
**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): April 8, 2011

SANGAMO BIOSCIENCES, INC.

(Exact name of registrant specified in its charter)

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

000-30171
**(Commission
File Number)**

68-0359556
**(I.R.S. Employer
Identification No.)**

501 Canal Blvd., Richmond, California
(Address of principal executive offices)

94804
(Zip Code)

Registrant's telephone, including area code: (510) 970-6000

(Former name and former address, if changed since last report)

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

- 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))
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Item 1.01. Entry into a Material Definitive Agreement.

On April 8, 2011, Sangamo BioSciences, Inc. (“we” or “Sangamo”) entered into an underwriting agreement (the “Underwriting Agreement”) with Barclays Capital Inc., as the sole book-running manager (“Barclays”), pursuant to which we agreed to issue and sell an aggregate of 6,700,000 shares of our common stock to Barclays (the “Offering”). Under the terms of the Underwriting Agreement, we granted Barclays an option for 30 days to purchase up to an additional 1,005,000 shares of our common stock. The shares in the Offering were sold at a public offering price of \$7.70 per share, and were purchased by Barclays from us at a price of \$7.52 per share. We estimate that net proceeds we will receive from the Offering will be approximately \$50.2 million, after deducting the underwriter’s discounts and commissions and estimated offering expenses payable by us, and assuming no exercise of the over-allotment option. The Offering is expected to close on or around April 13, 2011, subject to customary closing conditions.

The Offering was made pursuant to Sangamo’s effective registration statement on Form S-3 (Registration No. 333-157732) and the prospectus dated June 16, 2009 included in such registration statement, as supplemented by a preliminary prospectus supplement dated April 7, 2011 and a prospectus supplement dated April 8, 2011.

The foregoing description of the Underwriting Agreement is qualified in its entirety by reference to the Underwriting Agreement, a copy of which is filed as Exhibit 1.1 to this Form 8-K and is incorporated herein by reference. A copy of the opinion of Morgan, Lewis & Bockius LLP relating to the validity of the shares issued in the Offering is attached as Exhibit 5.1.

On April 8, 2011, Sangamo issued a press release announcing the pricing of the Offering. A copy of the press release is attached as Exhibit 99.1 hereto and is incorporated herein by reference.

Item 9.01. Financial Statements and Exhibits.

(d) Exhibits. The following documents are filed as exhibits to this report:

- 1.1 Underwriting Agreement, dated April 8, 2011, between Sangamo BioSciences, Inc., and Barclays Capital Inc.
- 5.1 Opinion of Morgan, Lewis & Bockius LLP
- 99.1 Press Release of Sangamo BioSciences, Inc., dated April 8, 2011

SIGNATURES

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

SANGAMO BIOSCIENCES, INC.

Date: April 8, 2011

By: /s/ Edward O. Lanphier

Name: Edward O. Lanphier

Title: Chief Executive Officer

6,700,000 Shares

Sangamo BioSciences, Inc.

Common Stock

UNDERWRITING AGREEMENT

April 8, 2011

BARCLAYS CAPITAL INC.
745 Seventh Avenue
New York, New York 10019

Ladies and Gentlemen:

Introductory. Sangamo BioSciences, Inc., a Delaware corporation (the “**Company**”), proposes to issue and sell to Barclays Capital Inc. (the “**Underwriter**”) an aggregate of 6,700,000 shares of its common stock (“**Common Stock**”), par value \$0.01 per share (the “**Shares**”). The 6,700,000 Shares to be sold by the Company are called the “**Firm Shares**.” In addition, the Company has granted to the Underwriter an option to purchase up to an additional 1,005,000 Shares as provided in Section 2. The additional 1,005,000 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**.”

The Company has prepared and filed with the Securities and Exchange Commission (the “**Commission**”) a shelf registration statement on Form S-3 (File No. 333-157732), which contains a form of prospectus (the “**Base Prospectus**”) to be used in connection with the public offering and sale of the Offered Shares. 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 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 called the “**Registration Statement**.” Any preliminary prospectus supplement to the Base Prospectus that describes the Offered Shares and the offering thereof and is used prior to the filing of the Prospectus (as defined below), together with the Base Prospectus, is called a “**preliminary prospectus**.” As used herein, the term “**Prospectus**” shall mean the final prospectus supplement to the Base Prospectus that describes the Offered Shares and the offering thereof (the “**Final Prospectus Supplement**”), together with the Base Prospectus, in the form first used by the Underwriter to confirm sales of the Offered Shares or in the form first made available to the Underwriter by the Company to meet requests of purchasers pursuant to Rule 173 under the Securities Act. As used herein, “**Applicable Time**” is the time of the first contract of sale for the Shares. As used herein, “**free writing prospectus**” has the meaning set forth in Rule 405 under the Securities Act, and “**Time of Sale Prospectus**” means the Base Prospectus together with the preliminary prospectus and with the free writing prospectuses, if any, identified in Schedule A hereto and the information relating to the number of Shares being offered, the price per Share to the public and the gross proceeds to be received by

the Company identified in Schedule B hereto. As used herein, the terms “Registration Statement,” “preliminary prospectus,” “Base Prospectus,” “Time of Sale Prospectus” and “Prospectus” shall include the documents incorporated and deemed to be incorporated by reference therein. All references in this Agreement to amendments or supplements to the Registration Statement, any preliminary prospectus, the Base Prospectus, the Time of Sale Prospectus or the 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 the Registration Statement, any preliminary prospectus, the Base Prospectus, the Time of Sale Prospectus or the Prospectus, as the case may be. All references in this Agreement to (i) the Registration Statement, any preliminary prospectus, the Base Prospectus or the 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 and Retrieval System (“EDGAR”) and (ii) the Prospectus shall be deemed to include any “**electronic Prospectus**” provided for use in connection with the offering of the Offered Shares as contemplated by Section 3(n) of this Agreement. All references in this Agreement to financial statements and schedules and other information which are “**contained**,” “**included**” or “**stated**” in the Registration Statement, any preliminary prospectus, the Base Prospectus, the Time of Sale Prospectus or the 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 the Registration Statement or the Prospectus, as the case may be.

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 Underwriter as follows:

Section 1. Representations and Warranties of the Company.

The Company hereby represents, warrants and covenants to the 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 the Underwriter, as follows:

(a) *Compliance with Registration Requirements.* The Registration Statement has 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, if any, for additional or supplemental information. No stop order suspending the effectiveness of the Registration Statement is in effect and no proceedings for such purpose have been instituted or are pending or, to the knowledge of the Company, are contemplated or threatened by the Commission.

Any preliminary prospectus and the Prospectus when filed complied 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 Underwriter for use in connection with the offer and sale of the Offered Shares. Each of the Registration Statement and any post-effective amendment thereto, at the time it became effective and at all times during which a prospectus is required by the Securities Act to be delivered (whether physically or through compliance with Rule 172 under the Securities Act or any other applicable rule) in connection with any sale of the Offered Shares (“**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 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. The Prospectus (including any Prospectus wrapper), as amended or supplemented, as of its date and at all times during the 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 the Registration Statement or any post-effective amendment thereto, or the Prospectus or the Time of Sale Prospectus, or any amendments or supplements thereto, made in reliance upon and in conformity with information relating to the Underwriter furnished to the Company in writing by the Underwriter expressly for use therein, it being understood and agreed that the only such information furnished by the Underwriter 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 the Prospectus or to be filed as exhibits to the 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 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 the Registration Statement, the Prospectus or any preliminary prospectus, including any document incorporated by reference therein. Except for the free writing prospectuses, if any, identified in Schedule A 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. No electronic road show, if any, will contain any statement of a material fact that does not appear in a previously filed document under the Exchange Act which is or is deemed to be incorporated by reference in the Registration Statement or Prospectus.

(b) Offering Materials Furnished to Underwriter. The Company has delivered to the Underwriter one conformed copy of the Registration Statement, each amendment thereto (without exhibits), and of each consent and certificate of experts filed as a part thereof, any preliminary prospectuses, the Time of Sale Prospectus, the Prospectus, as amended or supplemented, and any free writing prospectus reviewed and consented to by the Underwriter, in such quantities and at such places as the Underwriter has reasonably requested.

(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 Underwriter in Section 2 and (ii) the completion of the Underwriter's distribution of the Offered Shares, any offering material in connection with the offering and sale of the Offered Shares other than the Time of Sale Prospectus, the Prospectus, any preliminary prospectus or free writing prospectus reviewed and consented to by the Underwriter, or the Registration Statement.

(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 in accordance with its terms, except as rights to indemnification hereunder may be limited by applicable law and except as 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 the Registration Statement or included in the offering contemplated by this Agreement.

(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 any supporting schedules filed with the Commission as a part of the Registration Statement and included in any preliminary prospectus, the Prospectus and the Time of Sale Prospectus (each, an "**Applicable Prospectus**" and collectively, the "**Applicable Prospectuses**"), are (i) independent registered public accounting firm with respect to the Company 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 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 the Registration Statement and included in any preliminary prospectus, the Time of Sale Prospectus and the Prospectus present fairly in all material respect 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. Any supporting schedules included in the Registration Statement present fairly in all material respect the information required to be stated therein. Such financial statements and supporting schedules have been prepared in conformity with generally accepted accounting principles 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 the Registration Statement or 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 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. There has not been and is no 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. 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 its respective jurisdiction of organization 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 and in good standing or have such power or authority would not constitute, individually or in the aggregate, 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 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. Except for those described in each Applicable Prospectus, 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. 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 reflects the information required to be shown with respect to such plans, arrangements, options and rights.

(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 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, 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 Securities (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 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 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, in the case of each of clauses (ii) and (iii) above, for any such conflict, breach, violation, default, lien, charge or encumbrance that would not, individually or in the aggregate, reasonably be expected to have 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 by the Company and are in full force and effect under the Securities Act, applicable state securities laws or blue sky laws.

(o) *No Material Actions or Proceedings.* There are no legal or governmental actions, suits or proceedings pending or, to 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) there is a reasonable possibility that such action, suit or proceeding might 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 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.* To the Company's knowledge with respect to patents, patent applications, trade and service marks, trade and service mark registrations, and trade names only, the Company and its subsidiaries own, possess, or license, and otherwise have legally enforceable rights to use all patents, patent applications, trade and service marks, trade and service mark registrations, trade names, copyrights, licenses, inventions, trade secrets, technology, and know-how, except with regard to off-the-shelf software provided by third parties, (collectively, the "**Intellectual Property Rights**") necessary for the conduct of the Company's business as now conducted or, to the knowledge of the Company, as proposed in the Applicable Prospectuses to be conducted. Except as disclosed in the Applicable Prospectus, (i) to the knowledge of the Company, there are no rights of third parties to any such Intellectual Property Rights that conflict with the Company's use of such Intellectual Property Rights; (ii) the Company is not aware of any material infringement by third parties of any such Intellectual Property Rights; (iii) there is no pending, or to the knowledge of the Company threatened, action, suit, proceeding or claim by others challenging the Company's rights in or to any such Intellectual Property Rights, and the Company is unaware of any facts which would form a reasonable basis for any such claim; (iv) there is no pending, or to the knowledge of the Company threatened, action, suit, proceeding or claim by others 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; (v) there is no pending, or to the knowledge of the Company threatened, action, suit, proceeding or claim by others that the Company infringes or otherwise violates any patent, trademark, copyright, trade secret or other proprietary rights of others, and the Company is unaware of any other fact which would form a reasonable basis for any such claim; (vi) to the knowledge of the Company, there is no U.S. patent or published U.S. patent application which contains claims that dominate or may dominate any Intellectual Property Rights described in the Applicable Prospectuses as being owned by or licensed to the Company or that interferes with the issued or pending claims of any such Intellectual Property Rights; (vii) there is no prior art of which the Company is aware that may render any U.S. patent held by the Company invalid or any U.S. patent application held by the Company unpatentable which has not been disclosed to the U.S. Patent and Trademark Office, and (viii) to the knowledge of the Company, all pertinent prior art references known to the Company or its counsel during the prosecution of

the patents and patent applications comprising the Intellectual Property Rights were disclosed to the relevant patent authority and, to the knowledge of the Company, neither such counsel nor the Company nor any licensor made any misrepresentation to, or concealed any material fact from, the relevant patent authority during such prosecution and the Company, and to the knowledge of the Company, any licensor, has complied with all applicable duty of candor requirements of the relevant patent authority with respect to such patents and patent applications. To the knowledge of the Company, all licenses to which the Company and its subsidiaries is a party relating to the Intellectual Property Rights are valid, subsisting, enforceable, and in good standing and the Company and its subsidiaries has, in all material respects, complied with its respective contractual obligations pursuant to all such licenses relating to the Intellectual Property Rights and has not committed any material breach thereof (declared or undeclared). 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 disclosed in any Applicable Prospectus and that are not disclosed therein. None of the Intellectual Property Rights used by the Company and its subsidiaries has been obtained by them or is being used by them in violation of any material contractual obligations binding on the Company, its subsidiaries or, to the knowledge of the Company, any of their officers, directors, or employees. Except as required to be set forth in the Applicable Prospectus, (i) the Company and its subsidiaries are not obligated to pay a material royalty, grant a license or provide other consideration to any third party in connection with the Intellectual Property Rights and (ii) no third party, including any academic or governmental organization, possess rights to the Intellectual Property Rights owned by the Company.

(q) *All Necessary Permits, etc.* Except as otherwise disclosed in the Time of Sale Prospectus, 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 except for such certificates, authorizations or permits which the failure to obtain would not result in a Material Adverse Change, 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, individually or in the aggregate, if the subject of an unfavorable decision, ruling or finding, could 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. 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 filed all necessary federal, state and foreign income and franchise tax returns and have paid all 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.

(t) *Company Not an “Investment Company”*. The Company is not, and either after receipt of payment for the Offered Shares or after 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**” within the meaning of Investment Company Act of 1940, as amended (the “**Investment Company 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, acts of vandalism and earthquakes 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. Neither of the Company nor any subsidiary has been denied any insurance coverage 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 Underwriter 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.

(x) *Parties to Lock-Up Agreements*. Each of the Company’s directors and officers (as defined under Section 16 of the Exchange Act) and each of the other persons and entities listed in Exhibit B has executed and delivered to the Underwriter a lock-up agreement in the form of Exhibit C-1 or Exhibit C-2 hereto. If any additional persons shall become directors or officers (as defined under Section 16 of the Exchange Act) 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 officer of the Company, to execute and deliver to the Underwriter an agreement in the form attached hereto as Exhibit C-1.

(y) *Statistical and Market-Related Data*. The statistical, demographic and market-related data included in the 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.

(z) *S-3 Eligibility*. At the time the 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 was filed with the Commission, the Company met the then applicable requirements for use of Form S-3 under the Securities Act. The Company meets the requirements for use of Form S-3 under the Securities Act specified in Conduct Rule 5110(b)(7)(C)(i) of the Financial Industry Regulatory Authority.

(aa) Exchange Act Compliance. The documents incorporated or deemed to be incorporated by reference in the 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 the Prospectus, at the time the 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 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.

(bb) 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 the Registration Statement and each Applicable Prospectus.

(cc) 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) are effective in all material respects to perform the functions for which they were established. Based on the most recent evaluation of its disclosure controls and procedures, the Company is not aware of (x) 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 to management and the Board of Directors of the Company or (y) 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.

(dd) Compliance with Environmental Laws. Except as described in each Applicable Prospectus or except as would not, singly or in the aggregate, result in a Material Adverse Change, (i) the Company has not been advised, and has no reason to believe, that either the Company or any of its subsidiaries is in violation of any applicable federal, state, local or foreign statute, law, rule, regulation, ordinance, code or rule of common law or any binding and enforceable judicial or administrative interpretation thereof, including any binding and enforceable judicial or administrative order, consent, decree or judgment, relating to pollution or protection of human health or the environment (including, without limitation, ambient air, surface water, groundwater, land surface or subsurface strata), 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 has not been advised, and has no reason to believe, that the Company and its subsidiaries do not have all permits, authorizations and approvals required under any applicable Environmental Laws to operate the business of the Company as currently conducted or are not each in compliance with their requirements, (iii) there are no pending or to the Company’s knowledge, 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) the Company has not been advised, and has no reason to believe, that there are any events or circumstances 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 the Company or any of its subsidiaries relating to Hazardous Materials pursuant to any applicable Environmental Laws.

(*ee*) **ERISA Compliance.** The Company and its subsidiaries and any “**employee benefit plan**” (as defined in Section 3(3) of the Employee Retirement Income Security Act of 1974, as amended (collectively with the regulations and published interpretations thereunder, “**ERISA**”)) established or maintained by the Company, its subsidiaries or their “**ERISA Affiliates**” (as defined below) (“**Company Benefit Plans**”) 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 Company Benefit Plan is a multiemployer plan (as defined in Section 4001(a)(3) and Section 3(37) of ERISA) or a “multiple employer plan” (as defined in Section 4063 or 4064 of ERISA). Furthermore, no Company Benefit Plan is a “defined benefit plan” as defined in Section 3(35) of ERISA or plan subject to Part 3, Subtitle B of Title I of ERISA, Section 412 of the Code or Title IV of ERISA. Neither the Company, its subsidiaries nor any of their ERISA Affiliates has incurred or reasonably expects to incur any material liability under Sections 4975 or 4980B of the Code. Each Company Benefit Plan 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 cause the loss of such qualification, except where such act or failure to act would not, individually or in the aggregate, result in a Material Adverse Change.

(*ff*) **Brokers.** Except for the underwriting discounts and commissions payable to the Underwriter as described in the Time of Sale Prospectus and the Prospectus, 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 the transactions contemplated by this Agreement.

(*gg*) **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.

(hh) 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. Except as described in the Applicable Prospectus, each of the Company and its subsidiaries: (A) is and at all times has been in material compliance with all statutes, rules or regulations applicable to the ownership, testing, development, manufacture, packaging, processing, use, distribution, marketing, labeling, promotion, sale, offer for sale, storage, import, export or disposal of any product under development, manufactured or distributed by the Company (“**Applicable Laws**”); (B) 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 (the “**FDA**”) or any other federal, state, local or foreign governmental or regulatory authority alleging or asserting material noncompliance with any Applicable Laws or any licenses, certificates, approvals, clearances, authorizations, permits and supplements or amendments thereto required by any such Applicable Laws (“**Authorizations**”); (C) possesses all material Authorizations and such Authorizations are valid and in full force and effect and the Company is not in material violation of any term of any such Authorizations; (D) has not received notice of any claim, action, suit, proceeding, hearing, enforcement, investigation, arbitration or other action from the FDA or any other federal, state, local or foreign governmental or regulatory authority or third party alleging that any product operation or activity is in material violation of any Applicable Laws or Authorizations and has no knowledge that the FDA or any other federal, state, local or foreign governmental or regulatory authority or third party is considering any such claim, litigation, arbitration, action, suit, investigation or proceeding; (E) has not received notice that the FDA or any other federal, state, local or foreign governmental or regulatory authority has taken, is taking or intends to take action to limit, suspend, modify or revoke any material Authorizations and has no knowledge that the FDA or any other federal, state, local or foreign governmental or regulatory authority is considering such action; (F) has filed, obtained, maintained or submitted all material reports, documents, forms, notices, applications, records, claims, submissions and supplements or amendments as required by any Applicable Laws or Authorizations and that all such reports, documents, forms, notices, applications, records, claims, submissions and supplements or amendments were materially complete and correct on the date filed (or were corrected or supplemented by a subsequent submission); and (G) has not, either voluntarily or involuntarily, initiated, conducted, or issued or caused to be initiated, conducted or issued, any recall, market withdrawal or replacement, safety alert, “dear doctor” letter, or other notice or action relating to the alleged lack of safety or efficacy of any product or any alleged product defect or violation and, to the Company’s knowledge, no third party has initiated, conducted or intends to initiate any such notice or action.

(ii) 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.

(jj) Foreign Corrupt Practices Act. Neither the Company nor any of its subsidiaries nor, to the knowledge of the Company, 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 knowledge of the Company, the Company’s affiliates have conducted their respective businesses in compliance with the FCPA.

(kk) *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 knowledge of the Company, threatened.

(ll) *OFAC.* Neither the Company nor any of its subsidiaries nor, to the knowledge of the Company, 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.

(mm) *Clinical Studies.* The studies, tests and preclinical and clinical trials conducted by or on behalf of the Company or any of its subsidiaries were and, if still pending, are being conducted in all material respects in accordance 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 (collectively, “**FFDCA**”); the descriptions of the results of such studies, tests and trials contained in the Registration Statement and the Applicable Prospectus are accurate and complete in all material respects and fairly present the data derived from such studies, tests and trials; except as disclosed in the 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 results, test results, or trial results described or referred to in the Registration Statement, the Applicable Prospectus when viewed in the context in which such results are described and the clinical state of development; and, since December 31, 2007, the Company has not received any notices or correspondence from the FDA or any other federal, state, local or foreign governmental or regulatory 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.

Any certificate signed by any officer of the Company or any of its subsidiaries and delivered to the Underwriter or to counsel for the Underwriter shall be deemed a representation and warranty by the Company to the Underwriter as to the matters covered thereby. The Company acknowledges that the Underwriter and, for purposes of the

opinions to be delivered pursuant to Section 6 hereof, counsel to the Company and counsel to the Underwriter, 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 Underwriter an aggregate of 6,700,000 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 Underwriter agrees to purchase from the Company such number of Firm Shares. The purchase price per Firm Share to be paid by the Underwriter to the Company shall be \$7.52 per share.

(b) *The First Closing Date.* The closing of the issuance and sale of the Firm Shares to be purchased by the Underwriter and payment therefor shall be made at the offices of Barclays Capital Inc., 745 Seventh Avenue, New York, New York (or such other place as may be agreed to by the Company and the Underwriter) at 9:00 a.m. New York time, on April 13, 2011, or such other time and date not later than 1:30 p.m. New York time, on April 27, 2011 as the Underwriter shall designate by notice to the Company (the time and date of such closing are called the “**First Closing Date**”). The Company hereby acknowledges that circumstances under which the Underwriter may provide notice to postpone the First Closing Date as originally scheduled include, but are in no way limited to, any determination by the Company or the Underwriter to recirculate to the public copies of an amended or supplemented Prospectus.

(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 Underwriter to purchase up to an aggregate of 1,005,000 Optional Shares from the Company at the purchase price per share to be paid by the Underwriter for 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 Underwriter 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 Underwriter are exercising the option, (ii) the names and denominations in which the Optional Shares are to be registered and (iii) the time, date and place at which such Optional Shares 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 Underwriter and shall not be earlier than three nor later than five full business days after delivery of such notice of exercise. If any Optional Shares are to be purchased, the Underwriter agrees to purchase such number of Optional Shares and the Company agrees to sell the Optional Shares to the Underwriter. The Underwriter 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 Underwriter hereby advises the Company that the Underwriter intends to offer for sale to the public, initially on the terms set forth in the Time of Sale Prospectus and the Prospectus, the Offered Shares as soon after this

Agreement has been executed as the Underwriter, in its sole judgment, has 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.

(f) *Delivery of the Offered Shares.* The Company shall deliver, or cause to be delivered, to the Underwriter 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 Underwriter, the Optional Shares the Underwriter has agreed to purchase at the First Closing Date, if any, 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. 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 Underwriter.

Section 3. Additional Covenants of the Company

The Company further covenants and agrees with the Underwriter as follows:

(a) *Delivery of Registration Statement, Time of Sale Prospectus and Prospectus.* The Company 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, the Prospectus and any supplements and amendments thereto or to the Registration Statement as you may reasonably request.

(b) *Underwriter's Review of Proposed Amendments and Supplements.* Prior to amending or supplementing the Registration Statement, any preliminary prospectus, the Time of Sale Prospectus or the Prospectus (including any amendment or supplement through incorporation of any report filed under the Exchange Act) during the Prospectus Delivery Period, the Company shall furnish to the Underwriter 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, and the Company shall not file or use any such proposed amendment or supplement without the Underwriter's consent, and to 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 Underwriter 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 Underwriter's consent. The Company shall furnish to the Underwriter, without charge, as many copies of any free writing prospectus prepared by or on behalf of, or used by the Company, as the Underwriter may reasonably request. If during the Prospectus Delivery Period (but in any event if at any time through and including the First Closing Date) 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 the 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 Underwriter 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 Underwriter's consent.

(d) *Filing of Underwriter Free Writing Prospectuses.* The Company shall not take any action that would result in an 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 Underwriter that the Underwriter 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 Prospectus is 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 the Registration Statement, or if, in the opinion of counsel for the Underwriter, 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)) forthwith prepare, file with the Commission and furnish, at its own expense, to the Underwriter and to any dealer upon request, either 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 the 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 and during the Prospectus Delivery Period, the Company shall promptly advise the Underwriter 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 the Registration Statement or any amendment or supplement to any preliminary prospectus, the Time of Sale Prospectus, any free writing prospectus or the Prospectus, (iii) of the time and date that any post-effective amendment to the Registration Statement becomes effective and (iv) of the issuance by the Commission of any stop order suspending the effectiveness of the Registration Statement or any post-effective amendment thereto or any amendment or supplement to any preliminary prospectus, the Time of Sale Prospectus or the

Prospectus or of any order preventing or suspending the use of any preliminary prospectus, the Time of Sale Prospectus, any free writing prospectus or the 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), Rule 433 and Rule 430A, 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 the Prospectus and Other Securities Act Matters. If during the Prospectus Delivery Period, any event shall occur or condition exist as a result of which it is necessary to amend or supplement the Prospectus so that the 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 the Prospectus is delivered to a purchaser, not misleading, or if in the opinion of the Underwriter or counsel for the Underwriter it is otherwise necessary to amend or supplement the 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 Underwriter and to dealers, amendments or supplements to the Prospectus so that the statements in the 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 the Prospectus is delivered to a purchaser, be misleading or so that the Prospectus, as amended or supplemented, will comply with applicable law including the Securities Act. Neither the Underwriter's consent to, or 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 Underwriter and counsel for the Underwriter to qualify or register the Offered Shares for sale under (or obtain exemptions from the application of) the state securities, blue sky laws or Canadian provincial securities laws of those jurisdictions designated by the Underwriter, 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. 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 Underwriter promptly upon receipt of notice 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 no later than 75 days after the end of the twelve-month period beginning at the end of the fiscal quarter during which the date of this Agreement occurs, the Company will make generally available to its security holders and to the Underwriter an earnings statement (which need not be audited) covering a period of at least such twelve months which shall satisfy the provisions of Section 11(a) of the Securities Act and the rules and regulations of the Commission thereunder.

(l) *Periodic Reporting Obligations.* The Company shall file, on a timely basis, with the Commission and the Nasdaq Global Market all reports and documents required to be filed under the Exchange Act. During the Prospectus Delivery Period, the Company will 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 effect and maintain the quotation of the Offered Shares on the Nasdaq Global Market at the time of the First Closing Date.

(n) *Company to Provide Copy of the Prospectus 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 the Underwriter an “**electronic Prospectus**” to be used by the Underwriter 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 the Underwriter, that may be transmitted electronically by the Underwriter 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 the Underwriter, 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 the Prospectus filed pursuant to EDGAR or otherwise with the Commission and in the 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 90 days following the date of the Prospectus (as the same may be extended as described below, the “**Lock-up Period**”), the Company will not, without the prior written consent of the Underwriter (which consent may be withheld at the sole discretion of the Underwriter), 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 except for a registration statement on Form S-8 relating to the Company’s employee benefit plans 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; other than (i) the issuance of restricted Common Stock, restricted stock units or options to acquire Common Stock pursuant to the Company's employee benefit plans, qualified stock option plans or other employee compensation plans as such plans are in existence on the date hereof and described in the Applicable Prospectus, (ii) issuances of Common Stock upon the exercise or settlement of options or restricted stock units disclosed as outstanding in Applicable Prospectus; (iii) the issuance by the Company of up to 2,250,000 shares of Common Stock as consideration for strategic alliances, occurring after the date of this Agreement; provided that each recipient of shares pursuant to this clause (iii) agrees that all such shares remain subject to restrictions substantially similar to those contained in this subsection 3(o); or (iv) the purchase or sale of the Company's securities pursuant to a plan, contract or instruction, if any, that satisfies all of the requirements of Rule 10b5-1(c)(1)(i)(B) that was in effect prior to the date hereof. Notwithstanding the foregoing, if (x) 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 (y) 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 the Underwriter waives, in writing, such extension (which waiver may be withheld at the sole discretion of the Underwriter), except that such extension will not apply if, (i) within three business days prior to the 15th calendar day before the last day of the Lock-up Period, the Company delivers a certificate, signed by the Chief Financial Officer or Chief Executive Officer of the Company, certifying on behalf of the Company that (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) are not applicable to any research reports relating to the Company published or distributed by the Underwriter 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 Underwriter with prior notice of any such announcement that gives rise to an extension of the Lock-up Period.

(p) *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.

(q) *No Stabilization or Manipulation; Compliance with Regulation M.* The Company will not take, directly or indirectly, any action designed or intended 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 Underwriter (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.

(r) *Existing Lock-Up Agreement.* During the Lock-up Period, the Company will not waive any 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(h).

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 transactions contemplated hereby, 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 necessary issue, transfer and other stamp taxes in connection with the issuance and sale of the Offered Shares to the Underwriter, (iv) all fees and expenses of the Company's counsel, independent registered public accounting firm and other advisors, (v) all costs and expenses incurred in connection with the preparation, printing, filing, shipping and distribution of the Registration Statement (including financial statements, exhibits, schedules, consents and certificates of experts), the Time of Sale Prospectus, the Prospectus, 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 Underwriter 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 Underwriter, preparing and printing a "Blue Sky Survey" or memorandum and a "Canadian wrapper", and any supplements thereto, advising the Underwriter of such qualifications, registrations, determinations and exemptions, (vii) the fees and expenses associated with listing of the Offered Shares on the Nasdaq Global Market, and (viii) all other fees, costs and expenses of the nature referred to in Item 14 of Part II of the Registration Statement. Except as provided in this Section 4, Section 7, Section 9, Section 10 and Section 11 hereof, the Underwriter shall pay its own expenses, including the fees and disbursements of its counsel.

Section 5. Covenant of the Underwriter. The Underwriter 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 Underwriter.

Section 6. Conditions of the Obligations of the Underwriter. The obligations of the Underwriter 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 Underwriter 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 Underwriter, in form and substance satisfactory to the Underwriter, 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 Statement, any preliminary prospectus, the Prospectus, the Time of Sale Prospectus, and each free writing prospectus, if any, and (ii) confirming that they are (A) independent registered public accounting firm with respect to the Company 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 Prospectus with the Commission (including the information previously omitted from the Registration Statement 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;

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

(iii) the 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 Underwriter 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 Underwriter shall have received the opinion of Morgan, Lewis & Bockius LLP, counsel for the Company, dated as of such Closing Date, the form of which is attached as Exhibit A and to such further effect as counsel for the Underwriter shall reasonably request. Such counsel shall also have furnished to you a written "negative assurance letter", addressed to you and dated each of the First Closing Date and Option Closing Date, in form and substance reasonably satisfactory to you.

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

(f) *Officers' Certificate.* On each of the First Closing Date and each Option Closing Date the Underwriter 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 that are not qualified by “materiality” or “Material Adverse Change” are true and correct in all material respect and the representations, warranties and covenants that are so qualified are true and correct in all respects, in each case, with the same force and effect as though expressly made on and as of such Closing Date;

(iii) they have examined the Registration Statement, the Prospectus and the Time of Sale Prospectus, and, in their opinion, (A) (1) the Registration Statement, as of the time it became effective, (2) the Prospectus, as of its date and at such First Closing Date or Option Closing Date, as applicable, and (3) the Time of Sale Prospectus, as of the Applicable Time, did not and do not contain an untrue statement of a material fact and did not and do not omit to state a material fact required to be stated therein or necessary to make the statements therein (except in the case of the Registration Statement, in the light of the circumstances under which they were made) not misleading, and (B) since the date the Registration Statement became effective, no event has occurred that should have been set forth in a supplement or amendment to the Registration Statement, the Prospectus or any free writing prospectus that has not been so set forth; and

(iv) 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.

(g) *Bring-down Comfort Letter.* On each of the First Closing Date and each Option Closing Date the Underwriter shall have received from Ernst & Young LLP, independent registered public accounting firm for the Company, a letter dated such date, in form and substance satisfactory to the Underwriter, 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 three business days prior to the First Closing Date or the applicable Option Closing Date, as the case may be.

(h) *Lock-Up Agreement from Certain Securityholders of the Company.* On or prior to the date hereof, the Company shall have furnished to the Underwriter an agreement in the form of Exhibit C-1 or Exhibit C-2 hereto, as applicable, from the persons listed on Exhibit B hereto, and such agreement shall be in full force and effect on each of the First Closing Date and each Option Closing Date.

(i) *Additional Documents.* On or before each of the First Closing Date and each Option Closing Date, the Underwriter and counsel for the Underwriter 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 satisfactory in form and substance to the Underwriter and counsel for the Underwriter.

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 Underwriter 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 7, Section 9 and Section 13 shall at all times be effective and shall survive such termination.

Section 7. Reimbursement of Underwriter's Expenses. If this Agreement is terminated by the Underwriter pursuant to Section 6 or Section 11, or if the sale to the Underwriter 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 Underwriter, upon demand for all out-of-pocket expenses that shall have been reasonably incurred by the Underwriter 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 not become effective until the execution of this Agreement by the each of the parties hereto.

Section 9. Indemnification.

(a) *Indemnification of the Underwriter.* The Company agrees to indemnify and hold harmless the Underwriter, its directors, officers and employees, and each person, if any, who controls the 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 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 at common law or otherwise (including in settlement of any litigation), 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) (A) any untrue statement or alleged untrue statement of a material fact contained in the Registration Statement, or any amendment thereto, including any information deemed to be a part thereof pursuant to Rule 430A 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 (B) 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 the 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; or (ii) the violation of any laws or regulations of foreign jurisdictions where Offered Shares have been offered or sold; and to reimburse the Underwriter and each such director, officer, employee and controlling person for any and all expenses (including the fees and disbursements of counsel chosen by the Underwriter) as such expenses are reasonably incurred by the Underwriter or such 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 Underwriter expressly for use in the Registration Statement, any preliminary prospectus, the Time of Sale Prospectus, any such free writing prospectus or the Prospectus (or any amendment or supplement thereto), it being understood and agreed that the only such information furnished by the Underwriter 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, and its Directors and Officers. The Underwriter agrees to indemnify and hold harmless the Company, each of its directors, each of its officers who signed the Registration Statement 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 the 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 the 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 the 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 the 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, the Prospectus (or such amendment or supplement thereto), in reliance upon and in conformity with written information furnished to the Company by the Underwriter expressly for use therein; and to reimburse the Company, or any such director, officer or controlling person for any legal and other expense 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 Underwriter has furnished to the Company expressly for use in the 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 the Prospectus (or any amendment or supplement thereto) are the statements set forth in the first sentence of the fourth paragraph and the eleventh paragraph under the caption "Underwriting" in the Prospectus. The indemnity agreement set forth in this Section 9(b) shall be in addition to any liabilities that the 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 omission so to notify the indemnifying party will not relieve it from any

liability which it may have to any indemnified party contained in paragraph (a) or (b) of this Section 9 or to the extent it is not prejudiced as a proximate result of 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 (such approval not unreasonably withheld or delayed), 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 the Underwriter (in the case of counsel for the indemnified parties referred to in Section 8(a) above) or by the Company (in the case of counsel for the indemnified parties referred to in Section 8(b) above)); (ii) the indemnifying party shall not have employed counsel 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 45 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 Underwriter, 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 Underwriter, 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 Underwriter, 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 Underwriter, in each case as set forth on the front cover page of the Prospectus bear to the aggregate initial public offering price of the Offered Shares as set forth on such cover. The relative fault of the Company, on the one hand, and the Underwriter, 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 Underwriter, 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 Underwriter agree that it would not be just and equitable if contribution pursuant to this Section 10 were determined by pro rata allocation 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, the Underwriter shall not be required to contribute any amount in excess of the underwriting discounts and commissions received by the 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. For purposes of this Section 10, each officer and employee of the Underwriter and each person, if any, who

controls the Underwriter within the meaning of the Securities Act or the Exchange Act shall have the same rights to contribution as the Underwriter, and each director of the Company, each officer of the Company who signed the Registration Statement, 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. Termination of this Agreement. Prior to the purchase of the Firm Shares by the Underwriter on the First Closing Date this Agreement may be terminated by the Underwriter 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 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 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 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 Underwriter 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 the Prospectus or to enforce contracts for the sale of securities; or (iv) the Company shall have sustained a loss by strike, fire, flood, earthquake, accident or other calamity of such character as in the judgment of the Underwriter may interfere materially with the conduct of the business and operations of the Company regardless of whether or not such loss shall have been insured. Any termination pursuant to this Section 11 shall be without liability on the part of (a) the Company to the Underwriter, except that the Company shall be obligated to reimburse the expenses of the Underwriter pursuant to Section 7 hereof, (b) the 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 12. 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 Underwriter, on the other hand, (b) in connection with the offering contemplated hereby and the process leading to such transaction the 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) the Underwriter has not assumed and will not 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 the Underwriter has advised or is currently advising the Company on other matters) and the Underwriter does not have any obligation to the Company with respect to the offering contemplated hereby except the obligations expressly set forth in this Agreement, (d) the Underwriter and its respective affiliates may be engaged in a broad range of transactions that involve interests that differ from those of the Company, and (e) the Underwriter has 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 13. Representations and Indemnities to Survive Delivery. The respective indemnities, agreements, representations, warranties and other statements of the Company, of its officers and of the Underwriter 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 the 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 (solely with respect to Sections 1, 4, 7, 9, 10, 11, 12, 13, 14, 15, 16, 17 and 18 hereof) any termination of this Agreement.

Section 14. 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 Underwriter:

Barclays Capital Inc.
745 Seventh Avenue
New York, New York 10019
Facsimile: (646) 834-8133
Attention: Syndicate Registration

with a copy to:

Barclays Capital Inc.
745 Seventh Avenue
New York, New York 10019
Facsimile: (646) 834-8133
Attention: Director of Litigation, Office of the General Counsel

If to the Company:

Sangamo BioSciences, Inc.
501 Canal Boulevard, Suite A100
Richmond, California 94805
Facsimile: (510) 236-8951
Attention: H. Ward Wolff

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

Section 15. Successors. This Agreement will inure to the benefit of and be binding upon the parties hereto, and to the benefit of the employees, officers and directors and controlling persons referred to in Section 9 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 the Underwriter merely by reason of such purchase.

Section 16. 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 17. 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 18. 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 the Registration Statement, any preliminary prospectus, the Time of Sale Prospectus, each free writing prospectus and the 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,
SANGAMO BIOSCIENCES, INC.

By: /s/ H. Ward Wolff
Name: H. Ward Wolff
Title: Executive Vice President and
Chief Financial Officer

The foregoing Underwriting Agreement is hereby confirmed and accepted by the Underwriter in New York, New York as of the date first above written.

BARCLAYS CAPITAL INC.

By: /s/ Victoria Hale
Name: Victoria Hale
Title: Vice President

SCHEDULE A

None.

SCHEDULE B

Total number of Firm Shares being offered: 6,700,000

Total number of Optional Shares: 1,005,000

Price per Share to the public: \$7.70

Gross proceeds to be received by the Company: \$51,590,000

April 8, 2011

Sangamo BioSciences, Inc.
501 Canal Boulevard
Richmond, CA 94804

Ladies and Gentlemen:

We have acted as counsel to Sangamo BioSciences, Inc., a Delaware corporation (the "Company"), in connection with its filing of the registration statement (Reg. No. 333-157732) on Form S-3 (the "Registration Statement") under the Securities Act of 1933, as amended (the "Act"), with the Securities and Exchange Commission (the "SEC") on March 5, 2009 and with its filing of the prospectus supplement together with the prospectus contained in the Registration Statement (together, the "Prospectus") with the SEC on the date hereof pursuant to Rule 424(b)(5) under the Act. The Registration Statement relates to the proposed offer and sale by the Company of its common stock, \$0.01 par value per share (the "Common Stock"), preferred stock, debt securities warrants to purchase Common Stock, and warrants to purchase preferred stock from time to time, as set forth in the prospectus contained in the Registration Statement, and as shall be set forth in one or more supplements to the prospectus contained in the Registration Statement with an aggregate offering price of \$100,000,000. The Prospectus relates to the proposed issuance and sale by the Company of up to 6,700,000 shares of Common Stock (the "Shares").

In connection with this opinion letter, we have examined the Registration Statement and the Prospectus and originals, or copies certified or otherwise identified to our satisfaction, of the certificate of incorporation, as amended through the date hereof, and bylaws, as in effect on the date hereof, of the Company, and such other documents, records and other instruments, including resolutions adopted by the board of directors of the Company and the pricing committee of the board of directors of the Company at meetings of the board of directors or by written consent of such committee regarding the transactions contemplated by the Prospectus (the "Resolutions"), as we have deemed appropriate for purposes of the opinion set forth herein.

We have assumed the genuineness of all signatures, the legal capacity of all natural persons, the authenticity of the documents submitted to us as originals, the conformity with the originals of all documents submitted to us as certified, facsimile or photostatic copies and the authenticity of the originals of all documents submitted to us as copies.

Based upon the foregoing, we are of the opinion that the Shares have been duly authorized by the Company and, when issued and sold by the Company and delivered by the Company against receipt of the purchase price therefor, in the manner contemplated by the Prospectus and in accordance with the conditions set forth in the Resolutions, will be validly issued, fully paid and non-assessable.

The opinions expressed herein are limited to the Delaware General Corporation Law.

We hereby consent to the use of this opinion as Exhibit 5.1 to the Registration Statement and to the reference to us under the caption "Legal Matters" in the Prospectus. In giving such consent, we do not hereby admit that we are acting within the category of persons whose consent is required under Section 7 of the Act or the rules and regulations of the SEC thereunder.

Very truly yours,

/s/ **Morgan, Lewis & Bockius LLP**



Sangamo BioSciences, Inc.
 Point Richmond Tech Center
 501 Canal Boulevard
 Richmond, CA 94804
 510-970-6000 — 510-236-8951(Fax)

SANGAMO ANNOUNCES PRICING OF PUBLIC OFFERING OF COMMON STOCK

Richmond, Calif. – April 8, 2011— Sangamo BioSciences, Inc. (Nasdaq: SGMO) today announced the pricing of its previously announced public offering of 6,700,000 shares of its common stock at a price to the public of \$7.70 per share. The public offering is expected to close on or around Wednesday, April 13, 2011, subject to customary closing conditions. Barclays Capital Inc. is the sole book-running manager in this offering and Sangamo has granted the underwriter a thirty (30) day option to purchase up to 1,005,000 additional shares.

The securities described above are being offered by Sangamo pursuant to a shelf registration statement previously filed with and declared effective by the Securities and Exchange Commission (the “SEC”) on June 16, 2009. Copies of the prospectus supplement and the related prospectus, when available, may be obtained from Barclays Capital Inc., c/o Broadridge Financial Solutions, 1155 Long Island Avenue, Edgewood, New York 11717; Barclaysprospectus@broadridge.com (phone: 888-603-5847).

This press release shall not constitute an offer to sell or the solicitation of an offer to buy, nor shall there be any sale of, the shares in any state or other jurisdiction 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 Sangamo BioSciences, Inc.

Sangamo BioSciences, Inc. is focused on research and development of novel DNA-binding proteins for therapeutic gene regulation and modification. The most advanced ZFP Therapeutic® development program is currently in a Phase 2b clinical trial for evaluation of safety and clinical effect in patients with diabetic neuropathy. Sangamo also has a Phase 1/2 clinical trial and two ongoing Phase 1 clinical trials to evaluate safety and clinical effect of a treatment for HIV/AIDS as well as a Phase 1 trial of a treatment for recurrent glioblastoma multiforme. Other therapeutic development programs are focused on Parkinson’s disease, monogenic diseases, neuropathic pain and nerve regeneration. Sangamo’s core competencies enable the engineering of a class of DNA-binding proteins called zinc finger DNA-binding proteins (ZFPs). By engineering ZFPs that recognize a specific DNA sequence Sangamo has created ZFP transcription factors (ZFP TFs) that can control gene expression and, consequently, cell function. Sangamo is also developing sequence-specific ZFP Nucleases (ZFNs) for gene modification. Sangamo has established strategic partnerships with companies in non-therapeutic applications of its technology including Dow AgroSciences and Sigma-Aldrich Corporation. For more information about Sangamo, visit the company’s website at www.sangamo.com. ZFP Therapeutic® is a registered trademark of Sangamo BioSciences, Inc.

This press release may contain forward-looking statements based on Sangamo’s current expectations. These forward-looking statements include, without limitation, references to Sangamo’s public offering of common stock, the anticipated timing of the closing of the offering, the research and development of novel ZFP TFs and ZFNs and therapeutic applications of Sangamo’s ZFP technology platform. Actual results may differ materially from these forward-looking statements due to a number of factors, including, risks and uncertainties associated with market conditions and the satisfaction of customary closing conditions related to the proposed offering, technological challenges, Sangamo’s ability to develop commercially viable products and technological developments by our competitors. See the

company's SEC filings, and in particular, the risk factors described in the company's Annual Report on Form 10-K and its most recent quarterly report on Form 10-Q and Form 8-K. Sangamo assumes no obligation to update the forward-looking information contained in this press release.

Contact

Sangamo BioSciences, Inc.

Elizabeth Wolffe, Ph.D.

510-970-6000, x271

ewolffe@sangamo.com

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