by the Company, and assuming due authorization, execution and delivery by the Underwriters constitutes a valid, legal and binding obligation of the Company, enforceable against the Company 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 did not or will not (A) conflict with or result in a breach or violation of any of the terms or provisions of, or constitute a default under, or result in the creation or imposition of any lien, charge or encumbrance upon any property or assets of the Company or the Subsidiary pursuant to any indenture, mortgage, deed of trust, loan agreement or other agreement or instrument to which the Company or the Subsidiary is a party or by which the Company or the Subsidiary is bound or to which any of the property or assets of the Company or the Subsidiary is subject, (B) result in any violation of the provisions of the Company's or the Subsidiary's charter, constitution or by-laws (as applicable) or (C) result in the violation of any law or statute or any judgment, order, rule, regulation or decree of

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any court or arbitrator or federal, state, local or foreign governmental agency or regulatory authority having jurisdiction over the Company or the Subsidiary or any of their properties or assets (each, a "Governmental Authority"), except in the case of clause (A) or (C) as would not, individually or in the aggregate, 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 or state or foreign securities or blue sky laws or the rules of the Financial Industry Regulatory Authority ("FINRA"); 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.

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, state and applicable foreign securities laws, were not issued in violation of or subject to any preemptive rights or other rights to subscribe for or purchase securities that have not been waived in writing (a copy of which has been delivered to counsel to the Representatives); 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. There are no preemptive rights, restrictions upon the voting or transfer of any shares of Common Stock 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 or the Subsidiary is a party or by which the Company or the Subsidiary is bound. 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"), and any person to whom the Company has granted Registration Rights has agreed not to exercise such rights until after expiration of the Lock-Up Period (as defined below). All of the issued and outstanding shares of capital stock of the Subsidiary have been duly and validly authorized and issued and are fully paid and nonassessable, have been issued in compliance with all federal, state and applicable foreign securities laws, were not issued in violation of or subject to any preemptive rights or other rights to subscribe for or purchase securities that have not been waived in writing (a copy of which has been delivered to counsel to the Underwriters) and, except as otherwise described in the Registration Statement, in the Time of Sale Disclosure Package and in the Prospectus, the Company owns of record and beneficially, free and clear of any security interests, claims, liens, proxies, equities or other encumbrances, all of the issued and outstanding shares of such stock. 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

stock plans or arrangements, and the options or other rights granted thereunder, 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, options and rights.

- (xiii) (A) Each of the Company and the Subsidiary holds, and is operating in compliance in all material respects with, all material 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 as currently conducted; (B) all such franchises, grants, authorizations, licenses, permits, easements, consents, certifications and orders that are material to the Company or the Subsidiary are valid and in full force and effect; (C) neither the Company nor the Subsidiary has received notice of any revocation or modification of any such franchise, grant, authorization, license, permit, easement, consent, certification or order that is material to the Company or has reason to believe that any such franchise, grant, authorization, license, permit, easement, consent, certification or order that are material to the Company or its Subsidiary will not be renewed in the ordinary course; and (D) except as would not reasonably be expected to result in a Material Adverse Effect, each of the Company and the Subsidiary is and at all times has been in compliance with all applicable federal, state, local and foreign laws, regulations, orders and decrees.
- (xiv) Except as described in the Registration Statement, the Time of Sale Disclosure Package and the Prospectus, the Company and the Subsidiary: (A) are and at all times have been in compliance in all material respects with all statutes, rules or regulations applicable to the Company and the Subsidiary regarding the ownership, testing, development, manufacture, packaging, processing, use, distribution, marketing, labeling, promotion, sale, offer for sale, storage, import, export or disposal of any product manufactured or distributed by the Company or the Subsidiary or to billing, kickbacks, referral relationships or arrangements, ethics, claims processing, claims submission and privacy and security of health information ("Applicable Laws"); (B) have not received any notice of a material adverse finding, warning letter, untitled letter or other correspondence or notice from the U.S. Food and Drug Administration (the "FDA") or any other Governmental Authority alleging or asserting noncompliance with any Applicable Laws or any licenses, certificates, approvals, clearances, authorizations, permits and supplements or amendments thereto required by any such Applicable Laws ("Authorizations"); (C) have not received notice that any Governmental Authority has taken, is taking or intends to take action to limit, suspend, modify or revoke any Authorizations and the Company has no knowledge that any such Governmental Authority is considering such action; and (D) have filed, obtained, maintained or submitted all material reports, documents, forms, notices, applications, records, claims, submissions and supplements or amendments as required by any Applicable Laws or Authorizations and that all such reports, documents, forms,

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notices, applications, records, claims, submissions and supplements or amendments were complete and correct in all material respects on the date filed (or were corrected or supplemented by a subsequent submission).

- (xv) The clinical trials conducted by or on behalf of or sponsored by the Company or the Subsidiary or in which the Company or the Subsidiary or their product candidates have participated have been and, if still pending, are being conducted (A) in material compliance with all statutes, rules, regulations and guidance applicable thereto and (B) in all material respects in accordance with medical and scientific research procedures that the Company reasonably believes are appropriate. Neither the Company nor the Subsidiary has received any notices or other correspondence from the FDA or any other Governmental Authority requiring the termination, suspension or material modification of any clinical trials.
- (xvi) Neither the Company nor the Subsidiary has (A) offered, authorized, promised, made or agreed to make gifts of money, other property, or anything of value to any actual or potential customer, supplier, governmental employee, Medicare or Medicaid beneficiary, or any person in a position to assist or hinder the Company or the Subsidiary in connection with any actual or proposed transaction or (B) maintained any unrecorded fund or asset of the Company or the Subsidiary for any improper purpose or made any false entries on its books and records for any reason.
- (xvii) The Company and the Subsidiary have good and marketable title to all property (whether real or personal, except with respect to Intellectual Property, as to which matters of title are addressed in paragraph xviii of this Section 2(a)) described in the Registration Statement, in the Time of Sale Disclosure Package and in the Prospectus as being owned by them, in each case free and clear of all liens, claims, security interests, other encumbrances or defects except such as (A) are described in the Registration Statement, in the Time of Sale Disclosure Package and in the Prospectus or (B) do not, singly or in the aggregate, materially affect the value of such property and do not interfere with the use made and proposed to be made of such property by the Company or the Subsidiary. The property held under lease by the Company and the Subsidiary 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 or the Subsidiary.
- (xviii) Each of the Company and the Subsidiary owns, possesses, has a valid license to or can acquire or license on reasonable terms, all Intellectual Property necessary for the conduct of the Company's and the Subsidiary's business as now conducted or as described in the Registration Statement, the Time of Sale Disclosure Package and the Prospectus to be conducted, except as such failure to own, possess, or acquire such rights would not reasonably be expected to result in a Material Adverse Effect. Furthermore, (A) except as described in the Registration Statement, the Time of Sale Disclosure Package and the Prospectus, there are no rights of third parties to any Intellectual Property owned by the Company or the Subsidiary, or any Intellectual Property described in the Registration Statement, in the Time of Sale Disclosure Package and in the Prospectus as being owned by them, other than licenses granted to customers and suppliers of the Company or the

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Subsidiary in the ordinary course of business of the Company or the Subsidiary, and except as so described, there are no restrictions on the ability of the Company or the Subsidiary to control or transfer any rights to the Intellectual Property so owned or described; (B) to the knowledge of the Company, there is no infringement, misappropriation or violation by third parties of any such Intellectual Property, except as such infringement, misappropriation or violation would not reasonably be expected to result in a Material Adverse Effect; (C) except as described in the Registration Statement, the Time of Sale Disclosure Package and the Prospectus, there is no pending or, to the knowledge of the Company, threatened, action, suit, proceeding or claim by others challenging the Company's or the Subsidiary's rights in or to any such Intellectual Property, and the Company is unaware of any facts which would form a reasonable basis for any such claim; (D) the Intellectual Property owned by the Company and the

Subsidiary, and to the knowledge of the Company, the Intellectual Property licensed to the Company and the Subsidiary, has not been adjudged invalid or unenforceable, in whole or in part, and, except as disclosed in the Registration Statement, the Time of Sale Disclosure Package and the Prospectus, there is no pending or, to the knowledge of the Company, threatened action, suit, proceeding or claim by others challenging the validity or scope of any such Intellectual Property, and the Company is unaware of any facts which are reasonably likely to form a basis for any such claim; (E) except as described in the Registration Statement, the Time of Sale Disclosure Package and the Prospectus, there is no pending or, to the knowledge of the Company, threatened action, suit, proceeding or claim by others that the Company or the Subsidiary infringes, misappropriates or otherwise violates any Intellectual Property or other proprietary rights of others, neither the Company nor the Subsidiary has received any written notice of such claim and the Company and the Subsidiary are unaware of any other fact which would be reasonably likely to form a basis for any such action, suit, proceeding or claim; (F) to the Company's knowledge, no employee of the Company or the Subsidiary is 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 the Subsidiary or actions undertaken by the employee while employed with the Company or the Subsidiary, except for such violations as would not, individually or in the aggregate, reasonably be expected to result in a Material Adverse Effect; and (G) each former and current employee or consultant of the Company or the Subsidiary is a party to a written contract with the Company or the Subsidiary that assigns to the Company or the Subsidiary all rights to all inventions, improvements, discoveries and information relating to the Company or the Subsidiary. "Intellectual Property" means all patents, patent applications, together with any reissuances, continuations, continuations-in-part, revisions, extensions or re-examinations thereof, 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.

(xix) Neither the Company nor the Subsidiary (A) is in violation of its respective charter, by-laws, constitution or other organizational documents (as applicable), or (B) is 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

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obligation, agreement or condition contained in any bond, debenture, note, indenture, loan agreement or any other material contract, lease or other instrument to which it is subject or by which any of them may be bound, or to which any of the material property or assets of the Company or the Subsidiary is subject.

- (xx) The Company and the Subsidiary have timely filed all relevant 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 or the Subsidiary is contesting in good faith or except as would not reasonably be expected to result in a Material Adverse Effect. There is no pending dispute with any taxing authority relating to any of such returns, and the Company has no knowledge of any proposed liability for any tax to be imposed upon the properties or assets of the Company or the Subsidiary for which there is not an adequate reserve reflected in the Company's financial statements included or incorporated by reference in the Registration Statement, the Time of Sale Disclosure Package and the Prospectus.
- (xxi) The Company has not distributed and will not distribute any prospectus or other offering material in connection with the offering and sale of the Securities other than any Preliminary Prospectus, the Time of Sale Disclosure Package or the Prospectus or other materials permitted by the Securities Act to be distributed by the Company; *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" as defined in Rule 405 under the Securities Act, except in accordance with the provisions of Section 4(a)(xviii) of this Agreement.
- (xxii) The Common Stock is registered pursuant to Section 12(b) of the Exchange Act and is included or approved for listing on the Nasdaq Capital Market and the Company has taken no action designed to, or likely to have the effect of, terminating the registration of the Common Stock under the Exchange Act or delisting the Common Stock from the Nasdaq Capital Market nor has the Company received any notification that the Commission or the Nasdaq Capital Market is contemplating terminating such registration or listing. The Company has complied in all material respects with the applicable requirements of the Nasdaq Capital Market for maintenance of inclusion of the Common Stock thereon. The Company has submitted a notice of listing of additional shares relating to the Securities to the Nasdaq Capital Market. Except as previously disclosed to counsel for the Underwriters or as set forth in the Time of Sale Disclosure Package and the Prospectus, to the knowledge of the Company, no beneficial owners of the Company's capital stock or subordinated debt who, together with their associated persons and affiliates, hold in the aggregate 10% or more of such capital stock or subordinated debt, have any direct or indirect association or affiliate with a FINRA member.
- (xxiii) Other than the Subsidiary, the Company, directly or indirectly, owns, and upon closing of the offering of the Securities, directly or indirectly, will own, no capital stock or other equity or ownership or proprietary interest in any corporation, partnership, association, trust or other entity.

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(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 generally accepted accounting principles in the United States and to maintain accountability for assets; (iii) access to assets is permitted only in accordance with management's general or specific authorization; and (iv) the recorded accountability for assets is compared with existing assets at reasonable intervals and appropriate action is taken with respect to any differences. Except as disclosed in the Registration Statement, in the Time of Sale Disclosure Package and in the Prospectus, the Company's internal control over financial reporting is effective and none of the Company, its board of directors and audit committee is aware of any "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; 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 federal securities laws and the Company's board of directors and/or the audit committee has adopted a charter that satisfies the requirements of the Exchange Rules and the federal securities laws.

(xxv) Other than as contemplated by this Agreement and the Engagement Letter, dated September 11, 2013, by and between the Company and Piper Jaffray & Co. (the "*Engagement Letter*"), 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.

(xxvi) The Company carries, or is covered by, insurance from insurers with appropriately rated claims paying abilities in such amounts and covering such risks as is adequate for the conduct of its business and the value of its properties and as is customary for companies engaged in similar businesses in similar industries; all policies of insurance and any fidelity or surety bonds insuring the Company or the Subsidiary or its business, assets, employees, officers and directors are in full force and effect; the Company and the Subsidiary are in compliance with the terms of such policies and instruments in all material respects; there are no claims by the Company or the Subsidiary under any such policy or instrument as to which any insurance company is denying liability or defending under a reservation of rights clause, except as would not reasonably be expected to have a Material Adverse Effect; during the past 12 months, neither the Company nor the Subsidiary has been refused any insurance coverage sought or applied for; and neither the Company nor the Subsidiary has reason to believe that it will not be able to renew its existing insurance coverage as and when such coverage expires or to obtain similar coverage from similar

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insurers as may be necessary to continue its business at a cost that would not have a Material Adverse Effect.

(xxvii) 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.

(xxviii) The conditions for use of Form S-3, set forth in the General Instructions thereto, have been satisfied.

(xxix) The documents incorporated by reference in the Registration Statement, the Time of Sale Disclosure Package and in 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.

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

(xxxi) 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, including the Subsidiary, is made known to the principal executive officer and the principal financial officer of the Company. 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.

(xxxii) Each of the Company, the Subsidiary, its affiliates and any of their respective officers, directors, supervisors, managers, agents, or employees, has not violated, its participation in the offering will not violate, and the Company has instituted and maintains policies and procedures designed to ensure continued compliance with, each of the following laws: (a) anti-bribery laws, including but not limited to, any applicable law, rule, or regulation of any locality, including but not limited to any law, rule, or regulation promulgated to implement the OECD Convention on Combating Bribery of Foreign Public Officials in International Business Transactions, signed December 17, 1997, including the U.S. Foreign Corrupt Practices Act of 1977, as amended, or any other law, rule or regulation of similar purposes and scope, (b) anti-money laundering laws, including but not limited to,

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applicable federal, state, international, foreign or other laws, regulations or government guidance regarding anti-money laundering, including, without limitation, Title 18 US. Code section 1956 and 1957, the Patriot Act, the Bank Secrecy Act, and international anti-money laundering principles or procedures by an intergovernmental group or organization, such as the Financial Action Task Force on Money Laundering, of which the United States is a member and with which designation the United States representative to the group or organization continues to concur, all as amended, and any Executive order, directive, or regulation pursuant to the authority of any of the foregoing, or any orders or licenses issued thereunder or (c) laws and regulations imposing U.S. economic sanctions measures, including, but not limited to, the International Emergency Economic Powers Act, the Trading with the Enemy Act, the United Nations Participation Act, the Syria Accountability and Lebanese Sovereignty Act and the Iran Threat Reduction and Syria Human Rights Act, all as amended, and any Executive Order, directive, or regulation pursuant to the authority of any of the foregoing, including the regulations of the United States Treasury Department set forth under 31 CFR, Subtitle B, Chapter V, as amended, or any orders or licenses issued thereunder; and neither the Company nor the Subsidiary nor, to the knowledge of the Company, any director, officer, agent, employee or other person associated with or acting on behalf of the Company or the Subsidiary has (y) used any corporate funds for any unlawful contribution, gift, entertainment or other unlawful expense relating to political activity; or (z) made any direct or indirect unlawful payment to any foreign or domestic government official or employee from corporate funds.

(xxxiii) Neither the Company nor the Subsidiary nor, to the knowledge of the Company, any director, officer or employee of the Company or the Subsidiary is currently subject to any U.S. sanctions administered by the Office of Foreign Assets Control of the U.S. Department of the Treasury.

(xxxiv) To the Company's knowledge, no transaction has occurred between or among the Company and the Subsidiary, on the one hand, and any of the Company's officers, directors or 5% stockholders or any affiliate or affiliates of any such officer, director or 5% stockholders that is required to be described that is not so described in the Registration Statement, the Time of Sale Disclosure Package and the Prospectus. The Company has not, directly or indirectly, extended or maintained credit, or arranged for the extension of credit, or renewed an extension of credit, in the form of a personal loan to or for any of its directors or executive officers in violation of applicable laws, including Section 402 of the Sarbanes-Oxley Act.

(xxxv) Except as disclosed in the Time of Disclosure Package and the Prospectus, neither the Company nor the Subsidiary is in violation of any statute, any rule, regulation, decision or order of any Governmental Authority or any court, domestic or foreign, relating to the use, disposal or release of hazardous or toxic substances or relating to the protection or restoration of the environment or human exposure to hazardous or toxic substances (collectively, "Environmental Laws"), owns or operates any real property contaminated with any substance that is subject to any Environmental Laws, is liable for any off-site disposal or contamination pursuant to any Environmental Laws, or is subject to any claim relating to any Environmental Laws, which violation,

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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.

(xxxvi) Each of the Company and the Subsidiary (A) is in compliance, in all material respects, with any and all applicable foreign, federal, state and local laws, rules, regulations, treaties, statutes and codes promulgated by any and all governmental authorities (including pursuant to the Occupational Health and Safety Act) relating to the protection of human health and safety in the workplace ("Occupational Laws"); (B) has received all material permits, licenses or other approvals required of it under applicable Occupational Laws to conduct its business as currently conducted; and (C) is in compliance, in all material respects, with all terms and conditions of such permit, license or approval. No action, proceeding, revocation proceeding, writ, injunction or claim is pending or, to the Company's knowledge, threatened against the Company or the Subsidiary 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 could reasonably be expected to form the basis for or give rise to such actions, suits, investigations or proceedings.

(xxxvii) (i) To the knowledge of the Company, no "prohibited transaction" as defined under Section 406 of ERISA or Section 4975 of the Code and not exempt under ERISA Section 408 and the regulations and published interpretations thereunder has occurred with respect to any Employee Benefit Plan. At no time has the Company or any ERISA Affiliate maintained, sponsored, participated in, contributed to or has or had any liability or obligation in respect of any Employee Benefit Plan subject to Part 3 of Subtitle B of Title I of ERISA, Title IV of ERISA, or Section 412 of the Code or any "multiemployer plan" as defined in Section 3(37) of ERISA or any multiple employer plan for which the Company or any ERISA Affiliate has incurred or could incur liability under Section 4063 or 4064 of ERISA. No Employee Benefit Plan provides or promises, or at any time provided or promised, retiree health, life insurance, or other retiree welfare benefits except as may be required by the Consolidated Omnibus Budget Reconciliation Act of 1985, as amended, or similar state law. Each Employee Benefit Plan is and has been operated in material compliance with its terms and all applicable laws, including but not limited to ERISA and the Code and, to the knowledge of the Company, no event has occurred (including a "reportable event" as such term is defined in Section 4043 of ERISA) and no condition exists that would subject the Company or any ERISA Affiliate to any material tax, fine, lien, penalty or liability imposed by ERISA, the Code or other applicable law. Each Employee Benefit Plan intended to be qualified under Code Section 401(a) is so qualified and has a favorable determination or opinion letter from the IRS upon which it can rely, and any such determination or opinion letter remains in effect and has not been revoked; to the knowledge of the Company, nothing has occurred since the date of any such determination or opinion letter that is reasonably likely to adversely affect such qualification; (ii) with respect to each Foreign Benefit Plan, such Foreign Benefit Plan (A) if intended to qualify for special tax treatment, meets, in all material respects, the requirements for such treatment, and (B) if required to be funded, is funded to the extent

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required by applicable law, and with respect to all other Foreign Benefit Plans, adequate reserves therefore have been established on the accounting statements of the Company or the Subsidiary, as applicable; (iii) neither the Company nor the Subsidiary has any obligations under any collective bargaining agreement with any union and no organization efforts are underway with respect to employees of the Company or the Subsidiary. As used in this Agreement, "Code" means the Internal Revenue Code of 1986, as amended; "Employee Benefit Plan" means any "employee benefit plan" within the meaning of Section 3(3) of ERISA, including, without limitation, all stock purchase, stock option, stock-based severance, employment, change-in-control, medical, disability, fringe benefit, bonus, incentive, deferred compensation, employee loan and all other employee benefit plans, agreements, programs, policies or other arrangements, whether or not subject to ERISA, under which (A) any current or former employee, director or independent contractor of the Company or the Subsidiary has any present or future right to benefits and which are contributed to, sponsored by or maintained by the Company or the Subsidiary or (B) the Company or the Subsidiary has had or has any present or future obligation or liability; "ERISA" means the Employee Retirement Income Security Act of 1974, as amended; "ERISA Affiliate" means any member of the company's controlled group as defined in Code Section 414(b), (c), (m) or (o); and "Foreign Benefit Plan" means any Employee Benefit Plan established, maintained or contributed to outside of the United States of America or which covers any employee working or residing outside of the United States.

(xxxviii) Except as disclosed in the Registration Statement, the Time of Sale Disclosure Package and the Prospectus, the Company has not granted 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 affects the exclusive right of the Company to develop, manufacture, produce, assemble, distribute, license, market or sell its products.

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

- (xl) Subject to compliance with any applicable requirements under the Corporations Act and the Subsidiary's constitution, the Subsidiary is not currently prohibited, directly or indirectly, from paying any dividends to the Company, from making any other distribution on such Subsidiary's capital stock, from repaying to the Company any loans or advances to such Subsidiary from the Company or from transferring any of such Subsidiary's property or assets to the Company, except as described in or contemplated by the Registration Statement (excluding the exhibits thereto), the Time of Sale Disclosure Package and the Prospectus.
- (xli) Any third-party statistical and market-related data included in the Registration Statement, the Time of Sale Disclosure Package and the Prospectus are

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based on or derived from sources that the Company believes to be reliable and accurate in all material respects.

- (xlii) The Company has obtained for the benefit of the Underwriter the agreement, in the form set forth as Exhibit A hereto, of each of its directors and "officers" (within the meaning of Rule 16a-1(f) under the Exchange Act) (each a "Lock-Up Agreement" and collectively, the "Lock-Up Agreements").
- (xliii) Neither the Company nor the Subsidiary is, and after giving effect to the offering and sale of the Securities neither the Company nor the Subsidiary will be, a "holding company" or a "subsidiary company" or a "subsidiary company" or a "subsidiary company" or of a "subsidiary company," as such terms are defined in the Public Utility Holding Company Act of 1935, as amended.
- (xliv) Neither the Company nor the Subsidiary is engaged in any unfair labor practice; except for matters which would not, individually or in the aggregate, result in a Material Adverse Change, (i) there is (A) no unfair labor practice complaint pending or, to the Company's knowledge, threatened against the Company or the Subsidiary before the National Labor Relations Board, and no grievance or arbitration proceeding arising out of or under collective bargaining agreements is pending or, to the Company's knowledge, threatened, (B) no strike, labor dispute, slowdown or stoppage pending or, to the Company's knowledge, threatened against the Company or the Subsidiary and (C) no union representation dispute currently existing concerning the employees of the Company or the Subsidiary, (ii) to the Company's knowledge, no union organizing activities are currently taking place concerning the employees of the Company or the Subsidiary and (iii) there has been no violation of any federal, state, local or foreign law relating to discrimination in the hiring, promotion or pay of employees, any applicable wage or hour laws, any provision of the Worker Adjustment and Retraining Notification Act of 1988, as amended ("WARN Act") or the WARN Act's state, foreign or local equivalent, or any provision of ERISA or the rules and regulations promulgated thereunder concerning the employees of the Company or the Subsidiary.
- (xlv) Each "forward-looking statement" (within the meaning of Section 27A of the Act or Section 21E of the Exchange Act) contained or incorporated by reference in the Registration Statement, the Time of Sale Disclosure Package, the Prospectus and the Permitted Free Writing Prospectuses, if any, has been made or reaffirmed with a reasonable basis and in good faith.
- (xlvi) Neither the Company nor the Subsidiary nor any of their respective directors, officers or, to the knowledge of the Company, any of their affiliates or controlling persons has taken, directly or indirectly, any action designed, or which has constituted or might reasonably be expected to cause or result in the stabilization or manipulation of the price of any security of the Company to facilitate the sale or resale of the Securities.

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- (xlvii) From the time of filing of the Registration Statement with the Commission (or, if earlier, the first date on which the Company engaged directly or through any person authorized to act on its behalf in any oral or written communication with potential investors undertaken in reliance on Section 5(d) of the Act (any "Testing-the-Waters Communication")) through the date hereof, the Company has been and is an "emerging growth company," as defined in Section 2(a) of the Act (an "Emerging Growth Company").
- (xlviii) The Company has not alone engaged in any Testing-the-Waters Communication and has not authorized anyone other than the Representative to engage in Testing-the-Waters Communications. The Company reconfirms that the Representatives have been authorized to act on its behalf in undertaking any Testing-the-Waters Communications. The Company has not distributed any written Testing-the-Waters Communications other than those listed on Schedule IV hereto. As of the Time of Sale, none of (A) the Time of Sale Disclosure Package, (B) any individual Issuer Limited-Use Free Writing Prospectus, when considered together with the Time of Sale Disclosure Package, or (C) any individual written Testing-the-Waters Communication, when considered together with the Time of Sale Disclosure Package, included, includes or will include an untrue statement of a material fact or omitted, omits or will omit to state a material fact necessary in order to make the statements therein, in the light of the circumstances under which they were made, not misleading.
- (b) Any certificate signed by any officer of the Company and delivered to you or to counsel for the Underwriters shall be deemed a representation and warranty by the Company to each Underwriter as to the matters covered thereby.

3. Purchase, Sale and Delivery of Securities.

(a) 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 the Firm Shares to the several Underwriters, and each Underwriter agrees, severally and not jointly, to purchase from the Company the number of Firm Shares set forth opposite the name of such Underwriter in Schedule I hereto. The purchase price for each Firm Share shall be \$9.8175 per share. The obligation of each Underwriter to the Company shall be to purchase from the Company that number of Firm Shares (to be adjusted by the Representatives to avoid fractional shares) which represents the same proportion of the number of Firm Shares to be sold by the Company pursuant to this Agreement as the number of Firm Shares set forth opposite the name of such Underwriter in Schedule I hereto represents to the total number of Firm Shares to be purchased by all Underwriters pursuant to this Agreement. In making this Agreement, each Underwriter is contracting severally and not jointly; except as provided in paragraph (c) of this Section 3 and in Section 8 hereof, the agreement of each Underwriter is to purchase only the respective number of Firm Shares specified in Schedule I.

The Firm Shares will be delivered by the Company to you for the accounts of the several Underwriters against payment of the purchase price therefor by wire transfer of same day funds payable to the order of the Company at the offices of Cowen and Company, LLC, 599 Lexington Avenue, New York, New York 10022, or such other location as may be mutually

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acceptable, at 9:00 a.m. Central time on the third (or if the Securities are priced, as contemplated by Rule 15c6-1(c) under the Exchange Act, after 4:30 p.m. Eastern time, the fourth) full business day following the date hereof, or at such other time and date as you 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." If the Representatives so elect, delivery of the Firm Shares may be made by credit through full fast transfer to the accounts at The Depository Trust Company designated by the Representatives.

(b) On the basis of the representations, warranties and agreements herein contained, but subject to the terms and conditions herein set forth, the Company hereby grants to the several Underwriters an option to purchase all or any portion of the Option Shares at the same purchase price as the Firm Shares, for use solely in covering any over-allotments made by the Underwriters in the sale and distribution of the Firm Shares. The option granted hereunder may be exercised in whole or in part at any time (but not more than once) within 30 days after the effective date of this Agreement upon notice (confirmed in writing) by the Representatives to the Company setting forth the aggregate number of Option Shares as to which the several Underwriters are exercising the option, the names and denominations in which the certificates for the Option Shares are to be registered and the date and time, as determined by you, 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. The number of Option Shares to be purchased by each Underwriter shall be the same percentage of the total number of Option Shares to be purchased by the several Underwriters as the number of Firm Shares to be purchased by such Underwriter is of the total number of Firm Shares to be purchased by the Representatives in such manner as the Representatives deem advisable to avoid fractional shares. No Option Shares shall be sold and delivered unless the Firm Shares previously have been, or simultaneously are, sold and delivered.

The Option Shares will be delivered by the Company to you for the accounts of the several Underwriters against payment of the purchase price therefor by wire transfer of same day funds payable to the order of the Company at the offices of Cowen and Company, LLC, 599 Lexington Avenue, New York, New York 10022, or such other location as may be mutually acceptable at 9:00 a.m., Central time, on the Second Closing Date. If the Representatives so elect, delivery of the Option Shares may be made by credit through full fast transfer to the accounts at The Depository Trust Company designated by the Representatives.

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

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4. Covenants.

- (a) The Company covenants and agrees with the several Underwriters as follows:
- (i) 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 an Underwriter or 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 Representatives 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 Representatives or counsel to the Underwriters reasonably object. Subject to this Section 4(a)(i), immediately 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 Representatives and the Company may deem appropriate, and if requested by the Representatives, an Issuer Free Writing Prospectus containing the selling terms of the Securities and such other information as the Company and the Representatives 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) After the date of this Agreement, the Company shall promptly advise the Representatives 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 the lifting of such order at the earliest possible moment. Additionally, the Company agrees that it shall comply with the provisions of Rules 424(b), 430A 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) (A) During the Prospectus Delivery Period, the Company will comply as far as it is able 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 or appropriate in the opinion of the Company or its counsel or the Representatives or counsel to the Underwriters 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 in order to comply with the Securities Act or the Exchange Act, the Company will promptly notify you and will 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.
- (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 Statutory 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 has promptly notified or promptly will notify the Representatives and has promptly amended or will promptly amend or supplement, at its own expense, such Issuer Free Writing Prospectus to eliminate or correct such conflict, untrue statement or omission.
- (C) If immediately prior to the third anniversary of the initial effective date of the Registration Statement, any of the Securities remain unsold by the Underwriters, the Company will prior to that third anniversary file, if it has not already done so, a new shelf registration statement relating to the Securities, in a form satisfactory to the Representatives, will use its best efforts to cause such registration statement to be declared effective within 180 days after that third anniversary, and will take all other action necessary or appropriate to permit the public offering and sale of the Securities to continue as contemplated in the expired registration statement relating to the Securities. References herein to the Registration Statement shall include such new shelf registration statement.
- (iv) The Company shall take or cause to be taken all necessary action to qualify the Securities for sale under the securities laws of such jurisdictions as you reasonably designate and to continue such qualifications in effect so long as required for the distribution of the Securities, except that the Company shall not be required in connection

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therewith to qualify as a foreign corporation or to execute a general consent to service of process in any state.

- (v) The Company will furnish, at its own expense, to the Underwriters and counsel for the Underwriters copies of the Registration Statement (which will include three complete manually signed copies of the Registration Statement and all consents and exhibits filed therewith), and to the Underwriters and any dealer each Preliminary Prospectus, the Time of Sale Disclosure Package, the Prospectus, any Issuer Free Writing Prospectus, and all amendments and supplements to such documents, in each case as soon as available and in such quantities as you may from time to time reasonably request.
- (vi) During a period of five years commencing with the date hereof, the Company will furnish to the Representatives, and to each Underwriter who may so request in writing, copies of all periodic and special reports furnished to the stockholders of the Company and all information, documents and reports filed with the Commission, the FINRA or any securities exchange (other than any such information, documents and reports that are filed with the Commission electronically via EDGAR or any successor system).
- (vii) The Company will make generally available to its security holders as soon as practicable, but in no event later than 15 months after the end of the Company's current fiscal quarter, an earnings statement (which need not be audited) covering a 12-month period that shall satisfy the provisions of Section 11(a) of the Securities Act and Rule 158 of the Rules and Regulations. The parties agree that such obligation may be satisfied by filings with the Commission made on EDGAR.
- (viii) 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 and fees and disbursements of the Underwriters' counsel incurred in connection with the qualification of the Securities for offering and sale by the Underwriters or by dealers under the securities or blue sky laws of the states and other jurisdictions which you shall designate, (D) the fees and expenses of any transfer agent or registrar, (E) the filing fees and fees and disbursements of Underwriters' counsel 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,

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forth in this subsection (H)) shall not exceed \$150,000 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. If this Agreement is terminated by the Representatives pursuant to Section 9 hereof or if the sale of the Securities provided for herein is not consummated by reason of any failure, refusal or inability on the part of the Company to perform any agreement on its part to be performed, or because any other condition of the Underwriters' obligations hereunder required to be fulfilled by the Company is not fulfilled, the Company will reimburse the several Underwriters for all out-of-pocket disbursements (including but not limited to fees and disbursements of counsel, printing expenses, travel expenses, postage, facsimile and telephone charges) incurred by the Underwriters in connection with their investigation, preparing to market and marketing the Securities or in contemplation of performing their obligations hereunder. The Company shall not in any event be liable to any of the Underwriters for loss of anticipated profits from the transactions covered by this Agreement.

- (ix) The Company will apply the net proceeds from the sale of the Securities to be sold by it hereunder for the purposes set forth in the Time of Sale Disclosure Package and in the Prospectus.
- (x) The Company will not, without the prior written consent of Piper Jaffray & Co. and Cowen and Company, LLC, from the date of execution of this Agreement and continuing to and including the date 90 days after the date of the Prospectus (the "Lock-Up Period"), (A) offer, pledge, announce the intention to sell, sell, contract to sell, sell any option or contract to purchase, purchase any option or contract to sell, grant any option, right or warrant to purchase or otherwise transfer or dispose of, directly or indirectly, any shares of Stock or any securities convertible into or exercisable or exchangeable for Common Stock (including, for the avoidance of doubt, any sales of shares of Common Stock pursuant to the Common Stock Purchase Agreement, dated as of January 15, 2013, by and between the Company and Aspire Capital Fund, LLC) 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 (i) to the Underwriters pursuant to this Agreement or (ii) in the ordinary course of business pursuant to the Company's Amended and Restated 2002 Stock Plan, 2011 Equity Incentive Plan, 2013 Non-Employee Director's Equity Incentive Plan or New-Hire Equity Incentive Plan. Except as required under any agreement existing on the date of this Agreement, the Company agrees not to accelerate the vesting of any option or warrant or the lapse of any repurchase right prior to the expiration of the Lock-Up Period. Notwithstanding the foregoing, the Company shall be permitted during the Lock-Up Period to file a post-effective amendment to its registration statement on Form S-1 (File No. 333-186259) for the

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purpose of reflecting in the prospectus contained in such registration statement facts or events representing a fundamental change in the information set forth in such registration statement as required by the undertaking set forth in Item 17(a)(1)(ii) of Part II of such registration statement.

- (xi) The Company has caused to be delivered to you prior to the date of this Agreement the Lock-Up Agreements from each of the Company's directors and officers. If any additional persons shall become directors or officers of the Company prior to the end of the Lock-Up Period, the Company shall cause each such person, prior to or contemporaneously with their appointment or election as a director or officer of the Company, to execute and deliver to you a Lock-Up Agreement. 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) The Company agrees to announce the Underwriters' intention to release any director or officer of the Company from any of the restrictions imposed by any Lock-Up Agreement, by issuing, through a major news service, a press release in form and substance satisfactory to you promptly following the Company's receipt of any notification from you in which such intention is indicated, but in any case not later than the close of the third business day prior to the date on which such release or waiver is to become effective; *provided*, *however*, that nothing shall prevent you, on behalf of the Underwriters, from announcing the same through a major news service, irrespective of whether the Company has made the required announcement; provided further, that no such announcement shall be made of any release or waiver granted solely to permit a transfer of securities that is not for consideration and where the transferee has agreed in writing to be bound by the terms of a Lock-Up Agreement, in the form set forth as Exhibit A hereto.
- (xiii) 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.
- (xiv) The Company will not incur any liability for any finder's or broker's fee or agent's commission in connection with the execution and delivery of this Agreement or the consummation of the transactions contemplated hereby.
- (xv) 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.
- (xvi) The Company and the Subsidiary 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

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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, including the Subsidiary, is made known to them by others within those entities.

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

(xviii) The Company represents and agrees that, unless it obtains the prior written consent of Piper Jaffray & Co. and Cowen and Company, LLC, and each Underwriter severally represents and agrees that, unless it obtains the prior written consent of the Company and Piper Jaffray & Co. and Cowen and Company, LLC, it has not made and will not make any offer relating to the Securities that would constitute an "issuer free writing prospectus," as defined in Rule 433 under the Securities Act, or that would otherwise constitute a "free writing prospectus," as defined in Rule 405 under the Securities Act, required to be filed with the Commission; provided that the prior written consent of the parties hereto shall be deemed to have been given in respect of the free writing prospectuses included in Schedule II. Any such free writing prospectus consented to by the Company and Piper Jaffray & Co. and Cowen and Company, LLC 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," as defined in Rule 433, and has complied and will comply with the requirements of Rule 433 applicable to any Permitted Free Writing Prospectus, including timely Commission filing where required, legending and record keeping. The Company represents that it has satisfied and agrees that it will satisfy the conditions in Rule 433 to avoid a requirement to file with the Commission any electronic roadshow.

(xix) The Company will promptly notify the Representatives if the Company ceases to be an Emerging Growth Company at any time prior to the later of (i) completion of the distribution of the Securities within the meaning of the Act and (ii) completion of the Lock-Up Period referred to in Section 4(a)(x) hereof. Furthermore, if at any time following the distribution of any Written Testing-the-Waters Communication with respect to Emerging Growth Company status of the Company there occurred or occurs an event or development as a result of which such Written Testing-the-Waters Communication 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 existing at that subsequent time, not misleading, the Company will promptly notify the Representative and will promptly amend or supplement, at its own expense, such Written Testing-the-Waters Communication to eliminate or correct such untrue statement or omission

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(b) Reserved.

- 5. *Conditions of Underwriters' Obligations*. The obligations of the several Underwriters hereunder are subject to the accuracy, as of the date hereof and at each of the First Closing Date and the Second Closing Date (as if made at such Closing Date), of and compliance with all representations, warranties and agreements of the Company contained herein, to the performance by the Company of its obligations hereunder and to the following additional conditions:
- (a) 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 included or incorporated by reference in the Registration Statement, the Time of Sale Disclosure Package, the Prospectus, any Issuer Free Writing Prospectus or otherwise) shall have been complied with to your satisfaction.
- (b) No Underwriter shall have advised the Company that (i) the Registration Statement or any amendment thereof or supplement thereto contains an untrue statement of a material fact which, in your opinion, is material or omits to state a material fact which, in your opinion based on the advice of your counsel, is required to be stated therein or necessary to make the statements therein not misleading, or (ii) the Time of Sale Disclosure Package or the Prospectus, or any amendment thereof or supplement thereto, or any Issuer Free Writing Prospectus contains an untrue statement of fact which, in your reasonable opinion based on the advice of counsel, is material, or omits to state a fact which, based on the advice of your counsel, is material and is required to be stated therein, or necessary to make the statements therein, in light of the circumstances under which they are made, not misleading.
- (c) 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, neither the Company nor the Subsidiary shall have incurred any material liabilities or obligations, other than those incurred in the ordinary course of business, direct or contingent, or entered into any material transactions, or declared or paid any dividends or made any distribution of any kind with respect to its capital stock; and there shall not have been any change in the capital stock (other than a change in the number of outstanding shares of Common Stock due to the issuance of shares upon the exercise of outstanding options or warrants), or any material change in the short-term or long-term debt of the Company, or any issuance of options, warrants, convertible securities or other rights to purchase the capital stock of the Company or the Subsidiary, or any Material Adverse Change or any development which would reasonably be expected to result in a Material Adverse Change (whether or not arising in the ordinary course of business), or any loss by strike, fire, flood, earthquake, accident or other calamity, whether or not covered by

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insurance, incurred by the Company or the Subsidiary, the effect of which, in any such case described above, in your judgment, makes it impractical or inadvisable to offer or deliver the Securities on the terms and in the manner contemplated in the Time of Sale Disclosure Package and in the Prospectus.

- (d) On each Closing Date, there shall have been furnished to you, as Representatives of the several Underwriters, the opinion of Honigman Miller Schwartz and Cohn LLP, counsel for the Company, dated such Closing Date and addressed to you, in form and substance satisfactory to the Underwriters.
- (e) On each Closing Date, there shall have been furnished to you, as Representatives of the several Underwriters, the opinion of Johnson Winter & Slattery, Australian counsel for the Company, dated such Closing Date and addressed to you, in form and substance satisfactory to the Underwriters.

- (f) On each Closing Date, there shall have been furnished to you, as Representatives of the several Underwriters, the opinion of Davis, Brown, Koehn, Shors & Roberts, P.C., special patent counsel for the Company, dated such Closing Date and addressed to you, in form and substance satisfactory to the Underwriters.
- (g) On each Closing Date, there shall have been furnished to you, as Representatives of the several Underwriters, the opinion of Jones Day, counsel for the several Underwriters, dated such Closing Date and addressed to you, in form and substance satisfactory to the Underwriters, and such counsel shall have received such papers and information as they request to enable them to pass upon such matters.
- (h) On the date hereof and on each Closing Date you, as Representatives of the several Underwriters, shall have received a letter of Ernst & Young LLP, dated such date and addressed to you, confirming that they are independent public accountants within the meaning of the Securities Act and are in compliance with the applicable requirements relating to the qualifications of accountants under Rule 2-01 of Regulation S-X of the Commission, and stating, as of the date of such letter (or, with respect to matters involving changes or developments since the respective dates as of which specified financial information is given in the Time of Sale Disclosure Package, as of a date not prior to the date hereof or more than five days prior to the date of such letter), the conclusions and findings of said firm with respect to the financial information and other matters covered by its letter delivered to you concurrently with the execution of this Agreement, and the effect of the letter so to be delivered on such Closing Date shall be to confirm the conclusions and findings set forth in such prior letter.
- (i) On each Closing Date, there shall have been furnished to you, as Representatives of the Underwriters, a certificate, dated such Closing Date and addressed to you, signed by the chief executive officer and by the chief financial officer of the Company, to the effect that:
 - (i) The representations and warranties of the Company in this Agreement are true and correct as if made at and as of such Closing Date, and the Company

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has complied with all the agreements and satisfied all the conditions on its part to be performed or satisfied under this Agreement 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) The signers of said certificate have carefully examined the Registration Statement, the Time of Sale Disclosure Package and the Prospectus, and any amendments thereof or supplements thereto (including any documents filed under the Exchange Act and deemed to be incorporated by reference into the Time of Sale Disclosure Package and the Prospectus), and
 - (A) each part of the Registration Statement and the Prospectus, and any amendments thereof or supplements thereto (including any documents filed under the Exchange Act and deemed to be incorporated by reference into the Prospectus) contain, and contained, when such part of the Registration Statement (or such amendment) became effective, all statements and information required to be included therein, each part of the Registration Statement, or any amendment thereof, does not contain, and did not contain, when such part of the Registration Statement (or such amendment) became effective, any untrue statement of a material fact or omit to state, and did not omit to state when such part of the Registration Statement (or such amendment) became effective, any material fact required to be stated therein or necessary to make the statements therein not misleading, and the Prospectus, as amended or supplemented, does not include and did not include as of its date, or the time of first use within the meaning of the Rules and Regulations, any untrue statement of a material fact or omit to state and did not omit to state as of its date, or the time of first use within the meaning of the Rules and Regulations, a material fact necessary to make the statements therein, in light of the circumstances under which they were made,
 - (B) neither (1) the Time of Sale Disclosure Package nor (2) any individual Issuer Limited-Use Free Writing Prospectus, when considered together with the Time of Sale Disclosure Package, include, nor included as of the Time of Sale any untrue statement of a material fact or omits, or omitted as of the Time of Sale, to state any material fact necessary in order to make the statements therein, in the light of the circumstances under which they were made, not misleading.
 - (C) since the Time of Sale, there has occurred no event required to be set forth in an amended or supplemented prospectus which has not been so set forth, and

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there has been no document required to be filed under the Exchange Act that upon such filing would be deemed to be incorporated by reference into the Time of Sale Disclosure Package or into the Prospectus that has not been so filed,

(D) subsequent to the respective dates as of which information is given in the Time of Sale Disclosure Package and in the Prospectus, neither the Company nor the Subsidiary has incurred any material liabilities or obligations, direct or contingent, or entered into any material transactions, not in the ordinary course of business, or declared or paid any dividends or made any distribution of any kind with respect to its capital stock, and except as disclosed in the Time of Sale Disclosure Package and in the Prospectus, there has not been any change in the capital stock (other than a change in the number of outstanding shares of Common Stock due to the issuance of shares upon the exercise of outstanding options or warrants or issued pursuant to the Company's Amended and Restated 2002 Stock Plan, 2011 Equity Incentive Plan, 2013 Non-Employee Director's Equity Incentive Plan or New-Hire Equity Incentive Plan), or any material change in the short-term or long-term debt, or any issuance of options, warrants, convertible securities or other rights to purchase the capital stock, of the Company, or the Subsidiary, or any Material Adverse Change or any development which could reasonably be expected to result in any Material Adverse Change (whether or not arising in the ordinary course of business), or any loss by strike, fire, flood, earthquake, accident or other calamity, whether or not covered by insurance, incurred by the Company or the Subsidiary, and

- (E) except as stated in the Time of Sale Disclosure Package and in the Prospectus, there is not pending, or, to the knowledge of the Company, threatened, any action, suit or proceeding to which the Company or the Subsidiary is a party before or by any court or Governmental Authority or body, or any arbitrator, which could reasonably be expected to result in any Material Adverse Change.
- (j) FINRA shall have raised no objection to the fairness and reasonableness of the underwriting terms and arrangements.
- (k) The Company shall have furnished to you and counsel for the Underwriters such additional documents, certificates and evidence as you or they may have reasonably requested.
- (l) The Securities to be delivered on such Closing Date have been approved for listing on the Nasdaq Capital 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 you and counsel for the Underwriters. The Company will furnish you with such conformed copies of such opinions, certificates, letters and other documents as you shall reasonably request.

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6. **Indemnification and Contribution**.

The Company agrees to indemnify and hold harmless each Underwriter, its affiliates, directors and officers and each person, if any, who controls such Underwriter within the meaning of Section 15 of the Act or Section 20 of the Exchange Act, from and against any losses, claims, damages or liabilities, joint or several, to which such Underwriter may become subject, under the Act or otherwise (including in settlement of any litigation if such settlement is effected with the written consent of the Company), insofar as such losses, claims, damages or liabilities (or actions in respect thereof) 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 430A 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 (including any documents filed under the Exchange Act and deemed to be incorporated by reference into the Registration Statement or such Prospectus), any written Testing-the-Waters Communication, any Issuer Free Writing Prospectus or in any materials or information provided to investors by, or with the approval of, the Company in connection with the marketing of the offering of the Common Stock ("Marketing Materials"), including any roadshow or investor presentations made to investors by the Company (whether in person or electronically), 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 (in the case of the Time of Sale Disclosure Package or any Prospectus, any Testing-the-Waters Communication or any Issuer Free Writing Prospectus, in light of the circumstances under which they were made) not misleading, and will reimburse each Underwriter for any legal or other expenses reasonably incurred by it in connection with investigating or defending against such loss, claim, damage, liability or action as such expenses are incurred; provided, however, that the Company will not be liable in any such case to the extent that any such loss, claim, damage, liability or action arises out of or is based upon an untrue statement or alleged untrue statement or omission or alleged omission made in the Registration Statement, any Preliminary Prospectus, the Time of Sale Disclosure Package, the Prospectus, or any such amendment or supplement, any written Testing-the-Waters Communication, any Issuer Free Writing Prospectus or in any Marketing Materials, in reliance upon and in conformity with written information furnished to the Company by you, or by any Underwriter through you, specifically for use in the preparation thereof; it being understood and agreed that the only information furnished by an Underwriter consists of the information described as such in Section 6(f).

(b) Each Underwriter will, severally and not jointly, indemnify and hold harmless the Company, its affiliates, directors and officers and each person, if any, who controls the Company within the meaning of Section 15 of the Act and Section 20 of the Exchange Act, from and against any losses, claims, damages or liabilities to which the Company may become subject, under the Act or otherwise (including in settlement of any litigation, if such settlement is effected with the written consent of such Underwriter), insofar as such losses, claims, damages or liabilities (or actions in respect thereof) arise out of or are based upon an untrue statement or alleged untrue statement of a material fact contained in the Registration Statement, any Preliminary Prospectus, the Time of Sale Disclosure Package, the Prospectus, or any amendment or supplement thereto, any written Testing-the-Waters Communication, or any Issuer Free Writing Prospectus or arise out of or

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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 the Registration Statement, any Preliminary Prospectus, the Time of Sale Disclosure Package, the Prospectus, or any such amendment or supplement, any written Testing-the-Waters Communication, or any Issuer Free Writing Prospectus in reliance upon and in conformity with written information furnished to the Company by you, or by such Underwriter through you, specifically for use in the preparation thereof (it being understood and agreed that the only information furnished by an Underwriter consists of the information described as such in Section 6(f)), and will reimburse the Company for any legal or other expenses reasonably incurred by the Company in connection with investigating or defending against any such loss, claim, damage, liability or action as such expenses are incurred.

(c) 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 satisfactory to such indemnified party, and after notice from the indemnifying party to such indemnified party of the indemnifying party's election so to assume the defense thereof, the indemnifying party shall not be liable to such indemnified party under such subsection for any legal or other expenses subsequently incurred by such indemnified party in connection with the defense thereof other than reasonable costs of investigation; provided, however, that if, in the sole judgment of the Representatives, it is advisable for the Underwriters to be represented

as a group by separate counsel, the Representatives shall have the right to employ a single counsel (in addition to local counsel) to represent the Representatives and all Underwriters who may be subject to liability arising from any claim in respect of which indemnity may be sought by the Underwriters under subsection (a) of this Section 6, in which event the reasonable fees and expenses of such separate counsel shall be borne by the indemnifying party or parties and reimbursed to the Underwriters as incurred. 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.

(d) If the indemnification provided for in this Section 6 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

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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 discounts and commissions received by the Underwriters, in each case as set forth in the table on the cover page of the Prospectus. The relative fault shall be determined by reference to, among other things, whether the untrue or alleged untrue statement of a material fact or the omission or alleged omission to state a material fact relates to information supplied by the Company 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 (even if the Underwriters were treated as one entity for such purpose) or by any other method of allocation which does not take account of the equitable considerations referred to in the first sentence of this subsection (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 discounts and commissions received by such Underwriter with respect to the Securities exceeds the amount of any damages that such Underwriter has otherwise been required to pay by reason of such untrue or alleged untrue statement or omission or alleged omission. No person guilty of fraudulent misrepresentation (within the meaning of Section 11(f) of the Act) shall be entitled to contribution from any person who was not guilty of such fraudulent misrepresentation. The Underwriters' obligations in this subsection (d) to contribute are several in proportion to their respective underwriting obligations and not joint.

- (e) The obligations of the Company under this Section 6 shall be in addition to any liability which the Company may otherwise have and shall extend, upon the same terms and conditions, to each person, if any, who controls any Underwriter within the meaning of the Act; and the obligations of the Underwriters under this Section 6 shall be in addition to any liability that the respective Underwriters may otherwise have and shall extend, upon the same terms and conditions, to each director of the Company (including any person who, with his consent, is named in the Registration Statement as about to become a director of the Company), to each officer of the Company who has signed the Registration Statement and to each person, if any, who controls the Company within the meaning of the Act.
- (f) The Underwriters severally confirm and the Company acknowledges that the statements with respect to the public offering of the Securities by the Underwriters set forth in the second paragraph under the caption "Underwriting" in the Time of Sale Disclosure Package and in

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the Prospectus are correct and constitute the only information concerning such Underwriters furnished in writing to the Company by or on behalf of the Underwriters specifically for inclusion in the Registration Statement, any Preliminary Prospectus, the Time of Sale Disclosure Package, the Prospectus, any written Testing-the-Waters Communication, or any Issuer Free Writing Prospectus.

7. **Representations and Agreements to Survive Delivery.** All representations, warranties, and agreements of the Company herein or in certificates delivered pursuant hereto, including but not limited to the agreements of the several Underwriters and the Company 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.

8. Substitution of Underwriters.

- (a) If any Underwriter or Underwriters shall fail to take up and pay for the amount of Firm Shares agreed by such Underwriter or Underwriters to be purchased hereunder, upon tender of such Firm Shares in accordance with the terms hereof, and the amount of Firm Shares not purchased does not aggregate more than 10% of the total amount of Firm Shares set forth in Schedule I hereto, the remaining Underwriters shall be obligated to take up and pay for (in proportion to their respective underwriting obligations hereunder as set forth in Schedule I hereto except as may otherwise be determined by you) the Firm Shares that the withdrawing or defaulting Underwriters agreed but failed to purchase.
- (b) If any Underwriter or Underwriters shall fail to take up and pay for the amount of Firm Shares agreed by such Underwriter or Underwriters to be purchased hereunder, upon tender of such Firm Shares in accordance with the terms hereof, and the amount of Firm Shares not purchased aggregates more than 10% of the total amount of Firm Shares set forth in Schedule I hereto, and arrangements satisfactory to you for the purchase of such Firm Shares by other persons are not made within 36 hours thereafter, this Agreement shall terminate. In the event of any such termination the Company shall not be under any liability to any Underwriter (except to the extent provided in Section 4(a)(viii) and Section 6 hereof) nor shall any Underwriter (other than an Underwriter who shall have failed, otherwise than for some reason permitted under this Agreement, to purchase the amount of Firm Shares agreed by such Underwriter to be purchased hereunder) be under any liability to the Company (except to the extent provided in Section 6 hereof).

9. **Termination of this Agreement.**

- (a) You, as Representatives of the several Underwriters, 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, (ii) any condition of the Underwriters' obligations hereunder is not fulfilled, (iii)trading in the Company's Common Stock shall have been suspended by the Commission or the Nasdaq Capital Market or trading in securities generally on the Nasdaq Capital Market, New York Stock Exchange or the American 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 Nasdaq Capital Market, New York Stock Exchange or the NYSE Amex, by such Exchange or by order of the Commission or any other Governmental Authority having jurisdiction, (v) a banking moratorium shall have been declared by federal or state authorities, 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 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 your judgment, is material and adverse and makes it impractical or inadvisable to proceed with the completion of the sale of and payment for the Securities. Any such termination shall be without liability of any party to any other party except that the provisions of Section 4(a)(viii) and Section 6 hereof shall at all times be effective and shall survive such termination.
- (b) If you elect to terminate this Agreement as provided in this Section, the Company shall be notified promptly by you by telephone, confirmed by letter.
- 10. **Default by the Company.** If the Company shall fail at the First Closing Date to sell and deliver the number of Securities which it is obligated to sell hereunder, then this Agreement shall terminate without any liability on the part of any Underwriter or, except as provided in Section 4(a) (viii) and Section 6 hereof, any non-defaulting party.

No action taken pursuant to this Section shall relieve the Company so defaulting from liability, if any, in respect of such default.

11. **Notices**. Except as otherwise provided herein, all communications hereunder shall be in writing and, if to the Underwriters, shall be mailed or delivered to the Representatives c/o Piper Jaffray & Co., U.S. Bancorp Center, 800 Nicollet Mall, Minneapolis, Minnesota 55402, Attention: General Counsel, and c/o Cowen and Company, LLC, 599 Lexington Avenue, New York, New York 10022, Attention: General Counsel, with a copy to Jones Day, 1755 Embarcadero Road, Palo Alto, California 94303, Attention: Timothy Curry, Esq., except that notices given to an Underwriter pursuant to Section 6 hereof shall be sent to such Underwriter at the address stated in the Underwriters' Questionnaire furnished by such Underwriter in connection with this offering; if to the Company, shall be mailed or delivered to it at Sunshine Heart, Inc., 12988 Valley View Road, Eden Prairie, Minnesota 55344, Attention: Chief Executive Officer, with a copy to Honigman

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Miller Schwartz and Cohn LLP, Columbia Plaza, 350 East Michigan Avenue, Suite 300, Kalamazoo, Michigan 49007, Attention: Phillip D. Torrence, Esq. 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.

- 12. **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 any of the several Underwriters.
- Absence of Fiduciary Relationship. The Company acknowledges and agrees that: (a) the Representatives 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 or the Subsidiary and the Underwriters have 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 or the Subsidiary 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 Representatives 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 the Subsidiary 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 the Representatives are acting, in respect of the transactions contemplated by this Agreement, solely for the benefit of the Underwriters, and not on behalf of the Company; (e) it waives, to the fullest extent permitted by law, any claims it may have against the Underwriters for breach of fiduciary duty or alleged breach of fiduciary duty in respect of any of the transactions contemplated by this Agreement and agrees that the Underwriters shall have no liability (whether direct or indirect) to the Company in respect of such a fiduciary duty claim on behalf of or in right of the Company and the Subsidiary, including stockholders, employees or creditors of the Company and the Subsidiary.
 - 14. **Governing Law.** This Agreement shall be governed by and construed in accordance with the laws of the State of New York.
- 15. *Counterparts*. This Agreement may be executed in one or more counterparts and, if executed in more than one counterpart, the executed counterparts shall each be deemed to be an original and all such counterparts shall together constitute one and the same instrument.

oral and all contemporaneous oral agreements, understandings and negotiations with	n respect to the subject matter hereof, including
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all provisions of the Engagement Letter that relate to the offer and sale of the Securi unless in writing by all of the parties hereto, and no condition herein (express or improndition is meant to benefit. The Section headings herein are for the convenience of this Agreement.	plied) may be waived unless waived in writing by each party whom the
[Signature Page F	Follows]
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Please sign and return to the Company the enclosed duplicates of this letter Company and the several Underwriters in accordance with its terms.	whereupon this letter will become a binding agreement between the
Very	truly yours,
SUN	ISHINE HEART, INC.
	/s/ David A. Rosa David A. Rosa Chief Executive Officer
PIPER JAFFRAY & CO.	
By /s/ Neil A. Riley Managing Director	
COWEN AND COMPANY, LLC	
By /s/ Andrew J. Mertz Managing Director	
[Signature Page to Underwi	riting Agreement]
SCHEDUL	E I

General Provisions. This Agreement constitutes the entire agreement of the parties to this Agreement and supersedes all prior written or

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Underwriter	Number of Firm Shares (1)
Piper Jaffray & Co.	1,409,700
Cowen and Company, LLC	1,409,700
Lazard Capital Markets LLC	571,500
Craig-Hallum Capital Group LLC	266,700
Northland Capital Markets	152,400
Total	3,810,000

⁽¹⁾ The Underwriters may purchase up to an additional 571,500 Option Shares, to the extent the option described in Section 3(b) of the Agreement is exercised, in the proportions and in the manner described in the Agreement.

None.

SCHEDULE III

Pricing Information

Price to the public	\$10.50 per share
Price to the Underwriters	\$9.8175 per share
Number of Firm Shares	3,810,000
Number of Option Shares	571,500

SCHEDULE IV

Written Testing-the-Waters Communications

None.

HONIGMAN

Honigman Miller Schwartz and Cohn LLP Attorneys and Counselors (269) 337-7700 Fax: (269) 337-7701

September 19, 2013

Sunshine Heart, Inc. 12988 Valley View Road Eden Prairie, MN 55344

Ladies and Gentlemen:

We have acted as counsel to Sunshine Heart, Inc., a Delaware corporation (the "Issuer"), in connection with the preparation and filing with the Securities and Exchange Commission (the "Commission") of the Registration Statement on Form S-3 (File No. 333-187273) (the "Registration Statement") under the Securities Act of 1933, as amended (the "Act"), and the prospectus supplement dated September 19, 2013 filed with the Commission pursuant to Rule 424(b) of the rules and regulations under the Act (the "Prospectus Supplement") for the issuance and sale by the Issuer of up to 4,381,500 shares (the "Shares") of the Issuer's common stock, par value \$0.0001 per share.

The law covered by the opinion expressed in this opinion letter is limited to the federal laws of the United States and the Delaware General Corporation Law.

Based on our examination of such documents and other matters as we deem relevant, we are of the opinion that the Shares have been duly authorized and, when issued, delivered and sold by the Issuer as described in the Registration Statement and the Prospectus Supplement and in the manner set forth in the Underwriting Agreement dated as of September 19, 2013, among the Issuer and Piper Jaffray & Co. and Cowen and Company, LLC, as representatives of the several underwriters named in Schedule I attached thereto, against payment of the consideration therefor as provided therein, will be validly issued, fully paid and nonassessable.

We consent to the filing of this opinion as an exhibit to the Registration Statement and to the reference to us under the heading "Legal Matters" in the Prospectus Supplement and the prospectus included in the Registration Statement. In giving such consent, we do not admit that we come within the category of persons whose consent is required under Section 7 of the Act, or the rules or regulations of the Commission thereunder.

Very truly yours,

/S/ HONIGMAN MILLER SCHWARTZ AND COHN LLP

350 East Michigan Avenue · Suite 300 · Kalamazoo, Michigan 49007-3800 Detroit · Lansing · Oakland County · Ann Arbor · Kalamazoo

Sunshine Heart, Inc. Prices \$40.0 Million Public Offering of Common Shares

Eden Prairie, MN: September 19, 2013: Sunshine Heart, Inc. (NASDAQ: SSH) announced today the pricing of its previously announced offering of 3,810,000 shares of its common stock at a price to the public of \$10.50 per share in an underwritten public offering pursuant to its effective shelf registration statement previously filed with the U.S. Securities and Exchange Commission (SEC). Piper Jaffray & Co. and Cowen and Company, LLC are acting as joint book-running managers and Lazard Capital Markets LLC is acting as co-lead manager for the offering. Craig-Hallum Capital Group and Northland Securities, Inc. are acting as co-managers for the offering. In addition, Sunshine Heart has granted the underwriters a 30-day option to purchase up to an additional 571,500 shares solely to cover over-allotments, if any. The offering is expected to close on or about September 24, 2013, subject to customary closing conditions.

Sunshine Heart currently intends to use the net proceeds from the offering for general corporate purposes, including its ongoing U.S. pivotal trial and post-market EU study, initial commercialization of the C-Pulse Heart Assist System, or C-Pulse System, in the EU, and product development activities.

The offering is being made pursuant to a shelf registration statement (File No. 333-187273) (including a prospectus) previously filed with and declared effective by the SEC. Prospective investors should read the prospectus in that registration statement, the final prospectus relating to the offering, and other documents that Sunshine Heart has filed with the SEC for more complete information about Sunshine Heart and the offering. A copy of the prospectus supplement and the accompanying prospectus relating to these securities may be obtained by contacting Piper Jaffray & Co., Attention: Prospectus Department, 800 Nicolett Mall, Suite 1000, Minneapolis, MN 55402, or by telephone at (800) 747-3924, or by e-mail at prospectus@pjc.com, or by contacting Cowen and Company, LLC (c/o Broadridge Financial Services, 1155 Long Island Avenue, Edgewood, NY, 11717, Attn: Prospectus Department, Phone: 631-274-2806, Fax: 631-254-7140). Electronic copies of the prospectus supplement and the accompanying prospectus are also available free of charge on the website of the SEC at www.sec.gov.

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

About Sunshine® Heart

Sunshine Heart, Inc. (NASDAQ: SSH) is a medical device company focused on developing, manufacturing and commercializing the C-Pulse System for treatment of Class III and ambulatory Class IV heart failure. Sunshine Heart has completed an approved U.S. Food and Drug Administration (FDA) feasibility clinical trial of the C-Pulse System and presented the results in November 2011. In March 2012, the FDA notified the Company that it could move forward with an investigational device exemption (IDE) application. Sunshine Heart received unconditional approval from the FDA in November 2012 to initiate its pivotal trial. In July 2012 Sunshine Heart received CE Mark approval for its C-Pulse System in Europe. Sunshine Heart is a Delaware corporation headquartered in Minneapolis with a wholly owned subsidiary in Australia. The Company has been listed on the NASDAQ Capital Market since February 2012.

Forward-Looking Statements

Certain statements in this release are forward-looking statements that are based on management's beliefs, assumptions and expectations and information currently available to management. All statements that address future operating performance, events or developments that we expect or anticipate will occur in

the future are forward-looking statements, including, without limitation, our expectations with respect to the closing of the offering and the timing thereof, future clinical trial activities and results including patient enrollment in trials. These forward-looking statements are subject to numerous risks and uncertainties, including, without limitation, that the offering may not close due to the failure of any condition precedent or otherwise or may close later than we currently anticipate, the possibility that our clinical trials do not meet their enrollment goals, meet their end-points or otherwise fail, that regulatory authorities do not accept our application or approve the marketing of the C-Pulse System, the possibility that we may be unable to raise the funds necessary for the development and commercialization of our products, that we may not be able to commercialize our products successfully in the EU and the other risk factors described under the caption "Risk Factors" and elsewhere in our filings with the SEC. You should not place undue reliance on forward-looking statements because they speak only as of the date when made and may turn out to be inaccurate. We do not assume any obligation to publicly update or revise any forward-looking statements, whether as a result of new information, future events or otherwise. We may not actually achieve the plans, projections or expectations disclosed in forward-looking statements, and actual results, developments or events could differ materially from those disclosed in the forward-looking statements.

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For further information, please contact:

Media: Laura Forman Blueprint Life Science Group T: +1-415-375-3340 Investor: Jeff Mathiesen Chief Financial Officer Sunshine Heart, Inc. T: +1-952-345-4200

Source: Sunshine Heart