

**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): January 6, 2012

VICAL INCORPORATED

(Exact name of registrant as specified in charter)

Delaware
(State or other jurisdiction of
incorporation)

000-21088
(Commission
File Number)

93-0948554
(I.R.S. Employer
Identification No.)

10390 Pacific Center Court
San Diego, California
(Address of principal executive offices)

92121-4340
(Zip Code)

Registrant's telephone number, including area code: (858) 646-1100

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:

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

In this report, "Vical," "we," "us" and "our" refer to Vical Incorporated.

Item 1.01 Entry Into a Material Definitive Agreement.

On January 6, 2012, we entered into an underwriting agreement (the "Underwriting Agreement") with Citigroup Global Markets Inc., Credit Suisse Securities (USA) LLC and Leerink Swann LLC, as representatives of the several underwriters named therein (the "Underwriters"), relating to the issuance and sale of 13,333,334 shares of our common stock, par value \$0.01 per share. The price to the public in this offering is \$3.75 per share, and the Underwriters have agreed to purchase the shares from us pursuant to the Underwriting Agreement at a price of \$3.525 per share. The net proceeds to us from this offering are expected to be approximately \$50 million, after deducting underwriting discounts and commissions and other estimated offering expenses payable by us. The offering is expected to close on or about January 11, 2012, subject to customary closing conditions. In addition, under the terms of the Underwriting Agreement, we have granted the Underwriters an option, exercisable for 30 days, to purchase up to an additional 2,000,000 shares of common stock.

The Underwriting Agreement contains customary representations, warranties, covenants and agreements by the Company, indemnification obligations of the Company and the Underwriters, including for liabilities under the Securities Act of 1933, as amended, other obligations of the parties and termination provisions. The representations, warranties and covenants contained in the Underwriting Agreement were made only for purposes of such agreement and as of specific dates, were solely for the benefit of the parties to such agreement, and may be subject to limitations agreed upon by the contracting parties.

The offering is being made pursuant to our effective registration statements on Form S-3 (Registration Statement Nos. 333-159103 and 333-164476) previously filed with the Securities and Exchange Commission and prospectus supplements thereunder. The Underwriting Agreement is filed as Exhibit 1.1 to this report, and the description of the terms of the Underwriting Agreement is qualified in its entirety by reference to such exhibit. A copy of the opinion of Cooley LLP relating to the legality of the issuance and sale of the shares in the offering is attached as Exhibit 5.1 hereto.

On January 5, 2012, we issued a press release announcing that we had commenced the offering. On January 6, 2012, we issued a press release announcing that we had priced the offering. The press releases are attached as Exhibits 99.1 and 99.2 hereto, respectively.

Item 9.01 Financial Statements and Exhibits.

(d) Exhibits.

<u>Exhibit No.</u>	<u>Description</u>
1.1	Underwriting Agreement, dated January 6, 2012
5.1	Opinion of Cooley LLP
23.1	Consent of Cooley LLP (included in Exhibit 5.1)
99.1	Press Release dated January 5, 2012
99.2	Press Release dated January 6, 2012

SIGNATURES

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

Date: January 6, 2012

VICAL INCORPORATED

By: /s/ JILL M. BROADFOOT

Jill M. Broadfoot

Senior Vice President, Chief Financial Officer and Secretary

13,333,334 Shares
VICAL INCORPORATED
Common Stock
(\$0.01 par value per Share)
UNDERWRITING AGREEMENT

January 6, 2012

Citigroup Global Markets Inc.
Credit Suisse Securities (USA) LLC
Leerink Swann LLC
As Representatives
of the several Underwriters
named in Schedule A hereto

c/o Citigroup Global Markets Inc.
388 Greenwich Street
New York, NY 10013

c/o Credit Suisse Securities (USA) LLC
Eleven Madison Avenue
New York, NY 10010-3629

c/o Leerink Swann LLC
One Federal Street, 37th Floor
Boston, MA 02110

Ladies and Gentlemen:

Introductory. Vical Incorporated, a Delaware corporation (the "**Company**"), proposes to issue and sell to the several Underwriters named on Schedule A hereto (the "**Underwriters**") an aggregate of 13,333,334 shares of its common stock, par value \$0.01 per share (the "**Shares**"). The 13,333,334 Shares to be sold by the Company are collectively called the "**Firm Shares**." In addition, the Company has granted to the Underwriters an option to purchase up to an additional 2,000,000 Shares. The additional 2,000,000 Shares to be sold by the Company pursuant to such option are collectively called the "**Optional Shares**." The Firm Shares and, if and to the extent such option is exercised, the Optional Shares are collectively called the "**Offered Shares**." Citigroup Global Markets Inc. ("**Citigroup**"), Credit Suisse Securities (USA) LLC ("**Credit Suisse**") and Leerink Swann LLC ("**Leerink**") have agreed to act as representatives of the several Underwriters (in such capacity, the "**Representatives**") in connection with the offering and sale of the Offered Shares.

The Company has prepared and filed with the Securities and Exchange Commission (the "**Commission**") shelf registration statements on Form S-3 (File Nos. 333-164476 and 333-159103), and has prepared a base prospectus with respect to each shelf registration statement (each such base prospectus, hereinafter called a "**Base Prospectus**" and collectively the "**Base Prospectuses**") to be used in connection with the public offering and sale of the Offered Shares.

Each such registration statement, as amended, including the financial statements, exhibits and schedules thereto, in the form in which it was declared effective by the Commission under the Securities Act of 1933, as amended, and the rules and regulations promulgated thereunder (collectively, the “**Securities Act**”), including all documents incorporated or deemed to be incorporated by reference therein and any information deemed to be a part thereof at the time of such registration statement’s effectiveness pursuant to Rule 430B under the Securities Act or the Securities Exchange Act of 1934, as amended, and the rules and regulations promulgated thereunder (collectively, the “**Exchange Act**”), is hereinafter called a “**Registration Statement**” and collectively the “**Registration Statements**”. 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 to which it relates. Each preliminary prospectus supplement, dated January 5, 2012, describing any portion of the Offered Shares and the offering thereof, together with the related Base Prospectus, is called a “**Preliminary Prospectus**” and collectively the “**Preliminary Prospectuses**,” and each Preliminary Prospectus and any other preliminary prospectus supplement to a Base Prospectus that describes any portion of the Offered Shares and the offering thereof and is used prior to the filing of the Prospectuses (as defined below), together with such Base Prospectus, is called a “**preliminary prospectus**.” As used herein, the term “**Prospectus**” shall mean a final prospectus supplement to a Base Prospectus that describes any portion of the Offered Shares and the offering thereof (each a “**Final Prospectus Supplement**” and collectively the “**Final Prospectus Supplements**”), together with such Base Prospectus, in the form first used by the Underwriters to confirm sales of such Offered Shares or in the form first made available to the Underwriters by the Company to meet requests of purchasers pursuant to Rule 173 under the Securities Act. As used herein, “**Applicable Time**” is 8:30 a.m. (New York time) on January 6, 2012. As used herein, “**free writing prospectus**” has the meaning set forth in Rule 405 under the Securities Act, and “**Time of Sale Prospectus**” collectively means the preliminary prospectuses, each as amended or supplemented immediately prior to the Applicable Time, together with the free writing prospectuses, if any, identified in Schedule B hereto, and each “road show” (as defined in Rule 433 under the Securities Act), if any, related to the concurrent offerings of the Shares contemplated hereby that is a “written communication” (as defined in Rule 405 under the Securities Act). As used herein, the terms “Registration Statement,” “Rule 462(b) Registration Statement,” “Preliminary Prospectus,” “preliminary prospectus,” “Base Prospectus,” “Time of Sale Prospectus” and “Prospectus” shall include the documents incorporated and deemed to be incorporated by reference therein as of the date thereof. All references in this Agreement to financial statements and schedules and other information which are “contained,” “included” or “stated” in a Registration Statement, the Rule 462(b) Registration Statement, a Preliminary Prospectus, any preliminary prospectus, a Base Prospectus, the Time of Sale Prospectus or a Prospectus (and all other references of like import) shall be deemed to mean and include all such financial statements and schedules and other information which is or is deemed to be incorporated by reference in such Registration Statement or Prospectus, as the case may be; and all references in this Agreement to amendments or supplements to a Registration Statement, the Rule 462(b) Registration Statement, a Preliminary Prospectus, any other preliminary prospectus, a Base Prospectus, the Time of Sale Prospectus or a Prospectus, as the case may be, and all references in this Agreement to amendments or supplements to a Registration Statement, the Rule 462(b) Registration Statement, a Preliminary Prospectus, any preliminary prospectus, a Base Prospectus, the Time of Sale Prospectus or a Prospectus shall be deemed to mean and include the filing of any document under the Exchange Act which is or is deemed to be incorporated by reference in such Registration Statement, the Rule 462(b) Registration Statement, such Preliminary Prospectus, any other preliminary prospectus, such Base Prospectus, the Time of Sale Prospectus or such Prospectus, as the case

may be. All references in this Agreement to a Registration Statement, the 462(b) Registration Statement, a Preliminary Prospectus, any other preliminary prospectus, a Base Prospectus or a Prospectus, or any amendments or supplements to any of the foregoing, shall include any copy thereof filed with the Commission pursuant to its Electronic Data Gathering, Analysis and Retrieval System (“EDGAR”).

In the event that the Company has only one subsidiary, then all references herein to “subsidiaries” of the Company shall be deemed to refer to such single subsidiary, mutatis mutandis.

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

Section 1. Representations and Warranties of the Company. The Company hereby represents, warrants and covenants to each Underwriter, as of the date of this Agreement, as of the First Closing Date (as hereinafter defined) and as of each Option Closing Date (as hereafter defined), if any, and covenants with each Underwriter, as follows:

(a) Compliance with Registration Requirements. The Registration Statements and any Rule 462(b) Registration Statement have been declared effective by the Commission under the Securities Act. The Company has complied, to the Commission’s satisfaction, with all requests of the Commission for additional or supplemental information. No stop order suspending the effectiveness of any 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 Company’s knowledge, are contemplated or threatened by the Commission.

Each preliminary prospectus and Prospectus when filed complied or will comply in all material respects with the Securities Act and, if filed by electronic transmission pursuant to EDGAR (except as may be permitted by Regulation S-T under the Securities Act), was identical to the copy thereof delivered to the Underwriters for use in connection with the offer and sale of the Offered Shares. Each Registration Statement, any Rule 462(b) Registration Statement and any post-effective amendment thereto, at the time it became effective and at all subsequent times during the period beginning on the date hereof and ending on the later of the Option Closing Date or such date, as in the opinion of counsel for the Underwriters, the related Prospectus is no longer required by law to be delivered (assuming the absence of Rule 172 under the Securities Act), in connection with sales by the Underwriters or a dealer (the “**Prospectus Delivery Period**”), complied and will comply in all material respects with the Securities 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. As of the Applicable Time, the Time of Sale Prospectus (including any preliminary prospectus wrapper) did not, and at the time of each sale of the Offered Shares and at the First Closing Date (as defined in Section 2), the Time of Sale Prospectus, as then amended or supplemented by the Company, if applicable, will not, contain any untrue statement of a material fact or omit to state a material fact necessary to make the statements therein, in the light of the circumstances under which they were made, not misleading. Each Prospectus (including any related Prospectus wrapper), as amended or supplemented, as of its date and at all subsequent times during the applicable Prospectus Delivery Period, did not and will not contain any untrue statement of a material fact or omit to state a material fact necessary in order to make the statements therein, in the light of the circumstances under which they were made, not misleading. The representations and warranties set forth in the three immediately preceding sentences do not apply to statements in or omissions from a

Registration Statement, any Rule 462(b) Registration Statement, or any post-effective amendment thereto, or any preliminary prospectus, a Prospectus or the Time of Sale Prospectus, or any amendments or supplements thereto, made in reliance upon and in conformity with information relating to any Underwriter furnished to the Company in writing by the Representatives expressly for use therein, it being understood and agreed that the only such information furnished by the Representatives to the Company consists of the information described in Section 9(b) below. There are no contracts or other documents required to be described in the Time of Sale Prospectus or a Prospectus or to be filed as exhibits to a Registration Statement which have not been described or filed as required.

The Company is not an “ineligible issuer” in connection with the offering of the Offered Shares pursuant to Rules 164, 405 and 433 under the Securities Act. Any free writing prospectus that the Company is required to file pursuant to Rule 433(d) under the Securities Act has been, or will be, filed with the Commission in accordance with the requirements of the Securities Act. Each free writing prospectus that the Company has filed, or is required to file, pursuant to Rule 433(d) under the Securities Act or that was prepared by or on behalf of or used or referred to by the Company complies or will comply in all material respects with the requirements of Rule 433 under the Securities Act including timely filing with the Commission or retention where required and legending, and each such free writing prospectus, as of its issue date and at all subsequent times through the completion of the public offer and sale of the Offered Shares did not, does not and will not include any information that conflicted, conflicts with or will conflict with the information contained in any Registration Statement, any Prospectus or any preliminary prospectus, including any document incorporated by reference therein. Except for the free writing prospectuses, if any, identified in Schedule B hereto, and electronic road shows, if any, furnished to you before first use, the Company has not prepared, used or referred to, and will not, without your prior consent, prepare, use or refer to, any free writing prospectus.

(b) Offering Materials Furnished to Underwriters . The Company has delivered to the Representatives two signed copies of each Registration Statement, any amendments thereto and any Rule 462(b) Registration Statement (including exhibits thereto) and of each consent and certificate of experts filed as a part thereof.

(c) Distribution of Offering Material By the Company. The Company has not distributed and will not distribute, prior to the later of (i) the expiration or termination of the option granted to the several Underwriters in Section 2 and (ii) the completion of the Underwriters’ distribution of the Offered Shares, any offering material in connection with the offering and sale of the Offered Shares other than a preliminary prospectus, the Time of Sale Prospectus, the Prospectuses, any free writing prospectus reviewed and consented to by the Representatives, or the Registration Statements.

(d) The Underwriting Agreement. This Agreement has been duly authorized, executed and delivered by, and is a valid and binding agreement of, the Company, enforceable against the Company in accordance with its terms, except as rights to indemnification hereunder may be limited by applicable law and except as the enforcement hereof may be limited by bankruptcy, insolvency, reorganization, moratorium or other similar laws relating to or affecting the rights and remedies of creditors or by general equitable principles.

(e) Authorization of the Offered Shares. The Offered Shares have been duly authorized for issuance and sale pursuant to this Agreement and, when issued and delivered

by the Company pursuant to this Agreement, will be validly issued, fully paid and nonassessable, and the issuance and sale of the Offered Shares is not subject to any preemptive rights, rights of first refusal or other similar rights to subscribe for or purchase the Offered Shares.

(f) *No Applicable Registration or Other Similar Rights.* There are no persons with registration or other similar rights to have any equity or debt securities registered for sale under a Registration Statement or included in the offering contemplated by this Agreement, except for such rights as have been duly waived.

(g) *No Material Adverse Change.* Except as otherwise disclosed in the Time of Sale Prospectus, subsequent to the respective dates as of which information is given in the Time of Sale Prospectus: (i) there has been no material adverse change, or any development that could reasonably be expected to result in a material adverse change, in the condition, financial or otherwise, or in the earnings, business, operations or prospects, whether or not arising from transactions in the ordinary course of business, of the Company and its subsidiaries, considered as one entity (any such change is called a “**Material Adverse Change**”); (ii) the Company and its subsidiaries, considered as one entity, have not incurred any material liability or obligation, indirect, direct or contingent, not in the ordinary course of business nor entered into any material transaction or agreement not in the ordinary course of business; and (iii) there has been no dividend or distribution of any kind declared, paid or made by the Company or, except for dividends paid to the Company or other subsidiaries, any of its subsidiaries on any class of capital stock or repurchase or redemption by the Company or any of its subsidiaries of any class of capital stock.

(h) *Independent Accountants.* Ernst & Young LLP, who have expressed their opinion with respect to the financial statements (which term as used in this Agreement includes the related notes thereto) and supporting schedules filed with the Commission as a part of each Registration Statement and incorporated by reference in each Preliminary Prospectus, each Prospectus and the Time of Sale Prospectus (each, an “**Applicable Prospectus**” and collectively, the “**Applicable Prospectuses**”), are (i) independent public or certified public accountants as required by the Securities Act and the Exchange Act, (ii) in compliance with the applicable requirements relating to the qualification of accountants under Rule 2-01 of Regulation S-X and (iii) a registered public accounting firm as defined by the Public Company Accounting Oversight Board (the “**PCAOB**”) whose registration has not been suspended or revoked and, to the Company’s knowledge, who has not requested such registration to be withdrawn.

(i) *Preparation of the Financial Statements.* The financial statements filed with the Commission as a part of each Registration Statement and included in each Preliminary Prospectus, the Time of Sale Prospectus and each Prospectus present fairly the consolidated financial position of the Company and its subsidiaries as of and at the dates indicated and the results of their operations and cash flows for the periods specified. The supporting schedules included in each Registration Statement present fairly the information required to be stated therein. Such financial statements and supporting schedules have been prepared in conformity with generally accepted accounting principles as applied in the United States applied on a consistent basis throughout the periods involved, except as may be expressly stated in the related notes thereto. No other financial statements or supporting schedules are required to be included in a Registration Statement or any Applicable Prospectus. The financial data set forth or incorporated by reference in each Applicable Prospectus fairly present the information set forth therein on a basis consistent with that of the audited financial

statements contained in each Registration Statement and each Applicable Prospectus. To the Company's knowledge, no person who has been suspended or barred from being associated with a registered public accounting firm, or who has failed to comply with any sanction pursuant to Rule 5300 promulgated by the PCAOB, has participated in or otherwise aided the preparation of, or audited, the financial statements, supporting schedules or other financial data filed with the Commission as a part of a Registration Statement and included in any Applicable Prospectus.

(j) *Company's Accounting System.* The Company and each of its subsidiaries make and keep accurate books and records and maintain a system of internal accounting controls sufficient to provide reasonable assurance that (i) transactions are executed in accordance with management's general or specific authorization; (ii) transactions are recorded as necessary to permit preparation of financial statements in conformity with generally accepted accounting principles as applied 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. The Company is not aware of any material weakness in the Company's internal control over financial reporting (whether or not remediated) and since December 31, 2010, there has been no change in the Company's internal control over financial reporting that has materially affected, or is reasonably likely to materially affect, the Company's internal control over financial reporting.

(k) *Incorporation and Good Standing of the Company and its Subsidiaries.* Each of the Company and its subsidiaries has been duly incorporated or organized, as the case may be, and is validly existing as a corporation, partnership or limited liability company, as applicable, in good standing under the laws of the jurisdiction of its incorporation or organization and has the power and authority (corporate or other) to own, lease and operate its properties and to conduct its business as described in each Applicable Prospectus and, in the case of the Company, to enter into and perform its obligations under this Agreement, except where the failure to be in good standing would not reasonably be expected to result in a Material Adverse Change. Each of the Company and each subsidiary is duly qualified as a foreign corporation, partnership or limited liability company, as applicable, to transact business and is in good standing in the State of California and each other jurisdiction in which such qualification is required, whether by reason of the ownership or leasing of property or the conduct of business, except where the failure to be so qualified or in good standing would not reasonably be expected to result in a Material Adverse Change. All of the issued and outstanding capital stock or other equity or ownership interests of each subsidiary have been duly authorized and validly issued, are fully paid and nonassessable and are owned by the Company, directly or through subsidiaries, free and clear of any security interest, mortgage, pledge, lien, encumbrance or adverse claim. The Company does not own or control, directly or indirectly, any corporation, association or other entity other than (i) the subsidiaries listed in Exhibit 21 to the Company's Annual Report on Form 10-K for the fiscal year ended December 31, 2010 and (ii) such other entities omitted from Exhibit 21 which, when such omitted entities are considered in the aggregate as a single subsidiary, would not constitute a "significant subsidiary" within the meaning of Rule 1-02(w) of Regulation S-X.

(l) *Capitalization and Other Capital Stock Matters.* The authorized, issued and outstanding capital stock of the Company is as set forth in each Applicable Prospectus (other than for subsequent issuances, if any, pursuant to employee benefit plans described in the Time of Sale Prospectus or upon the exercise of outstanding options or warrants described in

each Applicable Prospectus). The Shares (including the Offered Shares) conform in all material respects to the description thereof contained in the Time of Sale Prospectus. All of the issued and outstanding Shares have been duly authorized and validly issued, are fully paid and nonassessable and have been issued in compliance with federal and state securities laws. None of the outstanding Shares was issued in violation of any preemptive rights, rights of first refusal or other similar rights to subscribe for or purchase securities of the Company. There are no authorized or outstanding options, warrants, preemptive rights, rights of first refusal or other rights to purchase, or equity or debt securities convertible into or exchangeable or exercisable for, any capital stock of the Company or any of its subsidiaries other than those accurately described in each Applicable Prospectus. The description of the Company's stock option, stock bonus and other stock plans or arrangements, and the options or other rights granted thereunder, set forth in each Applicable Prospectus accurately and fairly presents the information required to be shown with respect to such plans, arrangements, options and rights. All grants of options to acquire Shares (each, a "**Company Stock Option**") were validly issued and approved by the Board of Directors of the Company, a committee thereof or an individual with authority duly delegated by the Board of Directors of the Company or a committee thereof. Grants of Company Stock Options were (i) made in material compliance with all applicable laws and (ii) as a whole, made in material compliance with the terms of the plans under which such Company Stock Options were issued. There is no and has been no policy or practice of the Company to coordinate the grant of Company Stock Options with the release or other public announcement of material information regarding the Company or its results of operations or prospects. Except as described in the Time of Sale Prospectus and each Prospectus, the Company has not sold or issued any Shares during the six-month period preceding the date of any Prospectus, including any sales pursuant to Rule 144A under, or Regulations D or S of, the Securities Act other than Shares issued pursuant to employee benefit plans, qualified stock options plans or other employee compensation plans or pursuant to outstanding options, rights or warrants.

(m) Stock Exchange Listing. The Shares are registered pursuant to Section 12(b) of the Exchange Act and are listed on the Nasdaq Global Market, and the Company has taken no action designed to, or likely to have the effect of, terminating the registration of the Shares under the Exchange Act or delisting the Shares from the Nasdaq Global Market, nor has the Company received any notification that the Commission or the Nasdaq Global Market is contemplating terminating such registration or listing.

(n) Non-Contravention of Existing Instruments; No Further Authorizations or Approvals Required. Neither the Company nor any of its subsidiaries is in violation of its charter or by-laws, partnership agreement or operating agreement or similar organizational document, as applicable, or is in default (or, with the giving of notice or lapse of time, would be in default) ("**Default**") under any indenture, mortgage, loan or credit agreement, note, contract, franchise, lease or other instrument to which the Company or any of its subsidiaries is a party or by which it or any of them may be bound (including, without limitation, any credit agreement, indenture, pledge agreement, security agreement or other instrument or agreement evidencing, guaranteeing, securing or relating to indebtedness of the Company or any of its subsidiaries), or to which any of the property or assets of the Company or any of its subsidiaries is subject (each, an "**Existing Instrument**"), except for such Defaults as would not reasonably be expected to, individually or in the aggregate, result in a Material Adverse Change. The Company's execution, delivery and performance of this Agreement, consummation of the transactions contemplated hereby and by each Applicable Prospectus and the issuance and sale of the Offered Shares (i) have been duly authorized by all necessary corporate action and will not result in any violation of the provisions of the charter or

by-laws, partnership agreement or operating agreement or similar organizational document of the Company or any subsidiary, as applicable, (ii) will not conflict with or constitute a breach of, or Default under, or result in the creation or imposition of any lien, charge or encumbrance upon any property or assets of the Company or any of its subsidiaries pursuant to, or require the consent of any other party to, any Existing Instrument, except for such breaches, Defaults or results, or failure to obtain such consent, as would not reasonably be expected, individually or in the aggregate, to result in a Material Adverse Change and (iii) will not result in any violation of any law, administrative regulation or administrative or court decree applicable to the Company or any subsidiary, except for such violations as would not reasonably be expected, individually or in the aggregate, to result in a Material Adverse Change. No consent, approval, authorization or other order of, or registration or filing with, any court or other governmental or regulatory authority or agency, is required for the Company's execution, delivery and performance of this Agreement and consummation of the transactions contemplated hereby and by each Applicable Prospectus, except such as have been obtained or made or will be made by the Company under the Securities Act, or that may be required under applicable state securities or blue sky laws and from the Financial Industry Regulatory Authority ("FINRA").

(o) No Material Actions or Proceedings. There are no legal or governmental actions, suits or proceedings pending or, to the best of the Company's knowledge, threatened (i) against or affecting the Company or any of its subsidiaries, (ii) which have as the subject thereof any officer or director of, or property owned or leased by, the Company or any of its subsidiaries or (iii) relating to environmental or discrimination matters, where in any such case (A) to the Company's knowledge, there is a substantial likelihood that such action, suit or proceeding will be determined adversely to the Company, such subsidiary or such officer or director, (B) any such action, suit or proceeding, if so determined adversely, would reasonably be expected to result in a Material Adverse Change or adversely affect the consummation of the transactions contemplated by this Agreement or (C) any such action, suit or proceeding is or would be material in the context of the sale of Shares. No material labor dispute with the employees of the Company or any of its subsidiaries, or to the Company's knowledge, with the employees of any principal supplier, manufacturer, customer or contractor of the Company, exists or, to the Company's knowledge, is threatened or imminent.

(p) Intellectual Property Rights. The Company and its subsidiaries own, possess or can acquire on reasonable terms sufficient trademarks, trade names, patent rights, copyrights, domain names, licenses, approvals, trade secrets and other similar rights (collectively, "**Intellectual Property Rights**") reasonably necessary to conduct their businesses as now conducted; except to the extent failure to own, possess or acquire such Intellectual Property Rights would not result in a Material Adverse Change. Neither the Company nor any of its subsidiaries has received, or has any reason to believe that it will receive, any notice of infringement or conflict with asserted Intellectual Property Rights of others. Except as would not be reasonably likely to result, individually or in the aggregate, in a Material Adverse Change (A) to the Company's knowledge, there is no infringement, misappropriation or violation by third parties of any of the Intellectual Property Rights owned by the Company; (B) there is no pending or, to the Company's knowledge, threatened action, suit, proceeding or claim by others challenging the rights of the Company and its subsidiaries in or to any such Intellectual Property Rights, and the Company is unaware of any facts which would form a reasonable basis for any such claim, that would, individually or in the aggregate, together with any other claims in this subsection (p) result in a Material Adverse Change; (C) the Intellectual Property Rights owned by the Company and its subsidiaries and, to the

Company's knowledge, the Intellectual Property Rights licensed to the Company and its subsidiaries have not been adjudged by a court of competent jurisdiction invalid or unenforceable, in whole or in part, and except as otherwise disclosed in the Time of Sale Prospectus, there is no pending or, to the Company's knowledge, threatened action, suit, proceeding or claim by others challenging the validity or scope of any such Intellectual Property Rights, and the Company is unaware of any facts which would form a reasonable basis for any such claim that would, individually or in the aggregate, together with any other claims in this subsection (p) result in a Material Adverse Change; (D) there is no pending or, to the Company's knowledge, threatened action, suit, proceeding or claim by others that the Company or its subsidiaries infringe, misappropriate or otherwise violate any Intellectual Property Rights or other proprietary rights of others, the Company and its subsidiaries have not received any written notice of such claim and the Company is unaware of any other facts which would form a reasonable basis for any such claim that would reasonably be expected, individually or in the aggregate, together with any other claims in this subsection (p) to result in a Material Adverse Change; and (E) to the Company's knowledge, no employee of the Company or a subsidiary of the Company is in or has ever been in violation in any material respect 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 a subsidiary of the Company, or actions undertaken by the employee while employed with the Company or a subsidiary of the Company and would reasonably be expected to result, individually or in the aggregate, in a Material Adverse Change. To the Company's knowledge, all material technical information developed by and belonging to the Company and its subsidiaries for which they have not sought, and do not intend to seek, to patent or otherwise protect pursuant to applicable intellectual property laws has been kept confidential or disclosed only under obligations of confidentiality. The Company is not a party to or bound by any options, licenses or agreements with respect to the Intellectual Property Rights of any other person or entity that are required to be set forth in any Prospectus and are not described therein. The Time of Sale Prospectus contains in all material respects the same description of the matters set forth in the preceding sentence contained in any Prospectus. None of the technology employed by the Company or any of its subsidiaries has been obtained or is being used by the Company or any of its subsidiaries in violation of any contractual obligation binding on the Company or any of its subsidiaries or, to the Company's knowledge, any of its or its subsidiaries' officers, directors or employees or otherwise in violation of the rights of any persons, except in each case for such violations that would not reasonably be expected to result in a Material Adverse Change.

(q) *All Necessary Permits, etc.* The Company and each subsidiary possess such valid and current certificates, authorizations or permits issued by the appropriate state, federal or foreign regulatory agencies or bodies necessary to conduct their respective businesses, and neither the Company nor any subsidiary has received, or has any reason to believe that it will receive, any notice of proceedings relating to the revocation or modification of, or non-compliance with, any such certificate, authorization or permit which, singly or in the aggregate, if the subject of an unfavorable decision, ruling or finding, would reasonably be expected to result in a Material Adverse Change.

(r) *Title to Properties.* The Company and each of its subsidiaries has good and marketable title to all of the real and personal property and other assets reflected as owned in the financial statements referred to in Section 1(i) above (or elsewhere in any Applicable Prospectus), in each case free and clear of any security interests, mortgages, liens,

encumbrances, equities, adverse claims and other defects, except such as do not materially and adversely affect the value of such property and do not materially interfere with the use made or proposed to be made of such property by the Company or such subsidiary. To the Company's knowledge, the real property, improvements, equipment and personal property held under lease by the Company or any subsidiary are held under valid and enforceable leases, with such exceptions as are not material and do not materially interfere with the use made or proposed to be made of such real property, improvements, equipment or personal property by the Company or such subsidiary.

(s) *Tax Law Compliance.* The Company and its consolidated subsidiaries have timely filed all federal, state and foreign income and franchise tax returns required to be filed or have obtained extensions thereof and have timely paid all taxes (including, without limitation, any estimated taxes) required to be paid by any of them and, if due and payable, any related or similar assessment, fine or penalty levied against any of them except as may be being contested in good faith and by appropriate proceedings. The Company has made adequate charges, accruals and reserves in the applicable financial statements referred to in Section 1(i) above in respect of all federal, state and foreign income and franchise taxes for all periods as to which the tax liability of the Company or any of its consolidated subsidiaries has not been finally determined.

(t) *Company Not an "Investment Company."* The Company is not and, after giving effect to the offering and sale of the Offered Shares and the application of the proceeds therefrom as described under "Use of Proceeds" in each Applicable Prospectus, will not be required to register as an "investment company," as such term is defined in the Investment Company Act of 1940, as amended, and will not be an entity "controlled" by an "investment company" within the meaning of such Act.

(u) *Insurance.* Each of the Company and its subsidiaries are insured by recognized, financially sound and reputable institutions with policies in such amounts and with such deductibles and covering such risks as are generally deemed adequate and customary for their businesses including, but not limited to, policies covering real and personal property owned or leased by the Company and its subsidiaries against theft, damage, destruction and acts of vandalism and policies covering the Company and its subsidiaries for product liability claims and clinical trial liability claims. The Company has no reason to believe that it or any subsidiary will not be able (i) to renew its existing insurance coverage as and when such policies expire or (ii) to obtain comparable coverage from similar institutions as may be necessary or appropriate to conduct its business as now conducted and at a cost that would not result in a Material Adverse Change. During the past three years, the Company has not been denied any insurance coverage material to the Company which it has sought or for which it has applied.

(v) *No Price Stabilization or Manipulation; Compliance with Regulation M.* The Company has not taken, directly or indirectly, any action designed to or that might be reasonably expected to cause or result in stabilization or manipulation of the price of the Shares or any other "reference security" (as defined in Rule 100 of Regulation M under the 1934 Act ("**Regulation M**")) whether to facilitate the sale or resale of the Offered Shares or otherwise, and has taken no action which would directly or indirectly violate Regulation M. The Company acknowledges that the Underwriters may engage in passive market making transactions in the Offered Shares on the Nasdaq Global Market in accordance with Regulation M.

(w) *Related Party Transactions.* There are no business relationships or related-party transactions involving the Company or any of its subsidiaries or any other person required to be described in each Applicable Prospectus which have not been described as required. The Time of Sale Prospectus contains in all material respects the same description of the matters set forth in the preceding sentence contained in each Prospectus.

(x) *S-3 Eligibility.* At the time each Registration Statement was originally declared effective and at the time the Company's Annual Report on Form 10-K for the year ended December 31, 2010 (the "**Annual Report**") was filed with the Commission, the Company met the then applicable requirements for use of Form S-3 under the Securities Act. The Company is eligible to offer and sell securities under the Registration Statements (including the offer and sale of the Offered Shares) without reliance on General Instruction I.B.6 of Form S-3.

(y) *Exchange Act Compliance.* The documents incorporated or deemed to be incorporated by reference in any Prospectus, at the time they were or hereafter are filed with the Commission, complied and will comply in all material respects with the requirements of the Exchange Act, and, when read together with the other information in such Prospectus, at the time the related Registration Statement and any amendments thereto become effective and at the First Closing Date and the applicable Option Closing Date, as the case may be, will 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.

(z) *FINRA Matters.* All of the information provided to the Underwriters or to counsel for the Underwriters by the Company, its officers and directors and the holders of any securities (debt or equity) or options to acquire any securities of the Company in connection with letters, filings or other supplemental information provided to FINRA pursuant to FINRA Rule 5110 or the National Association of Securities Dealers Inc. (the "**NASD**") Conduct Rule 2710 or 2720 is true, complete and correct. Neither the Company nor, to the knowledge of the Company, any of its affiliates (within the meaning of the NASD Conduct Rule 2720(f)(1)) directly or indirectly controls, is controlled by, or is under common control with, or is an associated person (within the meaning of Article I Section 1(ee) of the By-laws of FINRA) of, any member of FINRA. To the Company's knowledge, there are no affiliations with FINRA among the Company's officers or directors.

(aa) *Parties to Lock-Up Agreements.* Each of the Company's directors and executive officers listed in Exhibit A has executed and delivered to Citigroup, Credit Suisse and Leerink a lock-up agreement in the form of Exhibit B hereto. Exhibit A hereto contains a true, complete and correct list of all directors and officers of the Company. If any additional persons shall become directors or executive officers of the Company prior to the end of the Company Lock-up Period (as defined below), the Company shall cause each such person, prior to or contemporaneously with their appointment or election as a director or executive officer of the Company, to execute and deliver to Citigroup, Credit Suisse and Leerink an agreement in the form attached hereto as Exhibit B.

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

(cc) *No Unlawful Contributions or Other Payments.* Neither the Company nor any of its subsidiaries nor, to the Company's knowledge, any employee or agent of the Company or any subsidiary, has made any contribution or other payment to any official of, or candidate for, any federal, state or foreign office in violation of any law or of the character required to be disclosed in each Registration Statement and each Applicable Prospectus.

(dd) *Disclosure Controls and Procedures; Deficiencies in or Changes to Internal Control Over Financial Reporting* The Company has established and maintains disclosure controls and procedures (as defined in Exchange Act Rules 13a-15(e) and 15d-15(e)), which (i) are designed to ensure that material information relating to the Company, including its consolidated subsidiaries, is made known to the Company's principal executive officer and its principal financial officer by others within those entities, particularly during the periods in which the periodic reports required under the Exchange Act are being prepared; (ii) have been evaluated by management of the Company for effectiveness as of the end of the Company's most recent fiscal quarter; and (iii) the Company's principal executive officer and principal financial officer concluded to be effective at the reasonable assurance level. Based on the most recent evaluation of its disclosure controls and procedures, the Company is not aware of (i) any significant deficiencies or material weaknesses in the design or operation of internal control over financial reporting which are reasonably likely to adversely affect the Company's ability to record, process, summarize and report financial information or (ii) any fraud, whether or not material, that involves management or other employees who have a significant role in the Company's internal control over financial reporting. The Company is not aware of any change in its internal control over financial reporting that has occurred during its most recent fiscal quarter that has materially affected, or is reasonably likely to materially affect, the Company's internal control over financial reporting.

(ee) *Compliance with Environmental Laws.* Except as described in each Applicable Prospectus and except as would not reasonably be expected to, singly or in the aggregate, result in a Material Adverse Change, (i) neither the Company nor any of its subsidiaries is in violation of any federal, state, local or foreign statute, law, rule, regulation, ordinance, code, policy or rule of common law or any judicial or administrative interpretation thereof, including any judicial or administrative order, consent, decree or judgment, relating to pollution or protection of human health, the environment (including, without limitation, ambient air, surface water, groundwater, land surface or subsurface strata) or wildlife, including, without limitation, laws and regulations relating to the release or threatened release of chemicals, pollutants, contaminants, wastes, toxic substances, hazardous substances, petroleum or petroleum products (collectively, "**Hazardous Materials**") or to the manufacture, processing, distribution, use, treatment, storage, disposal, transport or handling of Hazardous Materials (collectively, "**Environmental Laws**"), (ii) the Company and its subsidiaries have all permits, authorizations and approvals required under any applicable Environmental Laws and are each in compliance with their requirements, (iii) there are no pending or threatened administrative, regulatory or judicial actions, suits, demands, demand letters, claims, liens, notices of noncompliance or violation, investigation or proceedings relating to any Environmental Law against the Company or any of its subsidiaries and (iv) there are no events or circumstances of which the Company is aware that might reasonably be expected to form the basis of an order for clean-up or remediation, or an action, suit or proceeding by any private party or governmental body or agency, against or affecting the Company or any of its subsidiaries relating to Hazardous Materials or any Environmental Laws.

(ff) *ERISA Compliance.* The Company and its subsidiaries and any “**employee benefit plan**” (as defined under the Employee Retirement Income Security Act of 1974, as amended, and the regulations and published interpretations thereunder (collectively, “**ERISA**”)) established or maintained by the Company, its subsidiaries or their “**ERISA Affiliates**” (as defined below) are in compliance in all material respects with ERISA. “**ERISA Affiliate**” means, with respect to the Company or a subsidiary, any member of any group of organizations described in Sections 414(b),(c),(m) or (o) of the Internal Revenue Code of 1986, as amended, and the regulations and published interpretations thereunder (the “**Code**”) of which the Company or such subsidiary is a member. No “**reportable event**” (as defined under ERISA) has occurred or is reasonably expected to occur with respect to any “**employee benefit plan**” established or maintained by the Company, its subsidiaries or any of their ERISA Affiliates. No “**employee benefit plan**” established or maintained by the Company, its subsidiaries or any of their ERISA Affiliates, if such “**employee benefit plan**” were terminated, would have any “**amount of unfunded benefit liabilities**” (as defined under ERISA). Neither the Company, its subsidiaries nor any of their ERISA Affiliates has incurred or reasonably expects to incur any liability under (i) Title IV of ERISA with respect to termination of, or withdrawal from, any “**employee benefit plan**” or (ii) Sections 412, 4971, 4975 or 4980B of the Code. Each “**employee benefit plan**” established or maintained by the Company, its subsidiaries or any of their ERISA Affiliates that is intended to be qualified under Section 401(a) of the Code is so qualified and nothing has occurred, whether by action or failure to act, which would reasonably be expected to result in the loss of such qualification.

(gg) *Brokers.* Except as contemplated by this Agreement, there is no broker, finder or other party that is entitled to receive from the Company any brokerage or finder’s fee or other fee or commission as a result of any transactions contemplated by this Agreement.

(hh) *No Outstanding Loans or Other Extensions of Credit.* Since the adoption of Section 13(k) of the Exchange Act, neither the Company nor any of its subsidiaries has extended or maintained credit, arranged for the extension of credit, or renewed any extension of credit, in the form of a personal loan, to or for any director or executive officer (or equivalent thereof) of the Company and/or such subsidiary except for such extensions of credit as are expressly permitted by Section 13(k) of the Exchange Act.

(ii) *Compliance with Laws.* The Company has not been advised, and has no reason to believe, that it and each of its subsidiaries are not conducting business in compliance with all applicable laws, rules and regulations of the jurisdictions in which it is conducting business, except where failure to be so in compliance would not result in a Material Adverse Change. The Company has not received any FDA Form 483, notice of adverse finding, warning letter, untitled letter or other correspondence or notice from the U.S. Food and Drug Administration or any other governmental authority alleging or asserting noncompliance with any laws applicable to the Company.

(jj) *Clinical Trials.* The studies, tests and preclinical and clinical trials conducted by or on behalf of the Company and its subsidiaries were and, if still pending, are being conducted in compliance with experimental protocols, procedures and controls pursuant to accepted professional scientific standards and all applicable laws and authorizations, including, without limitation, the Federal Food, Drug and Cosmetic Act and the rules and regulations promulgated thereunder, except where the failure to be in compliance has not resulted and would not reasonably be expected to result in a Material Adverse Change; the descriptions of the results of such studies, tests and trials contained in any Applicable

Prospectus are accurate and complete in all material respects and fairly present the data derived from such studies, tests and trials; except to the extent disclosed in any Applicable Prospectus, the Company is not aware of any studies, tests or trials, the results of which the Company believes reasonably call into question the study, test, or trial results described or referred to in any Applicable Prospectus when viewed in the context in which such results are described and the clinical state of development; and the Company and its subsidiaries have not received any notices or correspondence from any applicable governmental authority requiring the termination, suspension or material modification of any studies, tests or preclinical or clinical trials conducted by or on behalf of the Company or its subsidiaries.

(kk) Dividend Restrictions. No subsidiary of the Company is prohibited or restricted, directly or indirectly, from paying dividends to the Company, or from making any other distribution with respect to such subsidiary's equity securities or from repaying to the Company or any other subsidiary of the Company any amounts that may from time to time become due under any loans or advances to such subsidiary from the Company or from transferring any property or assets to the Company or to any other subsidiary.

(ll) Foreign Corrupt Practices Act. Neither the Company nor any of its subsidiaries nor, to the Company's knowledge, any director, officer, agent, employee, affiliate or other person acting on behalf of the Company or any of its subsidiaries is aware of or has taken any action, directly or indirectly, that has resulted or would result in a violation of the Foreign Corrupt Practices Act of 1977, as amended, and the rules and regulations thereunder (the "**FCPA**"), including, without limitation, making use of the mails or any means or instrumentality of interstate commerce corruptly in furtherance of an offer, payment, promise to pay or authorization of the payment of any money, or other property, gift, promise to give, or authorization of the giving of anything of value to any "foreign official" (as such term is defined in the FCPA) or any foreign political party or official thereof or any candidate for foreign political office, in contravention of the FCPA; and the Company and its subsidiaries and, to the Company's knowledge, the Company's affiliates have conducted their respective businesses in compliance with the FCPA and have instituted and maintain policies and procedures designed to ensure, and which are reasonably expected to continue to ensure, continued compliance therewith.

(mm) Money Laundering Laws. The operations of the Company and its subsidiaries are, and have been conducted at all times, in compliance with applicable financial recordkeeping and reporting requirements of the Currency and Foreign Transactions Reporting Act of 1970, as amended, the money laundering statutes of all applicable jurisdictions, the rules and regulations thereunder and any related or similar applicable rules, regulations or guidelines, issued, administered or enforced by any governmental agency (collectively, the "**Money Laundering Laws**") and no action, suit or proceeding by or before any court or governmental agency, authority or body or any arbitrator involving the Company or any of its subsidiaries with respect to the Money Laundering Laws is pending or, to the Company's best knowledge, threatened.

(nn) OFAC. Neither the Company nor any of its subsidiaries nor, to the Company's knowledge, any director, officer, agent, employee, affiliate or person acting on behalf of the Company or any of its subsidiaries is currently subject to any U.S. sanctions administered by the Office of Foreign Assets Control of the U.S. Treasury Department ("**OFAC**"); and the Company will not directly or indirectly use the proceeds of this offering, or lend, contribute or otherwise make available such proceeds to any subsidiary, joint venture partner or other

person or entity, for the purpose of financing the activities of any person currently subject to any U.S. sanctions administered by OFAC.

(oo) *FINRA Filing Exemption.* To enable the Underwriters to rely on FINRA Rule 5110(b)(7)(C)(i), (i) the Company was subject to the requirements of Section 12 or 15(d) of the Exchange Act and filed all the material required to be filed pursuant to Sections 13, 14 or 15(d) for a period of at least thirty-six calendar months immediately preceding the date of this Agreement; (ii) the Company filed in a timely manner all reports required to be filed pursuant to Section 13, 14 or 15(d) of the Exchange Act during the twelve calendar months and any portion of a month immediately preceding the date of this Agreement; (iii) the last reported sale price of the Company's common stock on the Nasdaq Global Market on January 3, 2012 was \$4.49; (iv) as of such date, there were greater than 50,000,000 shares of the Company's common stock outstanding and held by non-affiliates of the Company; and (v) the Company has annual trading volume of 3 million shares or more.

(pp) *Sarbanes-Oxley Act Compliance.* There is and has been no failure on the part of the Company and any of the Company's directors or officers, in their capacities as such, to comply with any provision of the Sarbanes-Oxley Act of 2002 and the rules and regulations promulgated in connection therewith, including Section 402 relating to loans and Sections 302 and 906 relating to certifications.

Any certificate contemplated hereby and signed by any officer of the Company or any of its subsidiaries and delivered to the Representatives 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.

The Company acknowledges that the Underwriters and, for purposes of the opinions to be delivered pursuant to Section 6 hereof, counsel to the Company and counsel to the Underwriters, will rely upon the accuracy and truthfulness of the foregoing representations and hereby consents to such reliance.

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

(a) *The Firm Shares.* Upon the terms herein set forth, the Company agrees to issue and sell to the several Underwriters an aggregate of 13,333,334 Firm Shares. On the basis of the representations, warranties and agreements herein contained, and upon the terms but subject to the conditions herein set forth, the Underwriters agree, severally and not jointly, to purchase from the Company the respective number of Firm Shares set forth opposite their names on Schedule A. The purchase price per Firm Share to be paid by the several Underwriters to the Company shall be \$3.525 per share.

(b) *The First Closing Date.* Delivery of certificates for the Firm Shares to be purchased by the Underwriters and payment therefor shall be made at the offices of Citigroup Global Markets Inc., 388 Greenwich Street, New York, NY 10013 (or such other place as may be agreed to by the Company and the Representatives) at 9:00 a.m. New York time, on January 11, 2012, or such other time and date not later than 1:30 p.m. New York time, on January 24, 2012 as the Representatives shall designate by notice to the Company (the time and date of such closing are called the "**First Closing Date**").

(c) *The Optional Shares; Option Closing Date.* In addition, on the basis of the representations, warranties and agreements herein contained, and upon the terms but subject

to the conditions herein set forth, the Company hereby grants an option to the several Underwriters to purchase, severally and not jointly, up to an aggregate of 2,000,000 Optional Shares from the Company at the purchase price per share to be paid by the Underwriters for the Firm Shares less an amount per share equal to any dividends or distributions declared by the Company and payable on the Firm Shares but not payable on the Optional Shares. The Optional Shares shall be allocated in the same percentage as such Underwriters are purchasing the Firm Shares. The option granted hereunder may be exercised at any time and from time to time in whole or in part upon notice by the Representatives to the Company, which notice may be given at any time within 30 days from the date of this Agreement. Such notice shall set forth (i) the aggregate number of Optional Shares as to which the Underwriters are exercising the option, (ii) the names and denominations in which the certificates for the Optional Shares are to be registered and (iii) the time, date and place at which such certificates will be delivered (which time and date may be simultaneous with, but not earlier than, the First Closing Date; and in the event that such time and date are simultaneous with the First Closing Date, the term "**First Closing Date**" shall refer to the time and date of delivery of certificates for the Firm Shares and such Optional Shares). Any such time and date of delivery, if subsequent to the First Closing Date, is called an "**Option Closing Date**" and shall be determined by the Representatives and shall not be earlier than three nor later than five full business days after delivery of such notice of exercise. The Representatives may cancel the option at any time prior to its expiration by giving written notice of such cancellation to the Company.

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

(e) *Payment for the Offered Shares.* Payment for the Offered Shares shall be made at the First Closing Date (and, if applicable, at each Option Closing Date) by wire transfer of immediately available funds to the order of the Company.

It is understood that the Representatives have been authorized, for their own accounts and the accounts of the several Underwriters, to accept delivery of and receipt for, and make payment of the purchase price for, the Firm Shares and any Optional Shares the Underwriters have agreed to purchase. Each of Citigroup, Credit Suisse and Leerink, individually and not as the Representatives of the Underwriters, may (but shall not be obligated to) make payment for any Offered Shares to be purchased by any Underwriter whose funds shall not have been received by the Representatives by the First Closing Date or the applicable Option Closing Date, as the case may be, for the account of such Underwriter, but any such payment shall not relieve such Underwriter from any of its obligations under this Agreement.

(f) *Delivery of the Offered Shares.* The Company shall deliver, or cause to be delivered, to the Representatives for the accounts of the several Underwriters certificates for the Firm Shares at the First Closing Date, against the irrevocable release of a wire transfer of immediately available funds for the amount of the purchase price therefor. The Company shall also deliver, or cause to be delivered, to the Representatives for the accounts of the several Underwriters, certificates for the Optional Shares the Underwriters have agreed to purchase at the First Closing Date or the applicable Option Closing Date, as the case may be, against the irrevocable release of a wire transfer of immediately available funds for the amount of the purchase price therefor. If the Representatives so elect, delivery of the Offered

Shares may be made by credit to the accounts designated by the Representatives through The Depository Trust Company's full fast transfer or DWAC programs. If the Representatives so elect, the certificates for the Offered Shares shall be in definitive form and registered in such names and denominations as the Representatives shall have requested at least two full business days prior to the First Closing Date (or the applicable Option Closing Date, as the case may be) and shall be made available for inspection on the business day preceding the First Closing Date (or the applicable Option Closing Date, as the case may be) at a location in New York City as the Representatives may designate. Time shall be of the essence, and delivery at the time and place specified in this Agreement is a further condition to the obligations of the Underwriters.

Section 3. Additional Covenants of the Company. The Company further covenants and agrees with each Underwriter as follows:

(a) *Delivery of Registration Statement, Time of Sale Prospectus and Prospectus* The Company shall furnish to you, without charge, two signed copies of each Registration Statement, any amendments thereto and any Rule 462(b) Registration Statement (including exhibits thereto) and shall furnish to you in New York City, without charge, prior to 10:00 a.m. New York City time on the business day next succeeding the date of this Agreement and during the period mentioned in Section 3(e) or 3(f) below, as many copies of the Time of Sale Prospectus, each Prospectus and any supplements and amendments thereto or to the Registration Statements as you may reasonably request.

(b) *Representatives' Review of Proposed Amendments and Supplements.* During the Prospectus Delivery Period, prior to amending or supplementing a Registration Statement (including any registration statement filed under Rule 462(b) under the Securities Act), any preliminary prospectus, the Time of Sale Prospectus or a Prospectus (including any amendment or supplement through incorporation of any report filed under the Exchange Act), the Company: (i) shall furnish to the Representatives for review, a reasonable amount of time prior to the proposed time of filing or use thereof, a copy of each such proposed amendment or supplement, (ii) shall not file or use any such proposed amendment or supplement without the Representatives' consent, and (iii) shall file with the Commission within the applicable period specified in Rule 424(b) under the Securities Act, any prospectus required to be filed pursuant to such Rule.

(c) *Free Writing Prospectuses.* The Company shall furnish to the Representatives for review, a reasonable amount of time prior to the proposed time of filing or use thereof, a copy of each proposed free writing prospectus or any amendment or supplement thereto to be prepared by or on behalf of, used by, or referred to by the Company and the Company shall not file, use or refer to any proposed free writing prospectus or any amendment or supplement thereto without the Representatives' consent. The Company shall furnish to each Underwriter, without charge, as many copies of any free writing prospectus prepared by or on behalf of, or used by the Company, as such Underwriters may reasonably request. If during the Prospectus Delivery Period there occurred or occurs an event or development as a result of which any free writing prospectus prepared by or on behalf of, used by, or referred to by the Company conflicted or would conflict with the information contained in a Registration Statement or included or would include an untrue statement of a material fact or omitted or would omit to state a material fact necessary in order to make the statements therein, in the light of the circumstances prevailing at that subsequent time, not misleading, the Company shall promptly amend or supplement such free writing prospectus to eliminate or correct such conflict or so that the statements in such free writing prospectus as so amended or

supplemented will not include an untrue statement of a material fact or omit to state a material fact necessary in order to make the statements therein, in the light of the circumstances prevailing at such subsequent time, not misleading, as the case may be; provided, however, that prior to amending or supplementing any such free writing prospectus, the Company shall furnish to the Representatives for review, a reasonable amount of time prior to the proposed time of filing or use thereof, a copy of such proposed amended or supplemented free writing prospectus and the Company shall not file, use or refer to any such amended or supplemented free writing prospectus without the Representatives' consent.

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

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

(f) Securities Act Compliance. After the date of this Agreement, the Company shall promptly advise the Representatives in writing (i) of the receipt of any comments of, or requests for additional or supplemental information from, the Commission, (ii) of the time and date of any filing of any post-effective amendment to a Registration Statement, any Rule 462(b) Registration Statement or any amendment or supplement to any preliminary prospectus, the Time of Sale Prospectus, any free writing prospectus or a Prospectus, (iii) of the time and date that any post-effective amendment to a Registration Statement or any Rule 462(b) Registration Statement becomes effective and (iv) of the issuance by the Commission of any stop order suspending the effectiveness of a Registration Statement or any post-effective amendment thereto, any Rule 462(b) Registration Statement or any amendment or supplement to any Preliminary Prospectus, the Time of Sale Prospectus or a Prospectus or of any order preventing or suspending the use of any preliminary prospectus, the Time of Sale Prospectus, any free writing prospectus or a Prospectus, or of any proceedings to remove, suspend or terminate from listing or quotation the Shares from any securities exchange upon

which they are listed for trading or included or designated for quotation, or of the threatening or initiation of any proceedings for any of such purposes. If the Commission shall enter any such stop order at any time, the Company will use its 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 Rule 424(b) or Rule 433, as applicable, under the Securities Act and will use its reasonable efforts to confirm that any filings made by the Company under such Rule 424(b) or Rule 433 were received in a timely manner by the Commission.

(g) Amendments and Supplements to a Prospectus and Other Securities Act Matters If any event shall occur or condition exist as a result of which it is necessary to amend or supplement a Prospectus so that such Prospectus does not include an untrue statement of a material fact or omit to state a material fact necessary in order to make the statements therein, in the light of the circumstances when such Prospectus is delivered to a purchaser, not misleading, or if in the opinion of the Company, counsel for the Company, the Representatives or counsel for the Underwriters, it is otherwise necessary to amend or supplement a Prospectus to comply with applicable law, including the Securities Act, the Company agrees (subject to Section 3(b) and 3(c)) to promptly prepare, file with the Commission and furnish, at its own expense, to the Underwriters and to any dealer upon request, amendments or supplements to such Prospectus so that the statements in such Prospectus as so amended or supplemented will not include an untrue statement of a material fact or omit to state a material fact necessary in order to make the statements therein, in the light of the circumstances when such Prospectus is delivered to a purchaser, not misleading or so that such Prospectus, as amended or supplemented, will comply with applicable law including the Securities Act. Neither the Representatives' consent to, nor delivery of, any such amendment or supplement shall constitute a waiver of any of the Company's obligations under Sections 3(b) or (c).

(h) Blue Sky Compliance. The Company shall cooperate with the Representatives and counsel for the Underwriters to qualify or register the Offered Shares for sale under (or obtain exemptions from the application of) the state securities or blue sky laws or Canadian provincial securities laws of those jurisdictions designated by the Representatives, shall comply with such laws and shall continue such qualifications, registrations and exemptions in effect so long as required for the distribution of the Offered Shares; provided that the Company shall not be required to qualify as a foreign corporation or to take any action that would subject it to general service of process in any such jurisdiction where it is not presently qualified or where it would be subject to taxation as a foreign corporation. The Company will advise the Representatives promptly of the suspension of the qualification or registration of (or any such exemption relating to) the Offered Shares for offering, sale or trading in any jurisdiction or any initiation or threat of any proceeding for any such purpose, and in the event of the issuance of any order suspending such qualification, registration or exemption, the Company shall use its best efforts to obtain the withdrawal thereof at the earliest possible moment.

(i) Use of Proceeds. The Company shall apply the net proceeds from the sale of the Offered Shares sold by it in the manner described under the caption "Use of Proceeds" in each Applicable Prospectus.

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

(k) *Earnings Statement.* As soon as practicable, but in any event not later than 45 days after the end of the 12-month period beginning at the end of the fiscal quarter of the Company during which the most recent effective date of a Registration Statement occurs (or 90 days after the end of such 12-month period if such 12-month period coincides with the Company's fiscal year), the Company will make generally available to its security holders and to the Representatives an earnings statement (which need not be audited) covering such 12-month period which shall satisfy the provisions of Section 11(a) of the Securities Act and the rules and regulations of the Commission thereunder.

(l) *Exchange Act Compliance.* The Company shall file all documents required to be filed with the Commission pursuant to Section 13, 14 or 15 of the Exchange Act in the manner and within the time periods required by the Exchange Act.

(m) *Listing.* The Company will use its best efforts to list, subject to notice of issuance, the Offered Shares on the Nasdaq Global Market and to maintain the listing of the Shares on the Nasdaq Global Market.

(n) *Company to Provide Copy of the Prospectuses in Form That May be Downloaded from the Internet* The Company shall cause to be prepared and delivered, at its expense, within one business day from the effective date of this Agreement, to Citigroup, Credit Suisse and Leerink an "**electronic Prospectus**" to be used by the Underwriters in connection with the offering and sale of the Offered Shares. As used herein, the term "**electronic Prospectus**" means a form of Time of Sale Prospectus, and any amendment or supplement thereto, that meets each of the following conditions: (i) it shall be encoded in an electronic format, satisfactory to Citigroup, Credit Suisse and Leerink, that may be transmitted electronically by Citigroup, Credit Suisse and Leerink and the other Underwriters to offerees and purchasers of the Offered Shares; (ii) it shall disclose the same information as the paper Time of Sale Prospectus, except to the extent that graphic and image material cannot be disseminated electronically, in which case such graphic and image material shall be replaced in the electronic Prospectus with a fair and accurate narrative description or tabular representation of such material, as appropriate; and (iii) it shall be in or convertible into a paper format or an electronic format, satisfactory to Citigroup, Credit Suisse and Leerink, that will allow investors to store and have continuously ready access to the Time of Sale Prospectus at any future time, without charge to investors (other than any fee charged for subscription to the Internet as a whole and for on-line time). The Company hereby confirms that it has included or will include in each Prospectus filed pursuant to EDGAR or otherwise with the Commission and in each Registration Statement at the time it was declared effective an undertaking that, upon receipt of a request by an investor or his or her representative, the Company shall transmit or cause to be transmitted promptly, without charge, a paper copy of the Time of Sale Prospectus.

(o) *Agreement Not to Offer or Sell Additional Shares.* During the period commencing on and including the date hereof and ending on and including the 90th day following the date of the Prospectuses (as the same may be extended as described below, the "**Lock-up Period**"), the Company will not, without the prior written consent of Citigroup, Credit Suisse and Leerink (which consent may be withheld at the sole discretion of Citigroup, Credit Suisse and Leerink), directly or indirectly, sell (including, without limitation, any short sale), offer, contract or grant any option to sell, pledge, transfer or establish an open "put equivalent position" within the meaning of Rule 16a-1(h) under the Exchange Act, or otherwise dispose of or transfer, or announce the offering of, or file any registration statement under the Securities Act in respect of, any Shares, options, rights or warrants to acquire Shares or

securities exchangeable or exercisable for or convertible into Shares (other than as contemplated by this Agreement with respect to the Offered Shares) or publicly announce the intention to do any of the foregoing; provided, however, that the Company may issue Shares (i) pursuant to transactions relating to any director or employee stock option plan, stock ownership plan or dividend reinvestment plan of the Company in effect at the date of the Prospectuses and described in the Prospectuses (including the issuance of securities thereunder and the issuance of Shares upon the exercise of options issued pursuant thereto), (ii) pursuant to the conversion of securities or the exercise of warrants outstanding at the date of the Prospectuses and described in the Prospectuses or (iii) to one or more counterparties in connection with the consummation of a strategic partnership, joint venture, collaboration or the acquisition or license of any business products or technology; *provided* that, with respect to this subsection (iii), (1) the sum of the aggregate number of Shares so issued shall not exceed 5% of the total outstanding Shares immediately following the completion of this offering of Shares and (2) prior to the issuance of such Shares each recipient of such Shares agrees in writing not to sell, offer, dispose of or otherwise transfer any such Shares during such Lock-up Period without the prior written consent of Citigroup, Credit Suisse and Leerink (which consent may be withheld at the sole discretion of Citigroup, Credit Suisse and Leerink). Notwithstanding the foregoing, if (A) during the last 17 days of the Lock-up Period, the Company issues an earnings release or material news or a material event relating to the Company occurs or (B) prior to the expiration of the Lock-up Period, the Company announces that it will release earnings results during the 16-day period beginning on the last day of the Lock-up Period, then in each case the Lock-up Period will be extended until the expiration of the 18-day period beginning on the date of the issuance of the earnings release or the occurrence of the material news or material event, as applicable, unless Citigroup, Credit Suisse and Leerink waive, in writing, such extension (which waiver may be withheld at the sole discretion of Citigroup, Credit Suisse and Leerink), except that such extension will not apply if, (i) the Shares are “actively traded securities” (as defined in Regulation M), (ii) the Company meets the applicable requirements of paragraph (a)(1) of Rule 139 under the Securities Act in the manner contemplated by NASD Conduct Rule 2711(f)(4), and (iii) the provisions of NASD Conduct Rule 2711(f)(4) do not restrict the publishing or distribution of any research reports relating to the Company published or distributed by any of the Underwriters during the 15 days before or after the last day of the Lock-up Period (before giving effect to such extension). The Company will provide the Representatives with prior notice of any such announcement that gives rise to an extension of the Lock-up Period.

(p) Future Reports to the Representatives. During the period of five years hereafter the Company will furnish or make available to the Representatives at the addresses set forth in Section 15: (i) as soon as practicable after the end of each fiscal year, copies of the Annual Report of the Company containing the balance sheet of the Company as of the close of such fiscal year and statements of income, stockholders’ equity and cash flows for the year then ended and the opinion thereon of the Company’s independent public or certified public accountants; (ii) as soon as practicable after the filing thereof, copies of each proxy statement, Annual Report on Form 10-K, Quarterly Report on Form 10-Q, Current Report on Form 8-K or other report filed by the Company with the Commission, FINRA or any securities exchange; and (iii) as soon as available, copies of any report or communication of the Company furnished or made available generally to holders of its capital stock; *provided* that the requirements of this subsection (p) shall be satisfied to the extent the reports, communications, financial statements or other documents referenced herein are available on EDGAR.

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

(r) *No Stabilization or Manipulation; Compliance with Regulation M.* The Company will not take, directly or indirectly, any action designed to or that might be reasonably expected to cause or result in stabilization or manipulation of the price of the Shares or any other reference security, whether to facilitate the sale or resale of the Offered Shares or otherwise, and the Company will, and shall cause each of its affiliates to, comply with all applicable provisions of Regulation M. If the limitations of Rule 102 of Regulation M (“**Rule 102**”) do not apply with respect to the Offered Shares or any other reference security pursuant to any exception set forth in Section (d) of Rule 102, then promptly upon notice from the Representatives (or, if later, at the time stated in the notice), the Company will, and shall cause each of its affiliates to, comply with Rule 102 as though such exception were not available but the other provisions of Rule 102 (as interpreted by the Commission) did apply.

(s) *Existing Lock-Up Agreements.* During the Lock-up Period, the Company will enforce all existing agreements between the Company and any of its security holders that prohibit the sale, transfer, assignment, pledge or hypothecation of any of the Company’s securities. In addition, the Company will direct the transfer agent to place stop transfer restrictions upon any such securities of the Company that are bound by such existing “lock-up” agreements for the duration of the periods contemplated in such agreements, including, without limitation, “lock-up” agreements entered into by the Company’s officers and directors pursuant to Section 6(i).

Section 4. Payment of Expenses. The Company agrees to pay all costs, fees and expenses incurred in connection with the performance of its obligations hereunder and in connection with the offering of the Offered Shares hereunder, including without limitation (i) all expenses incident to the issuance and delivery of the Offered Shares (including all printing and engraving costs), (ii) all fees and expenses of the registrar and transfer agent of the Shares, (iii) all issue, transfer and other stamp taxes payable in connection with the issuance, sale and delivery of the Offered Shares to the Underwriters, (iv) all fees and expenses of the Company’s counsel, independent public or certified public accountants and other advisors, (v) all costs and expenses incurred in connection with the preparation, printing, filing, shipping and distribution of the Registration Statements (including financial statements, exhibits, schedules, consents and certificates of experts), the Time of Sale Prospectus, the Prospectuses, any free writing prospectus prepared by or on behalf of, used by, or referred to by the Company, and each preliminary prospectus, and all amendments and supplements thereto, and this Agreement, (vi) all filing fees, attorneys’ fees and expenses incurred by the Company or the Underwriters in connection with qualifying or registering (or obtaining exemptions from the qualification or registration of) all or any part of the Offered Shares for offer and sale under the state securities or blue sky laws or the provincial securities laws of Canada, and, if requested by the Representatives, preparing and printing a “**Blue Sky Survey**” or memorandum and a “Canadian wrapper”, and any supplements thereto, advising the Underwriters of such qualifications, registrations, determinations and exemptions; *provided* such fees and disbursements related to distribution in Canada do not exceed \$10,000 in the aggregate, (vii) the filing fees incident to, and the reasonable fees and expenses of counsel for the Underwriters in connection with, FINRA’s review, if any, and approval of the Underwriters’ participation in the offering and distribution of the Offered Shares; *provided* such fees and disbursements do not exceed \$10,000 in the aggregate, (viii) the costs and

expenses of the Company relating to investor presentations on any “road show” undertaken in connection with the marketing of the offering of the Shares, including, without limitation, expenses associated with the preparation or dissemination of any electronic road show, expenses associated with the production of road show slides and graphics, fees and expenses of any consultants engaged in connection with the road show presentations with the prior approval of the Company, and travel and lodging expenses of the representatives, employees and officers of the Company and of the Representatives and any such consultants, (ix) the fees and expenses associated with listing the Offered Shares on the Nasdaq Global Market, and (x) all other fees, costs and expenses of the nature referred to in Item 14 of Part II of each Registration Statement. Except as provided in this Section 4, Section 7, Section 9 and Section 10 hereof, the Underwriters shall pay their own expenses, including the fees and disbursements of their counsel.

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

Section 6. Conditions of the Obligations of the Underwriters. The obligations of the several Underwriters to purchase and pay for the Offered Shares as provided herein on the First Closing Date and, with respect to the Optional Shares, each Option Closing Date, shall be subject to the accuracy of the representations and warranties on the part of the Company set forth in Section 1 hereof as of the date hereof and as of the First Closing Date as though then made and, with respect to the Optional Shares, as of each Option Closing Date as though then made, to the timely performance by the Company of its covenants and other obligations hereunder, and to each of the following additional conditions:

(a) *Accountants’ Comfort Letter.* On the date hereof, the Representatives shall have received from Ernst & Young LLP, independent public or certified public accountants for the Company, (i) a letter dated the date hereof addressed to the Underwriters, in form and substance satisfactory to the Representatives, containing statements and information of the type ordinarily included in accountant’s “comfort letters” to underwriters, delivered according to Statement of Auditing Standards No. 72 (or any successor bulletin), with respect to the audited and unaudited financial statements and certain financial information contained in the Registration Statements and the Preliminary Prospectuses, and, with respect to each letter dated the date hereof only, the Prospectuses and the Representatives shall have received an additional conformed copy of such accountants’ letter for each of the other several Underwriters, and (ii) confirming that they are (A) independent public or certified public accountants as required by the Securities Act and the Exchange Act and (B) in compliance with the applicable requirements relating to the qualification of accountants under Rule 2-01 of Regulation S-X.

(b) *Compliance with Registration Requirements; No Stop Order; No Objection from FINRA.* For the period from and after effectiveness of this Agreement and prior to the First Closing Date and, with respect to the Optional Shares, each Option Closing Date:

(i) the Company shall have filed the Prospectuses with the Commission (including the information previously omitted from the Registration Statements pursuant to Rule 430B under the Securities Act) in the manner and within the time period required by Rule 424(b) under the Securities Act; or the Company shall have filed post-effective

amendments to the Registration Statements containing the information previously omitted pursuant to such Rule 430B, and such post-effective amendment shall have become effective;

(ii) no stop order suspending the effectiveness of any Registration Statement, any Rule 462(b) Registration Statement, or any post-effective amendment to any Registration Statement, shall be in effect and no proceedings for such purpose shall have been instituted or threatened by the Commission; and

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

(c) *No Material Adverse Change.* For the period from and after the date of this Agreement and through and including the First Closing Date and, with respect to the Optional Shares, each Option Closing Date, in the judgment of the Representatives, there shall not have occurred any Material Adverse Change.

(d) *Opinion of Counsel for the Company.* On each of the First Closing Date and each Option Closing Date the Representatives shall have received the opinion and negative assurance letter of Cooley LLP, counsel for the Company, dated as of such Closing Date, the form of which are attached as Exhibits C-1 and C-2, respectively.

(e) *Opinion of Intellectual Property Counsel for the Company.* On each of the First Closing Date and each Option Closing Date the Representatives shall have received the opinion of Sughrue Mion PLLC., intellectual property counsel for the Company, dated as of such Closing Date, with respect to certain intellectual property matters, the form of which is attached as Exhibit D.

(f) *Opinion of Counsel for the Underwriter.* On each of the First Closing Date and each Option Closing Date the Representatives shall have received the opinion of Latham & Watkins LLP, counsel for the Underwriters, in form and substance satisfactory to the Representatives, dated as of such Closing Date.

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

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

(ii) the representations, warranties and covenants of the Company set forth in Section 1 of this Agreement are true and correct with the same force and effect as though expressly made on and as of such Closing Date; and

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

(h) *Bring-down Comfort Letter.* On each of the First Closing Date and each Option Closing Date the Representatives shall have received from Ernst & Young LLP, independent public or certified public accountants for the Company, a letter dated such date, in form and substance satisfactory to the Representatives, to the effect that they reaffirm the statements made in the letter furnished by them pursuant to subsection (a) of this Section 6, except that the specified date referred to therein for the carrying out of procedures shall be no more than five business days prior to the First Closing Date or the applicable Option Closing Date, as the case may be, and the Representatives shall have received an additional conformed copy of such accountants' letter for each of the other several Underwriters.

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

(j) *Additional Documents.* On or before each of the First Closing Date and each Option Closing Date, the Representatives and counsel for the Underwriters shall have received such information, documents and opinions as they may reasonably request for the purposes of enabling them to pass upon the issuance and sale of the Offered Shares as contemplated herein, or in order to evidence the accuracy of any of the representations and warranties, or the satisfaction of any of the conditions or agreements, herein contained; and all proceedings taken by the Company in connection with the issuance and sale of the Offered Shares as contemplated herein and in connection with the other transactions contemplated by this Agreement shall be reasonably satisfactory in form and substance to the Representatives and counsel for the Underwriters.

If any condition specified in this Section 6 is not satisfied when and as required to be satisfied, this Agreement may be terminated by the Representatives by notice to the Company at any time on or prior to the First Closing Date and, with respect to the Optional Shares, at any time on or prior to the applicable Option Closing Date, which termination shall be without liability on the part of any party to any other party, except that Section 4, Section 6, Section 8 and Section 9 shall at all times be effective and shall survive such termination.

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

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

Section 9. Indemnification.

(a) *Indemnification of the Underwriters.* The Company agrees to indemnify and hold harmless each Underwriter, its affiliates, agents, directors, officers and employees, and each person, if any, who controls any Underwriter within the meaning of the Securities Act or the Exchange Act against any loss, claim, damage, liability or expense, as incurred, to which such Underwriter or such affiliate, agent, director, officer, employee or controlling person may become subject, under the Securities Act, the Exchange Act, other federal or state statutory law or regulation, or the laws or regulations of foreign jurisdictions where Offered Shares have been offered or sold or at common law or otherwise (including in settlement of any litigation, if such settlement is effected in accordance with Section 9(d) below), insofar as such loss, claim, damage, liability or expense (or actions in respect thereof as contemplated below) arises out of or is based upon (i) any untrue statement or alleged untrue statement of a material fact contained in a Registration Statement, or any amendment thereto, including any information deemed to be a part thereof pursuant to Rule 430B under the Securities Act, or the omission or alleged omission therefrom of a material fact required to be stated therein or necessary to make the statements therein not misleading; or (ii) any untrue statement or alleged untrue statement of a material fact contained in any preliminary prospectus, the Time of Sale Prospectus, any free writing prospectus that the Company has used, referred to or filed, or is required to file, pursuant to Rule 433(d) of the Securities Act or a Prospectus (or any amendment or supplement thereto), or the omission or alleged omission therefrom of a material fact necessary in order to make the statements therein, in the light of the circumstances under which they were made, not misleading; and to reimburse such Underwriter and each such affiliate, agent, director, officer, employee and controlling person for any and all expenses (including the fees and disbursements of counsel chosen by Citigroup, Credit Suisse and Leerink) as such expenses are reasonably incurred by such Underwriter or such affiliate, agent, director, officer, employee or controlling person in connection with investigating, defending, settling, compromising or paying any such loss, claim, damage, liability, expense or action; provided, however, that the foregoing indemnity agreement shall not apply to any loss, claim, damage, liability or expense to the extent, but only to the extent, arising out of or based upon any untrue statement or alleged untrue statement or omission or alleged omission made in reliance upon and in conformity with written information furnished to the Company by the Representatives expressly for use in a Registration Statement, any preliminary prospectus, the Time of Sale Prospectus, any such free writing prospectus or a Prospectus (or any amendment or supplement thereto), it being understood and agreed that the only such information furnished by the Representatives to the Company consists of the information described in subsection (b) below. The indemnity agreement set forth in this Section 9(a) shall be in addition to any liabilities that the Company may otherwise have.

(b) *Indemnification of the Company, its Directors and Officers.* Each Underwriter agrees, severally and not jointly, to indemnify and hold harmless the Company, each of its directors and officers, and each person, if any, who controls the Company within the meaning of the Securities Act or the Exchange Act, against any loss, claim, damage, liability or expense, as incurred, to which the Company, or any such director, officer or controlling person may become subject, under the Securities Act, the Exchange Act, or other federal or state statutory law or regulation, or at common law or otherwise (including in settlement of any litigation, if such settlement is effected with the written consent of such Underwriter), insofar as such loss, claim, damage, liability or expense (or actions in respect thereof as contemplated below) arises out of or is based upon any untrue statement or alleged untrue statement of a material fact contained in a Registration Statement, any preliminary

prospectus, the Time of Sale Prospectus, any free writing prospectus that the Company has used, referred to or filed, or is required to file, pursuant to Rule 433(d) of the Securities Act or a Prospectus (or such amendment or supplement thereto), or arises out of or is 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 such Registration Statement, such preliminary prospectus, the Time of Sale Prospectus, such free writing prospectus that the Company has used, referred to or filed, or is required to file, pursuant to Rule 433(d) of the Securities Act, or such Prospectus (or such amendment or supplement thereto), in reliance upon and in conformity with written information furnished to the Company by the Representatives expressly for use therein; and to reimburse the Company, or any such director, officer or controlling person for any legal and other expense as such expenses are reasonably incurred by the Company, or any such director, officer or controlling person in connection with investigating, defending, settling, compromising or paying any such loss, claim, damage, liability, expense or action. The Company hereby acknowledges that the only information that the Representatives and the Underwriters have furnished to the Company expressly for use in a Registration Statement, any preliminary prospectus, the Time of Sale Prospectus, any free writing prospectus that the Company has filed, or is required to file, pursuant to Rule 433(d) of the Securities Act or a Prospectus (or any amendment or supplement thereto) are the statements set forth in (i) the third, tenth and twelfth paragraphs under the caption "Underwriting" in the Company's final prospectus supplement dated January 6, 2012 filed under Registration Statement File No. 333-164476 relating to the offering of the Offered Shares and (ii) the third, ninth and eleventh paragraphs under the caption "Underwriting" in the Company's final prospectus supplement dated January 6, 2012 filed under Registration Statement File No. 333-159103 relating to the offering of the Offered Shares. The indemnity agreement set forth in this Section 9(b) shall be in addition to any liabilities that each Underwriter may otherwise have.

(c) Notifications and Other Indemnification Procedures. Promptly after receipt by an indemnified party under this Section 9 of notice of the commencement of any action, such indemnified party will, if a claim in respect thereof is to be made against an indemnifying party under this Section 9, notify the indemnifying party in writing of the commencement thereof, but the failure to so notify the indemnifying party shall not relieve the indemnifying party from any liability that it may have to any indemnified party for contribution or otherwise under the indemnity agreement contained in this Section 9 except to the extent such indemnifying party has been materially prejudiced by such failure. In case any such action is brought against any indemnified party and such indemnified party seeks or intends to seek indemnity from an indemnifying party, the indemnifying party will be entitled to participate in, and, to the extent that it shall elect, jointly with all other indemnifying parties similarly notified, by written notice delivered to the indemnified party promptly after receiving the aforesaid notice from such indemnified party, to assume the defense thereof with counsel reasonably satisfactory to such indemnified party; provided, however, if the defendants in any such action include both the indemnified party and the indemnifying party and the indemnified party shall have reasonably concluded that a conflict may arise between the positions of the indemnifying party and the indemnified party in conducting the defense of any such action or that there may be legal defenses available to it and/or other indemnified parties which are different from or additional to those available to the indemnifying party, the indemnified party or parties shall have the right to select separate counsel to assume such legal defenses and to otherwise participate in the defense of such action on behalf of such indemnified party or parties. Upon receipt of notice from the indemnifying party to

such indemnified party of such indemnifying party's election so to assume the defense of such action and approval by the indemnified party of counsel, the indemnifying party will not be liable to such indemnified party under this Section 9 for any legal or other expenses subsequently incurred by such indemnified party in connection with the defense thereof unless (i) the indemnified party shall have employed separate counsel in accordance with the proviso to the preceding sentence (it being understood, however, that the indemnifying party shall not be liable for the fees and expenses of more than one separate counsel (together with local counsel), representing the indemnified parties who are parties to such action), which counsel (together with any local counsel) for the indemnified parties shall be selected by Citigroup, Credit Suisse and Leerink (in the case of counsel for the indemnified parties referred to in Section 9(a) above) or by the Company (in the case of counsel for the indemnified parties referred to in Section 9(b) above)) (ii) the indemnifying party shall not have employed counsel reasonably satisfactory to the indemnified party to represent the indemnified party within a reasonable time after notice of commencement of the action or (iii) the indemnifying party has authorized in writing the employment of counsel for the indemnified party at the expense of the indemnifying party, in each of which cases the fees and expenses of counsel shall be at the expense of the indemnifying party and shall be paid as they are incurred.

(d) Settlements. The indemnifying party under this Section 9 shall not be liable for any settlement of any proceeding effected without its written consent, but if settled with such consent or if there be a final judgment for the plaintiff, the indemnifying party agrees to indemnify the indemnified party against any loss, claim, damage, liability or expense by reason of such settlement or judgment. Notwithstanding the foregoing sentence, if at any time an indemnified party shall have requested an indemnifying party to reimburse the indemnified party for fees and expenses of counsel as contemplated by Section 9(c) hereof, the indemnifying party agrees that it shall be liable for any settlement of any proceeding effected without its written consent if (i) such settlement is entered into more than 60 days after receipt by such indemnifying party of the aforesaid request and (ii) such indemnifying party shall not have reimbursed the indemnified party in accordance with such request prior to the date of such settlement. No indemnifying party shall, without the prior written consent of the indemnified party, effect any settlement, compromise or consent to the entry of judgment in any pending or threatened action, suit or proceeding in respect of which any indemnified party is or could have been a party and indemnity was or could have been sought hereunder by such indemnified party, unless such settlement, compromise or consent includes an unconditional release of such indemnified party from all liability on claims that are the subject matter of such action, suit or proceeding.

Section 10. Contribution. If the indemnification provided for in Section 9 is for any reason held to be unavailable to or otherwise insufficient to hold harmless an indemnified party in respect of any losses, claims, damages, liabilities or expenses referred to therein, then each indemnifying party shall contribute to the aggregate amount paid or payable by such indemnified party, as incurred, as a result of any losses, claims, damages, liabilities or expenses referred to therein (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 hand, from the offering of the Offered Shares pursuant to this Agreement 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 hand, in connection with the statements or omissions which resulted in such losses, claims, damages, liabilities or expenses, 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 hand, in connection with the offering of the Offered Shares pursuant to this Agreement shall be deemed to be in the same respective proportions as the total net proceeds from the offering of the Offered Shares pursuant to this Agreement (before deducting expenses) received by the Company, and the total underwriting discounts and commissions received by the Underwriters, in each case as set forth on the each front cover page of the Prospectuses bear to the aggregate initial public offering price of the Offered Shares as set forth on each such cover. The relative fault of the Company, on the one hand, and the Underwriters, on the other hand, shall be determined by reference to, among other things, whether any such untrue or alleged untrue statement of a material fact or omission or alleged omission to state a material fact relates to information supplied by the Company, on the one hand, or the Underwriters, on the other hand, and the parties' relative intent, knowledge, access to information and opportunity to correct or prevent such statement or omission.

The amount paid or payable by a party as a result of the losses, claims, damages, liabilities and expenses referred to above shall be deemed to include, subject to the limitations set forth in Section 9(c), any legal or other fees or expenses reasonably incurred by such party in connection with investigating or defending any action or claim. The provisions set forth in Section 9(c) with respect to notice of commencement of any action shall apply if a claim for contribution is to be made under this Section 10; *provided, however*, that no additional notice shall be required with respect to any action for which notice has been given under Section 9(c) for purposes of indemnification.

The Company and the Underwriters agree that it would not be just and equitable if contribution pursuant to this Section 10 were 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 this Section 10.

Notwithstanding the provisions of this Section 10, no Underwriter shall be required to contribute any amount in excess of the underwriting discounts and commissions received by such Underwriter in connection with the Offered Shares underwritten by it and distributed to the public. No person guilty of fraudulent misrepresentation (within the meaning of Section 11(f) of the Securities Act) shall be entitled to contribution from any person who was not guilty of such fraudulent misrepresentation. The Underwriters' obligations to contribute pursuant to this Section 10 are several, and not joint, in proportion to their respective underwriting commitments as set forth opposite their respective names on Schedule A. For purposes of this Section 10, each officer and employee of an Underwriter and each person, if any, who controls an Underwriter within the meaning of the Securities Act or the Exchange Act shall have the same rights to contribution as such Underwriter, and each director of the Company, and each person, if any, who controls the Company with the meaning of the Securities Act and the Exchange Act shall have the same rights to contribution as the Company.

Section 11. Default of One or More of the Several Underwriters. If, on the First Closing Date or the applicable Option Closing Date, as the case may be, any one or more of the several Underwriters shall fail or refuse to purchase Offered Shares that it or they have agreed to purchase hereunder on such date, and the aggregate number of Offered Shares which such defaulting Underwriter or Underwriters agreed but failed or refused to purchase does not exceed 10% of the aggregate number of the Offered Shares required to be purchased on such date by the Underwriters, the Representatives may make arrangements satisfactory to

the Company for the purchase of such Offered Shares by other persons, including any of the Underwriters, but if no such arrangements are made by such Closing Date, the other Underwriters shall be obligated, severally and not jointly, in the proportions that the number of Firm Shares set forth opposite their respective names on Schedule A bears to the aggregate number of Firm Shares set forth opposite the names of all such non-defaulting Underwriters, or in such other proportions as may be specified by the Representatives with the consent of the non-defaulting Underwriters, to purchase the Offered Shares which such defaulting Underwriter or Underwriters agreed but failed or refused to purchase on such date. If, on the First Closing Date or the applicable Option Closing Date, as the case may be, any one or more of the Underwriters shall fail or refuse to purchase Offered Shares and the aggregate number of Offered Shares with respect to which such default occurs exceeds 10% of the aggregate number of Offered Shares required to be purchased on such date by the Underwriters, and arrangements satisfactory to the Representatives and the Company for the purchase of such Offered Shares are not made within 48 hours after such default, this Agreement shall terminate without liability of any non-defaulting party to any other party (provided that if such default occurs with respect to Optional Shares after the First Closing Date, this Agreement will not terminate as to the Firm Shares or any Optional Shares purchased prior to such termination) except that the provisions of Section 4, Section 7, Section 9 and Section 10 shall at all times be effective and shall survive such termination. In any such case either the Representatives or the Company shall have the right to postpone the First Closing Date or the applicable Option Closing Date, as the case may be, but in no event for longer than seven days in order that the required changes, if any, to a Registration Statement and the related Prospectus or any other documents or arrangements may be effected. As used in this Agreement, the term “**Underwriter**” includes any person substituted for an Underwriter under this Section 11. Any action taken under this Section 11 shall not relieve any defaulting Underwriter from liability in respect of any default of such Underwriter under this Agreement.

Section 12. Termination of this Agreement Prior to the purchase of the Firm Shares by the Underwriters on the First Closing Date, this Agreement may be terminated by the Representatives by notice given to the Company if at any time (i) trading or quotation in any of the Company’s securities shall have been suspended or materially limited by the Commission or by the Nasdaq Global Market, or trading in securities generally on either the Nasdaq Stock Market or the New York Stock Exchange shall have been suspended or materially limited, or minimum or maximum prices shall have been generally established on any of such stock exchanges by the Commission or FINRA; (ii) a general banking moratorium shall have been declared by any of federal, New York, Delaware or California authorities; (iii) there shall have occurred any outbreak or escalation of national or international hostilities or any crisis or calamity, or any change in the United States or international financial markets, or any substantial change or development involving a prospective substantial change in United States’ or international political, financial or economic conditions, as in the judgment of the Representatives is material and adverse and makes it impracticable to market the Offered Shares in the manner and on the terms described in the Time of Sale Prospectus or a Prospectus or to enforce contracts for the sale of securities; or (iv) in the judgment of the Representatives there shall have occurred any Material Adverse Change. Any termination pursuant to this Section 12 shall be without liability on the part of (a) the Company to any Underwriter, except that the Company shall be obligated to reimburse the expenses of the Representatives and the Underwriters pursuant to Sections 4 and 7 hereof, (b) any Underwriter to the Company, or (c) of any party hereto to any other party except that the provisions of Section 9 and Section 10 shall at all times be effective and shall survive such termination.

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

Section 14. Representations and Indemnities to Survive Delivery. The respective indemnities, agreements, representations, warranties and other statements of the Company, of its officers and of the several Underwriters set forth in or made pursuant to this Agreement will remain in full force and effect, regardless of any investigation made by or on behalf of any Underwriter or the Company or any of its or their partners, officers or directors or any controlling person, as the case may be, and, anything herein to the contrary notwithstanding, will survive delivery of and payment for the Offered Shares sold hereunder and any termination of this Agreement.

Section 15. Notices. All communications hereunder shall be in writing and shall be mailed, hand delivered or telecopied and confirmed to the parties hereto as follows:

If to the Representatives:

Citigroup Global Markets Inc.
388 Greenwich Street
New York, NY 10013
Facsimile: (212) 816-7912
Attention: General Counsel

Credit Suisse Securities (USA) LLC
Eleven Madison Avenue
New York, NY 10010-3629
Facsimile: (212) 325-6665
Attention: LCD-IBD

Leerink Swann LLC
One Federal Street, 37th Floor
Boston, MA 02110
Facsimile: (617) 918-4664
Attention: Timothy A.G. Gerhold, Esq.

If to the Company:

Vical Incorporated
10390 Pacific Center Court
San Diego, CA 92121
Facsimile: (858) 646-1100
Attention: President and Chief Executive Officer

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

Section 16. Successors This Agreement will inure to the benefit of and be binding upon the parties hereto, including any substitute Underwriters pursuant to Section 11, and to the benefit of the employees, officers and directors and controlling persons referred to in Section 9 and Section 10, and in each case their respective successors, and no other person will have any right or obligation hereunder. The term “**successors**” shall not include any purchaser of the Offered Shares as such from any of the Underwriters merely by reason of such purchase.

Section 17. Partial Unenforceability. The invalidity or unenforceability of any Section, paragraph or provision of this Agreement shall not affect the validity or enforceability of any other Section, paragraph or provision hereof. If any Section, paragraph or provision of this Agreement is for any reason determined to be invalid or unenforceable, there shall be deemed to be made such minor changes (and only such minor changes) as are necessary to make it valid and enforceable.

Section 18. Governing Law Provisions This Agreement shall be governed by and construed in accordance with the internal laws of the State of New York applicable to agreements made and to be performed in such state. Any legal suit, action or proceeding arising out of or based upon this Agreement or the transactions contemplated hereby (“**Related Proceedings**”) may be instituted in the federal courts of the United States of America located in the Borough of Manhattan in the City of New York or the courts of the State of New York in each case located in the Borough of Manhattan in the City of New York (collectively, the “**Specified Courts**”), and each party irrevocably submits to the exclusive jurisdiction (except for proceedings instituted in regard to the enforcement of a judgment of any such court (a “**Related Judgment**”), as to which such jurisdiction is non-exclusive) of such courts in any such suit, action or proceeding. Service of any process, summons, notice or document by mail to such party’s address set forth above shall be effective service of process for any suit, action or other proceeding brought in any such court. The parties irrevocably and unconditionally waive any objection to the laying of venue of any suit, action or other proceeding in the Specified Courts and irrevocably and unconditionally waive and agree not to plead or claim in any such court that any such suit, action or other proceeding brought in any such court has been brought in an inconvenient forum.

With respect to any Related Proceeding, each party irrevocably waives, to the fullest extent permitted by applicable law, all immunity (whether on the basis of sovereignty or otherwise) from jurisdiction, service of process, attachment (both before and after judgment) and execution to which it might otherwise be entitled in the Specified Courts, and with respect to any Related Judgment, each party waives any such immunity in the Specified Courts or any other court of competent jurisdiction, and will not raise or claim or cause to be pleaded any such immunity at or in respect of any such Related Proceeding or Related

Judgment, including, without limitation, any immunity pursuant to the United States Foreign Sovereign Immunities Act of 1976, as amended.

Section 19. General Provisions. This Agreement constitutes the entire agreement of the parties to this Agreement and supersedes all prior written or oral and all contemporaneous oral agreements, understandings and negotiations with respect to the subject matter hereof. This Agreement may be executed in two or more counterparts, each one of which shall be an original, with the same effect as if the signatures thereto and hereto were upon the same instrument. This Agreement may not be amended or modified unless in writing by all of the parties hereto, and no condition herein (express or implied) may be waived unless waived in writing by each party whom the condition is meant to benefit. The Table of Contents and the Section headings herein are for the convenience of the parties only and shall not affect the construction or interpretation of this Agreement.

Each of the parties hereto acknowledges that it is a sophisticated business person who was adequately represented by counsel during negotiations regarding the provisions hereof, including, without limitation, the indemnification provisions of Section 9 and the contribution provisions of Section 10, and is fully informed regarding said provisions. Each of the parties hereto further acknowledges that the provisions of Sections 9 and 10 hereto fairly allocate the risks in light of the ability of the parties to investigate the Company, its affairs and its business in order to assure that adequate disclosure has been made in each Registration Statement, any preliminary prospectus, the Time of Sale Prospectus, each free writing prospectus and each Prospectus (and any amendments and supplements thereto), as required by the Securities Act and the Exchange Act.

If the foregoing is in accordance with your understanding of our agreement, kindly sign and return to the Company the enclosed copies hereof, whereupon this instrument, along with all counterparts hereof, shall become a binding agreement in accordance with its terms.

Very truly yours,

VICAL INCORPORATED

By: /s/ Jill M. Broadfoot
Name: Jill M. Broadfoot
Title: Chief Financial Officer

The foregoing Underwriting Agreement is hereby confirmed and accepted by each of the Representatives as of the date first above written.

**CITIGROUP GLOBAL MARKETS INC.
CREDIT SUISSE SECURITIES (USA) LLC
LEERINK SWANN LLC**

Acting as Representatives of the
several Underwriters named in
Schedule A hereto.

By: **CITIGROUP GLOBAL MARKETS INC.**

By: /s/ Sujal Shah
Name: Sujal Shah
Title: Director

By: **CREDIT SUISSE SECURITIES (USA) LLC**

By: /s/ Greg Butz
Name: Greg Butz
Title: Director

By: **LEERINK SWANN LLC**

By: /s/ Bryan Giraudo
Name: Bryan Giraudo
Title: Managing Director

SCHEDULE A

Underwriter	Number of Firm Shares to be Purchased
Citigroup Global Markets Inc.	4,000,000
Credit Suisse Securities (USA) LLC	4,000,000
Leerink Swann LLC	4,000,000
Rodman & Renshaw, LLC	1,333,334
Total	13,333,334

SCHEDULE B

Schedule of Free Writing Prospectuses included in the Time of Sale Prospectus

None.

Jason L. Kent
(858) 550-6044
jkent@cooley.com

January 6, 2012

Vical Incorporated
10390 Pacific Center Court
San Diego, CA 92121

Ladies and Gentlemen:

You have requested our opinion with respect to certain matters in connection with the offering by VICAL INCORPORATED, a Delaware corporation (the "**Company**"), of up to 15,333,334 shares of the Company's common stock, par value \$0.01 (the "**Shares**"), consisting of (i) 10,700,000 shares of common stock offered pursuant to Registration Statement No. 333-159103 (the "**2009 Registration Statement**") filed with the Securities and Exchange Commission (the "**Commission**") under the Securities Act of 1933, as amended (the "**Act**"), the prospectus dated May 20, 2009 included therein (the "**2009 Base Prospectus**"), and the related prospectus supplement dated January 6, 2012 and filed with the Commission pursuant to Rule 424(b) of the Rules and Regulations of the Act (together with the 2009 Base Prospectus, the "**2009 Prospectus**") and (ii) up to 4,633,334 shares of common stock, including up to 2,000,000 shares that may be sold pursuant to the exercise of a 30-day option granted by the Company, offered pursuant to Registration Statement No. 333-164476 (the "**2010 Registration Statement**") filed with the Commission under the Act, the prospectus dated January 29, 2010 included therein (the "**2010 Base Prospectus**"), and the related prospectus supplement dated January 6, 2012 and filed with the Commission pursuant to Rule 424(b) of the Rules and Regulations of the Act (together with the 2010 Base Prospectus, the "**2010 Prospectus**"). The 2009 Registration Statement and the 2010 Registration Statement are collectively referred to as the "**Registration Statements**", and the 2009 Prospectus and the 2010 Prospectus are collectively referred to as the "**Prospectuses**". The Shares are to be sold by the Company as described in the Registration Statements and the Prospectuses.

In connection with this opinion, we have examined and relied upon the Registration Statements and the Prospectuses, the Company's Restated Certificate of Incorporation and Restated Bylaws, and the originals or copies certified to our satisfaction of such records, documents, certificates, memoranda and other instruments as in our judgment are necessary or appropriate to enable us to render the opinion expressed below. We have assumed the genuineness and authenticity of all documents submitted to us as originals, and the conformity to originals of all documents submitted to us as copies; the accuracy, completeness and authenticity of certificates of public officials, and the due execution and delivery of all documents where due execution and delivery are a prerequisite to the effectiveness thereof.

On the basis of the foregoing, and in reliance thereon, we are of the opinion that the Shares, when sold in accordance with the Registration Statements and the Prospectuses, will be validly issued, fully paid and nonassessable.

4401 EASTGATE MALL, SAN DIEGO, CA 92121 T: (858) 550-6000 F: (858) 550-6420 WWW.COOLEY.COM

Vical Incorporated
January 6, 2012
Page Two

We consent to the reference to our firm under the caption "Legal Matters" in the Prospectuses and to the filing of this opinion as an exhibit to the Registration Statements.

Very truly yours,

Cooley LLP

By: /s/ Jason L. Kent
Jason L. Kent

4401 EASTGATE MALL, SAN DIEGO, CA 92121 T: (858) 550-6000 F: (858) 550-6420 WWW.COOLEY.COM



10390 Pacific Center Court, San Diego, CA 92121-4340
858-646-1100, FAX: 858-646-1150
www.vical.com

News Release

FOR IMMEDIATE RELEASE
January 5, 2012

Contact: Alan R. Engbring
(858) 646-1127
Website: www.vical.com

Vical Incorporated Announces Proposed Public Offering of Common Stock

SAN DIEGO—January 5, 2012—Vical Incorporated (Nasdaq:VICAL) today announced that it intends to offer and sell shares of its common stock in an underwritten public offering. Citigroup, Credit Suisse Securities (USA) LLC and Leerink Swann LLC are acting as joint book-running managers and Rodman & Renshaw, LLC is acting as co-manager in the offering. The offering is subject to market conditions, and there can be no assurance as to whether or when the offering may be completed, or as to the actual size or terms of the offering.

The securities described above are being offered by Vical pursuant to two shelf registration statements previously filed with and declared effective by the Securities and Exchange Commission (the "SEC") on May 20, 2009 and January 29, 2010. Preliminary prospectus supplements related to the offering will be filed with the SEC and will be available on the SEC's website at www.sec.gov. Copies of the preliminary prospectus supplements relating to these securities may also be obtained, when available, from Citigroup, Prospectus Department, Brooklyn Army Terminal, 140 58th Street, 8th Floor, Brooklyn, NY 11220, at 1-800-831-9146 and at batprospectusdept@citi.com; from Credit Suisse Securities (USA) LLC, Attention: Prospectus Department, One Madison Avenue, New York, NY 10010, at 1-800-221-1037 and at newyork.prospectus@credit-suisse.com; or from Leerink Swann LLC, Attention: Syndicate Department, One Federal Street, 37th Floor, Boston, Massachusetts 02110, at 1-800-808-7525 and at Syndicate@Leerink.com. This press release shall not constitute an offer to sell or the solicitation of an offer to buy these securities, nor shall there be any sale of these securities in any state or other jurisdiction in which such offer, solicitation or sale would be unlawful prior to the registration or qualification under the securities laws of any such state or other jurisdiction.

About Vical Incorporated

Vical researches and develops biopharmaceutical products based on its patented DNA delivery technologies for the prevention and treatment of serious or life-threatening diseases. Potential applications of the company's DNA delivery technology include DNA vaccines for infectious diseases or cancer, in which the expressed protein is an immunogen; cancer immunotherapeutics, in which the expressed

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protein is an immune system stimulant; and cardiovascular therapies, in which the expressed protein is an angiogenic growth factor. The company is developing certain infectious disease vaccines and cancer therapeutics internally. In addition, the company collaborates with major pharmaceutical companies and biotechnology companies that give it access to complementary technologies or greater resources. These strategic partnerships provide the company with mutually beneficial opportunities to expand its product pipeline and address significant unmet medical needs.

Forward-Looking Statements

In addition to historical facts, this press release contains forward-looking statements that involve a number of risks and uncertainties such as those, among others, relating to Vical's expectations regarding the completion, timing and size of its proposed public offering. Among the factors that could cause actual results to differ materially from those indicated in the forward-looking statements are risks and uncertainties associated with market conditions and the satisfaction of customary closing conditions related to the proposed offering, as well as risks and uncertainties associated with Vical's business and finances in general, and the other risks described in Vical's Quarterly Report on Form 10-Q for the quarter ended September 30, 2011, and in the preliminary prospectus supplements related to the proposed offering to be filed with the Securities and Exchange Commission. Vical undertakes no obligation to update the statements contained in this press release after the date hereof.

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10390 Pacific Center Court, San Diego, CA 92121-4340
858-646-1100, FAX: 858-646-1150
www.vical.com

News Release

FOR IMMEDIATE RELEASE
January 6, 2012

Contact: Alan R. Engbring
(858) 646-1127
Website: www.vical.com

Vical Incorporated Prices Public Offering of Common Stock

SAN DIEGO—January 6, 2012—Vical Incorporated (Nasdaq:VICL) today announced the pricing of an underwritten public offering of 13,333,334 shares of its common stock at a price to the public of \$3.75 per share. The gross proceeds to us from this offering are expected to be approximately \$50 million, before deducting underwriting discounts and commissions and other estimated offering expenses payable by us. The offering is expected to close on or about January 11, 2012, subject to customary closing conditions.

Citigroup, Credit Suisse Securities (USA) LLC and Leerink Swann LLC are acting as joint book-running managers and Rodman & Renshaw, LLC is acting as co-manager in the offering. Vical has granted the underwriters a 30-day option to purchase up to an aggregate of 2,000,000 additional shares of common stock. Vical anticipates using the net proceeds from the offering for general corporate purposes, including clinical trial expenses, research and development expenses and other working capital.

The securities described above are being offered by Vical pursuant to two shelf registration statements previously filed with and declared effective by the Securities and Exchange Commission (the "SEC") on May 20, 2009 and January 29, 2010. Preliminary prospectus supplements related to these securities may be obtained from Citigroup, Prospectus Department, Brooklyn Army Terminal, 140 58th Street, 8th Floor, Brooklyn, NY 11220, at 1-800-831-9146 and at batprospectusdept@citi.com; from Credit Suisse Securities (USA) LLC, Attention: Prospectus Department, One Madison Avenue, New York, NY 10010, at 1-800-221-1037 and at newyork.prospectus@credit-suisse.com; or from Leerink Swann LLC, Attention: Syndicate Department, One Federal Street, 37th Floor, Boston, Massachusetts 02110, at 1-800-808-7525 and at Syndicate@Leerink.com. This press release shall not constitute an offer to sell or the solicitation of an offer to buy these securities, nor shall there be any sale of these securities in any state or other jurisdiction in which such offer, solicitation or sale would be unlawful prior to the registration or qualification under the securities laws of any such state or other jurisdiction.

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About Vical Incorporated

Vical researches and develops biopharmaceutical products based on its patented DNA delivery technologies for the prevention and treatment of serious or life-threatening diseases. Potential applications of the company's DNA delivery technology include DNA vaccines for infectious diseases or cancer, in which the expressed protein is an immunogen; cancer immunotherapeutics, in which the expressed protein is an immune system stimulant; and cardiovascular therapies, in which the expressed protein is an angiogenic growth factor. The company is developing certain infectious disease vaccines and cancer therapeutics internally. In addition, the company collaborates with major pharmaceutical companies and biotechnology companies that give it access to complementary technologies or greater resources. These strategic partnerships provide the company with mutually beneficial opportunities to expand its product pipeline and address significant unmet medical needs.

Forward-Looking Statements

In addition to historical facts, this press release contains forward-looking statements that involve a number of risks and uncertainties such as those, among others, relating to Vical's expectations regarding the closing of the public offering and the expected gross proceeds therefrom. Among the factors that could cause actual results to differ materially from those indicated in the forward-looking statements are risks and uncertainties associated with market conditions and the satisfaction of customary closing conditions related to the offering, as well as risks and uncertainties associated with Vical's business and finances in general, and the other risks described in Vical's Quarterly Report on Form 10-Q for the quarter ended September 30, 2011, and in the preliminary prospectus supplements related to the offering filed with the Securities and Exchange Commission. Vical undertakes no obligation to update the statements contained in this press release after the date hereof.

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