

**UNITED STATES  
SECURITIES AND EXCHANGE COMMISSION**

Washington, D.C. 20549

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**FORM 8-K**

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

Date of report (Date of earliest event reported): **February 3, 2011**

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**ZIOPHARM Oncology, Inc.**

(Exact Name of Registrant as Specified in Charter)

**Delaware**  
(State or Other Jurisdiction  
of Incorporation)

**001-33038**  
(Commission File Number)

**84-1475672**  
(IRS Employer  
Identification No.)

**1180 Avenue of the Americas  
19<sup>th</sup> Floor  
New York, NY**  
(Address of Principal Executive Offices)

**10036**  
(Zip Code)

**(646) 214-0700**  
(Registrant's telephone number, including area code)

**Not applicable**  
(Former Name or Former Address, if Changed Since Last Report)

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Check the appropriate box below if the Form 8-K is intended to simultaneously satisfy the filing obligation of the registrant under any of the following provisions:

- Written communications pursuant to Rule 425 under the Securities Act (17 CFR 230.425).
  - Soliciting material pursuant to Rule 14a-12 under the Exchange Act (17 CFR 240.14a-12).
  - Pre-commencement communications pursuant to Rule 14d-2(b) under the Exchange Act (17 CFR 240.14d-2(b)).
  - Pre-commencement communications pursuant to Rule 13e-4(c) under the Exchange Act (17 CFR 240.13e-4(c)).
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**Item 1.01 Entry into a Material Definitive Agreement.**

On February 3, 2011, ZIOPHARM Oncology, Inc. (the “Company”) entered into an underwriting agreement (the “Underwriting Agreement”) with Barclays Capital Inc. (the “Underwriter”) relating to the issuance and sale of 9,600,000 shares of the Company’s common stock, par value \$0.001 per share. The price to the public in this offering is \$5.75 per share, and the Underwriter has agreed to purchase the shares from the Company pursuant to the Underwriting Agreement at a purchase price of \$5.425 per share. Under the terms of the Underwriting Agreement, the Company has also granted the Underwriter an option, exercisable for 30 days, to purchase up to an additional 1,440,000 shares of common stock at a purchase price of \$5.425 per share. The net proceeds to the Company from this offering are expected to be approximately \$51.6 million, after deducting underwriting discounts and commissions and estimated offering expenses payable by the Company, assuming no exercise by the Underwriter of its option to purchase additional shares of common stock. The transactions contemplated by the Underwriting Agreement are expected to close on or about February 8, 2011, subject to the satisfaction of customary closing conditions.

The offering is being made pursuant to the Company’s effective registration statement on Form S-3 (Registration Statement No. 333-166444) previously filed with the Securities and Exchange Commission, and a prospectus supplement thereunder. The Underwriting Agreement is filed as Exhibit 1.1 to this report, and the description of the terms of the Underwriting Agreement is qualified in its entirety by reference to such exhibit. The benefits and representations and warranties set forth in the Underwriting Agreement are not intended to and do not constitute continuing representations and warranties of the Company to persons not a party thereto, including without limitation, any future or other investor. A copy of the opinion of Maslon Edelman Borman & Brand, LLP relating to the legality of the issuance and sale of the shares in the offering is attached as Exhibit 5.1 hereto.

On February 3, 2011, the Company issued a press release announcing that it had priced the offering. The press release is attached as Exhibit 99.1.

**Item 9.01 Financial Statements and Exhibits.**

(d) Exhibits

<u>Exhibit No.</u>	<u>Description</u>
1.1	Underwriting Agreement dated February 3, 2011 between ZIOPHARM Oncology, Inc. and Barclays Capital Inc.
5.1	Opinion of Maslon Edelman Borman & Brand, LLP
23.1	Consent of Maslon Edelman Borman & Brand, LLP (included as part of Exhibit 5.1)
99.1	Press Release, dated February 3, 2011

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SIGNATURES

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

ZIOPHARM Oncology, Inc.

Date: February 4, 2011

By: /s/ Richard Bagley

Name: Richard Bagley

Title: President, Chief Operating Officer and Chief  
Financial Officer

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## INDEX OF EXHIBITS

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9,600,000 Shares

ZIOPHARM ONCOLOGY, INC.

Common Stock

(\$0.001 par value per Share)

**UNDERWRITING AGREEMENT**

February 3, 2011

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

Ladies and Gentlemen:

ZIOPHARM Oncology, Inc., a Delaware corporation (the “**Company**”), proposes to sell 9,600,000 shares (the “**Firm Stock**”) of the Company’s common stock, par value \$0.001 per share (the “**Common Stock**”). In addition, the Company proposes to grant to Barclays Capital Inc., as the sole underwriter (the “**Underwriter**”), an option to purchase up to 1,440,000 additional shares of the Common Stock on the terms set forth in Section 2 (the “**Option Stock**”). The Firm Stock and the Option Stock, if purchased, are hereinafter collectively called the “**Stock.**” This is to confirm the agreement (this “**Agreement**”) concerning the purchase of the Stock from the Company by the Underwriter.

1. *Representations, Warranties and Agreements of the Company.* The Company represents, warrants and agrees that:

(a) A registration statement on Form S-3 relating to the Stock has (i) been prepared by the Company in conformity with the requirements of the Securities Act of 1933, as amended (the “**Securities Act**”), and the rules and regulations (the “**Rules and Regulations**”) of the Securities and Exchange Commission (the “**Commission**”) thereunder; (ii) been filed with the Commission under the Securities Act; and (iii) become effective under the Securities Act. Copies of such registration statement and any amendment thereto have been delivered by the Company to you as the Underwriter. As used in this Agreement:

(i) “**Applicable Time**” means 8:50 a.m. (New York City time) February 3, 2011;

(ii) “**Effective Date**” means any date as of which any part of such registration statement relating to the Stock became, or is deemed to have become, effective under the Securities Act in accordance with the Rules and Regulations of effective by the Commission;

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(iii) “**Issuer Free Writing Prospectus**” means each “free writing prospectus” (as defined in Rule 405 of the Rules and Regulations) prepared by or on behalf of the Company or used or referred to by the Company in connection with the offering of the Stock;

(iv) “**Preliminary Prospectus**” means any preliminary prospectus relating to the Stock included in such registration statement or filed with the Commission pursuant to Rule 424(b) of the Rules and Regulations, including any preliminary prospectus supplement thereto relating to the Stock;

(v) “**Pricing Disclosure Package**” means, as of the Applicable Time, the most recent Preliminary Prospectus, together with each Issuer Free Writing Prospectus filed or used by the Company on or before the Applicable Time, other than a road show that is an Issuer Free Writing Prospectus under Rule 433 of the Rules and Regulations;

(vi) “**Prospectus**” means the final prospectus relating to the Stock, including any prospectus supplement thereto relating to the Stock, as filed with the Commission pursuant to Rule 424(b) of the Rules and Regulations; and

(vii) “**Registration Statement**” means, collectively, the various parts of such registration statement, each as amended as of the Effective Date for such part, including any Preliminary Prospectus or the Prospectus and all exhibits to such registration statement.

Any reference to any Preliminary Prospectus or the Prospectus shall be deemed to refer to and include any documents incorporated by reference therein pursuant to Form S-3 under the Securities Act as of the date of such Preliminary Prospectus or the Prospectus, as the case may be. Any reference to the “**most recent Preliminary Prospectus**” shall be deemed to refer to the latest Preliminary Prospectus included in the Registration Statement or filed pursuant to Rule 424(b) prior to or on the date hereof (including, for purposes hereof, any documents incorporated by reference therein prior to or on the date hereof). Any reference to any amendment or supplement to any Preliminary Prospectus or the Prospectus shall be deemed to refer to and include any document filed under the Securities Exchange Act of 1934, as amended (the “**Exchange Act**”), after the date of such Preliminary Prospectus or the Prospectus, as the case may be, and incorporated by reference in such Preliminary Prospectus or the Prospectus, as the case may be; and any reference to any amendment to the Registration Statement shall be deemed to include any annual report of the Company on Form 10-K filed with the Commission pursuant to Section 13(a) or 15(d) of the Exchange Act after the Effective Date that is incorporated by reference in the Registration Statement. Any reference herein to the term “Registration Statement” shall be deemed to include any registration statement to register additional shares of Common Stock under Rule 462(b) of the Rules and Regulations (the “**Rule 462(b) Registration Statement**”). The Commission has not issued any order preventing or suspending the use of any Preliminary Prospectus or the Prospectus or suspending the effectiveness of the Registration Statement, and no proceeding or examination for such purpose has been instituted or threatened by the Commission.

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(b) The Company was not at the time of initial filing of the Registration Statement and at the earliest time thereafter that the Company or another offering participant made a *bona fide* offer (within the meaning of Rule 164(h)(2) of the Rules and Regulations) of the Stock, is not on the date hereof and will not be on the applicable Delivery Date an “ineligible issuer” (as defined in Rule 405 of the Rules and Regulations). The Company has been since the time of initial filing of the Registration Statement and continues to be eligible to use Form S-3 for the offering of the Stock.

(c) The Registration Statement conformed and will conform in all material respects on the Effective Date and on the applicable Delivery Date, and any amendment to the Registration Statement filed after the date hereof will conform in all material respects when filed, to the requirements of the Securities Act and the Rules and Regulations. The most recent Preliminary Prospectus conformed, and the Prospectus will conform, in all material respects when filed with the Commission pursuant to Rule 424(b) and on the applicable Delivery Date to the requirements of the Securities Act and the Rules and Regulations. The documents incorporated by reference in any Preliminary Prospectus or the Prospectus conformed, and any further documents so incorporated will conform, when filed with the Commission, in all material respects to the requirements of the Exchange Act or the Securities Act, as applicable, and the rules and regulations of the Commission thereunder.

(d) The Registration Statement did not, as of the Effective Date, contain an untrue statement of a material fact or omit to state a material fact required to be stated therein or necessary to make the statements therein not misleading; *provided* that no representation or warranty is made as to information contained in or omitted from the Registration Statement in reliance upon and in conformity with written information furnished to the Company by or on behalf of the Underwriter specifically for inclusion therein, which information is specified in Section 8(e).

(e) The Prospectus will not, as of its date and on the applicable Delivery Date, contain an untrue statement of a material fact or omit to state a material fact required to be stated therein or necessary to make the statements therein, in the light of the circumstances under which they were made, not misleading; *provided* that no representation or warranty is made as to information contained in or omitted from the Prospectus in reliance upon and in conformity with written information furnished to the Company by or on behalf of the Underwriter specifically for inclusion therein, which information is specified in Section 8(e).

(f) The documents incorporated by reference in any Preliminary Prospectus or the Prospectus did not, and any further documents filed and incorporated by reference therein will not, when filed with the Commission, contain an untrue statement of a material fact or omit to state a material fact required to be stated therein or necessary to make the statements therein, in the light of the circumstances under which they were made, not misleading.

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(g) The Pricing Disclosure Package did not, as of the Applicable Time, contain an untrue statement of a material fact or omit to state a material fact necessary to make the statements therein, in the light of the circumstances under which they were made, not misleading; *provided* that no representation or warranty is made as to information contained in or omitted from the Pricing Disclosure Package in reliance upon and in conformity with written information furnished to the Company by or on behalf of the Underwriter specifically for inclusion therein, which information is specified in Section 8(e).

(h) Each Issuer Free Writing Prospectus (including, without limitation, any road show that is a free writing prospectus under Rule 433), when considered together with the Pricing Disclosure Package as of the Applicable Time, did not contain an untrue statement of a material fact or omit to state a material fact required to be stated therein or necessary to make the statements therein, in the light of the circumstances under which they were made, not misleading.

(i) Each Issuer Free Writing Prospectus conformed or will conform in all material respects to the requirements of the Securities Act and the Rules and Regulations on the date of first use, and the Company has complied with any filing requirements applicable to such Issuer Free Writing Prospectus pursuant to the Rules and Regulations. The Company has not made any offer relating to the Stock that would constitute an Issuer Free Writing Prospectus without the prior written consent of the Underwriter. The Company has retained in accordance with the Rules and Regulations all Issuer Free Writing Prospectuses that were not required to be filed pursuant to the Rules and Regulations.

(j) Each of the Company and its subsidiaries (as defined in Section 16) has been duly organized, is validly existing and in good standing as a corporation or other business entity under the laws of its jurisdiction of organization and is duly qualified to do business and in good standing as a foreign corporation or other business entity in each jurisdiction in which its ownership or lease of property or the conduct of its businesses requires such qualification, except where the failure to be so qualified or in good standing could not, in the aggregate, reasonably be expected to have a material adverse effect on the condition (financial or otherwise), results of operations, stockholders' equity, properties, business or prospects of the Company and its subsidiaries taken as a whole (a "**Material Adverse Effect**"). Each of the Company and its subsidiaries has all power and authority necessary to own or hold its properties and to conduct the businesses in which it is engaged, except where the failure to be so qualified or in good standing would not reasonably be expected to result in a Material Adverse Effect. The Company does not own or control, directly or indirectly, any corporation, association or other entity other than ZIOPHARM Oncology Limited, a private limited company incorporated in England and Wales under the Companies Act 1985. ZIOPHARM Oncology Limited, has no assets (other than as statutorily required) or liabilities (contingent or otherwise) and conducts no operations and is not a "significant subsidiary" (as defined in Rule 405).

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(k) The Company has an authorized capitalization as set forth in each of the most recent Preliminary Prospectus and the Prospectus, and all of the issued shares of capital stock of the Company have been duly authorized and validly issued, are fully paid and non-assessable, conform to the description thereof contained in the most recent Preliminary Prospectus and were issued in compliance with federal and state securities laws and not in violation of any preemptive right, resale right, right of first refusal or similar right. No options, warrants or other rights to purchase or exchange any securities for shares of the Company's capital stock are outstanding other than those accurately described in each of the most recent Preliminary Prospectus and the Prospectus, and any of such options, warrants and other rights to purchase or exchange any securities for shares of the Company's capital stock have been duly authorized and validly issued, conform to the description thereof contained in the most recent Preliminary Prospectus and were issued in material compliance with federal and state securities laws. All of the issued shares of capital stock of each subsidiary of the Company have been duly authorized and validly issued, are fully paid and non-assessable and are owned directly or indirectly by the Company, free and clear of all liens, encumbrances, equities or claims, except for such liens, encumbrances, equities or claims as could not, in the aggregate, reasonably be expected to have a Material Adverse Effect.

(l) The shares of the Stock to be issued and sold by the Company to the Underwriter hereunder have been duly authorized and, upon payment and delivery in accordance with this Agreement, will be validly issued, fully paid and non-assessable, will conform to the description thereof contained in the most recent Preliminary Prospectus, will be issued in compliance with federal and state securities laws and will be free of statutory and contractual preemptive rights, rights of first refusal and similar rights, except for such rights as have been duly waived.

(m) The Company has all requisite corporate power and authority to execute, deliver and perform its obligations under this Agreement. This Agreement has been duly and validly authorized, executed and delivered by the Company, and is enforceable against the Company in accordance with its terms, except as rights to indemnification hereunder may be limited by applicable law and except as the enforcement hereof may be limited by bankruptcy, insolvency, reorganization, moratorium or other similar laws relating to or affecting the rights and remedies of creditors or by general equitable principles.

(n) The execution, delivery and performance of this Agreement by the Company, the consummation of the transactions contemplated hereby and the application of the proceeds from the sale of the Stock as described in the most recent Preliminary Prospectus will not (i) conflict with or result in a breach or violation of any of the terms or provisions of, impose any lien, charge or encumbrance upon any property or assets of the Company and its subsidiaries, or constitute a default under, any indenture, mortgage, deed of trust, loan agreement, license or other agreement or instrument to which the Company or any of its subsidiaries is a party or by which the Company or any of its subsidiaries is bound or to which any of the property or assets of the Company or any of its subsidiaries is subject; (ii) result in any violation of the provisions of the charter or by-laws (or similar organizational documents) of the Company or any of its subsidiaries; or (iii) result in any violation of any statute or any order, rule or regulation of any court or governmental agency or body having jurisdiction over the Company or any of its subsidiaries or any of their properties or assets, except in the case of clauses (i) and (iii) above, to the extent any such conflict, breach or violation would not, in the aggregate, reasonably be expected to have a Material Adverse Effect.

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(o) No consent, approval, authorization or order of, or filing or registration with, any court or governmental agency or body having jurisdiction over the Company or any of its subsidiaries or any of their properties or assets is required for the execution, delivery and performance of this Agreement by the Company, the consummation of the transactions contemplated hereby, the application of the proceeds from the sale of the Stock as described in the most recent Preliminary Prospectus, except for the registration of the Stock under the Securities Act and such consents, approvals, authorizations, registrations or qualifications as may be required under the Exchange Act and applicable state securities laws in connection with the purchase and sale of the Stock by the Underwriter or that may be required under applicable state securities or blue sky laws and from the Financial Industry Regulatory Authority (“**FINRA**”).

(p) Other than as disclosed in the most recent Preliminary Prospectus, there are no contracts, agreements or understandings between the Company and any person granting such person the right (other than rights which have been waived in writing or otherwise satisfied) to require the Company to file a registration statement under the Securities Act with respect to any securities of the Company owned or to be owned by such person or to require the Company to include such securities in the securities registered pursuant to the Registration Statement or in any securities being registered pursuant to any other registration statement filed by the Company under the Securities Act.

(q) The Company has not sold or issued any securities that would be integrated with the offering of the Stock contemplated by this Agreement pursuant to the Securities Act, the Rules and Regulations or the interpretations thereof by the Commission.

(r) Neither the Company nor any of its subsidiaries has sustained, since the date of the latest audited financial statements included or incorporated by reference in the most recent Preliminary Prospectus, any loss or interference with its business from fire, explosion, flood or other calamity, whether or not covered by insurance, or from any labor dispute or court or governmental action, order or decree, and since such date, there has not been any change in the capital stock or long-term debt of the Company or any of its subsidiaries or any adverse change, or any development involving a prospective adverse change, in or affecting the condition (financial or otherwise), results of operations, stockholders’ equity, properties, management, business or prospects of the Company and its subsidiaries taken as a whole, in each case except as could not, in the aggregate, reasonably be expected to have a Material Adverse Effect.

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(s) The Company is insured by recognized, financially sound and reputable institutions with policies in such amounts and with such deductibles and covering such risks as are reasonably adequate and customary for its business as currently conducted and described in the most recent Preliminary Prospectus and the Prospectus, including, but not limited to, policies covering real and personal property owned or leased by the Company against theft, damage, destruction, acts of vandalism and policies covering the Company for product liability claims and clinical trial liability claims. The Company has no reason to believe that it will not be able (i) to renew its existing insurance coverage as and when such policies expire or (ii) to obtain comparable coverage from similar institutions as may be necessary or appropriate to conduct its business as now conducted and at a cost that would not result in a Material Adverse Effect. The Company has not been denied any insurance coverage material to the Company which it has sought or for which it has applied.

(t) 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 is made known to the Company's principal executive officer and its principal financial officer by others within the Company, particularly during the periods in which the periodic reports required under the Exchange Act are being prepared; (ii) have been evaluated by management of the Company for effectiveness as of the end of the Company's most recent fiscal quarter; and (iii) the Company's principal executive officer and principal financial officer concluded to be effective at the reasonable assurance level. Based on the most recent evaluation of its internal control over financial reporting, the Company is not aware of (i) any significant deficiencies or material weaknesses in the design or operation of internal control over financial reporting which are reasonably likely to adversely affect the Company's ability to record, process, summarize and report financial information or (ii) any fraud, whether or not material, that involves management or other employees who have a significant role in the Company's internal control over financial reporting. The Company is not aware of any change in its internal control over financial reporting that has occurred during its most recent fiscal quarter that has materially affected, or is reasonably likely to materially affect, the Company's internal control over financial reporting.

(u) Since the date as of which information is given in the most recent Preliminary Prospectus and except as described in the most recent Preliminary Prospectus, the Company has not (i) incurred any liability or obligation, direct or contingent, other than liabilities and obligations that were incurred in the ordinary course of business, (ii) entered into any material transaction not in the ordinary course of business or (iii) declared or paid any dividend on its capital stock.

(v) The historical financial statements (including the related notes and supporting schedules) included or incorporated by reference in the most recent Preliminary Prospectus comply as to form in all material respects with the requirements of Regulation S-X under the Securities Act and present fairly the financial condition, results of operations and cash flows of the entities purported to be shown thereby at the dates and for the periods indicated and have been prepared in conformity with accounting principles generally accepted in the United States applied on a consistent basis throughout the periods involved, except as may be expressly stated in the related notes thereto.

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(w) Each of (i) McGladrey & Pullen, LLP and (ii) Caturano and Company, Inc., who has certified certain financial statements of the Company and its consolidated subsidiaries, whose report appears in the most recent Preliminary Prospectus or is incorporated by reference therein are (a) an independent public accountants as required by the Securities Act and the Rules and Regulations, (b) in compliance with the applicable requirements relating to the qualification of accountants under Rule 2-01 of Regulation S-X and (c) a registered public accounting firm as defined by the Public Company Accounting Oversight Board (the “PCAOB”) whose registration has not been suspended or revoked and, to the Company’s knowledge, who has not requested such registration to be withdrawn.

(x) The financial statements filed with the Commission as a part of the Registration Statement and included in the Preliminary Prospectus, the most recent Preliminary Prospectus and the Prospectus present fairly the financial position of the Company as of and at the dates indicated and the results of its operations and cash flows for the periods specified. The supporting schedules included in the Registration Statement present fairly the information required to be stated therein. Such financial statements and supporting schedules have been prepared in conformity with generally accepted accounting principles as applied in the United States applied on a consistent basis throughout the periods involved, except as may be expressly stated in the related notes thereto. No other financial statements or supporting schedules are required to be included in the Registration Statement or any applicable Prospectus. The financial data set forth or incorporated by reference in each applicable Prospectus fairly present the information set forth therein on a basis consistent with that of the audited financial statements contained in the Registration Statement and each applicable Prospectus. To the Company’s knowledge, no person who has been suspended or barred from being associated with a registered public accounting firm, or who has failed to comply with any sanction pursuant to Rule 5300 promulgated by the PCAOB, has participated in or otherwise aided the preparation of, or audited, the financial statements, supporting schedules or other financial data filed with the Commission as a part of the Registration Statement and included in any applicable Prospectus.

(y) The statistical and market-related data included in the most recent Preliminary Prospectus and the consolidated financial statements of the Company and its subsidiaries included or incorporated by reference in the most recent Preliminary Prospectus are based on or derived from sources that the Company believes to be reliable and accurate in all material respects.

(z) Neither the Company nor any subsidiary is, and as of the applicable Delivery Date and, after giving effect to the offer and sale of the Stock and the application of the proceeds therefrom as described in the most recent Preliminary Prospectus and the Prospectus, none of them will be, (i) an “investment company” within the meaning of such term under the Investment Company Act of 1940, as amended (the “**Investment Company Act**”), and the rules and regulations of the Commission thereunder or (ii) a “business development company” (as defined in Section 2(a)(48) of the Investment Company Act).

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(aa) There are no legal or governmental proceedings pending to which the Company or any of its subsidiaries is a party or of which any property or assets of the Company or any of its subsidiaries is the subject that could, in the aggregate, reasonably be expected to have a Material Adverse Effect or could, in the aggregate, reasonably be expected to have a material adverse effect on the performance of this Agreement or the consummation of the transactions contemplated hereby; and to the Company's knowledge, no such proceedings are threatened or contemplated by governmental authorities or others.

(bb) Except as described in the most recent Preliminary Prospectus, no relationship, direct or indirect, exists between or among the Company, on the one hand, and the directors, officers, stockholders, customers or suppliers of the Company, on the other hand, that is required to be described in the most recent Preliminary Prospectus which is not so described.

(cc) No labor disturbance by the employees of the Company or its subsidiaries exists or, to the knowledge of the Company, is imminent that could reasonably be expected to have a Material Adverse Effect.

(dd) (i) Each "employee benefit plan" (within the meaning of Section 3(3) of the Employee Retirement Security Act of 1974, as amended ("ERISA")) for which the Company or any member of its "Controlled Group" (defined as any organization which is a member of a controlled group of corporations within the meaning of Section 414 of the Internal Revenue Code of 1986, as amended (the "Code")) would have any liability (each a "Plan") has been maintained in material compliance with its terms and with the requirements of all applicable statutes, rules and regulations including ERISA and the Code; (ii) with respect to each Plan subject to Title IV of ERISA (a) no "reportable event" (within the meaning of Section 4043(c) of ERISA) has occurred or is reasonably expected to occur, (b) no "accumulated funding deficiency" (within the meaning of Section 302 of ERISA or Section 412 of the Code), whether or not waived, has occurred or is reasonably expected to occur, (c) the fair market value of the assets under each Plan exceeds the present value of all benefits accrued under such Plan (determined based on those assumptions used to fund such Plan) and (d) neither the Company or any member of its Controlled Group has incurred, or reasonably expects to incur, any liability under Title IV of ERISA (other than contributions to the Plan or premiums to the PBGC in the ordinary course and without default) in respect of a Plan (including a "multiemployer plan", within the meaning of Section 4001(c)(3) of ERISA); and (iii) each 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 by failure to act, which would reasonably be expected to cause the loss of such qualification.

(ee) The Company and each of its subsidiaries have filed all federal, state, local and foreign income and franchise tax returns required to be filed through the date hereof, subject to permitted extensions, and have paid all taxes due thereon, and no tax deficiency has been determined adversely to the Company or any of its subsidiaries, nor does the Company have any knowledge of any tax deficiencies that could, in the aggregate, reasonably be expected to have a Material Adverse Effect.

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(ff) There are no transfer taxes or other similar fees or charges under Federal law or the laws of any state, or any political subdivision thereof, required to be paid in connection with the execution and delivery of this Agreement or the issuance by the Company or sale by the Company of the Stock.

(gg) Neither the Company nor any of its subsidiaries (i) is in violation of its charter or by-laws (or similar organizational documents), (ii) is in default, and no event has occurred that, with notice or lapse of time or both, would constitute such a default, in the due performance or observance of any term, covenant or condition contained in any indenture, mortgage, deed of trust, loan agreement, license or other agreement or instrument to which it is a party or by which it is bound or to which any of its properties or assets is subject or (iii) is in violation of any statute or any order, rule or regulation of any court or governmental agency or body having jurisdiction over it or its property or assets or has failed to obtain any license, permit, certificate, franchise or other governmental authorization or permit necessary to the ownership of its property or to the conduct of its business, except in the case of clauses (ii) and (iii), to the extent any such conflict, breach, violation or default could not, in the aggregate, reasonably be expected to have a Material Adverse Effect.

(hh) There is and has been no failure on the part of the Company and any of the Company's directors or officers, in their capacities as such, to comply with the provisions of the Sarbanes-Oxley Act of 2002 and the rules and regulations promulgated in connection therewith.

(ii) The Company and each of its subsidiaries have such permits, licenses, patents, franchises, certificates of need and other approvals or authorizations of governmental or regulatory authorities ("**Permits**") as are necessary under applicable law to own their properties and conduct their businesses in the manner described in the most recent Preliminary Prospectus, except for any of the foregoing that could not, in the aggregate, reasonably be expected to have a Material Adverse Effect; each of the Company and its subsidiaries has fulfilled and performed all of its obligations with respect to the Permits, and no event has occurred that allows, or after notice or lapse of time would allow, revocation or termination thereof or results in any other impairment of the rights of the holder or any such Permits, except for any of the foregoing that could not reasonably be expected to have a Material Adverse Effect.

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(jj) The Company owns, possesses or can acquire on reasonable terms sufficient trademarks, trade names, patent rights, copyrights, domain names, licenses, approvals, trade secrets and other similar rights (collectively, “**Intellectual Property Rights**”) reasonably necessary to conduct its businesses as now conducted; except to the extent failure to own, possess or acquire such Intellectual Property Rights would not result in a Material Adverse Effect. The Company has not received and has no reason to believe that it will receive, any notice of infringement or conflict with asserted Intellectual Property Rights of others. Except as would not be reasonably likely to result, individually or in the aggregate, in a Material Adverse Effect (A) to the Company’s knowledge there is no infringement, misappropriation or violation by third parties of any of the Intellectual Property Rights owned by the Company; (B) there is no pending or, to the Company’s knowledge, threatened action, suit, proceeding or claim by others challenging the rights of the Company in or to any such Intellectual Property Rights, and the Company is unaware of any facts which would form a reasonable basis for any such claim, that would reasonably be expected, individually or in the aggregate, together with any other claims in this subsection (p) to result in a Material Adverse Effect; (C) the Intellectual Property Rights owned by the Company and, to the Company’s knowledge, the Intellectual Property Rights licensed to the Company have not been adjudged by a court of competent jurisdiction invalid or unenforceable, in whole or in part, and there is no pending or, to the Company’s knowledge, threatened action, suit, proceeding or claim by others challenging the validity or scope of any such Intellectual Property Rights, and, except as described in the most recent Preliminary Prospectus and the Prospectus, the Company is unaware of any facts which would form a reasonable basis for any such claim that would reasonably be expected, individually or in the aggregate, together with any other claims in this subsection (p) to result in a Material Adverse Effect; (D) there is no pending or, to the Company’s knowledge, threatened action, suit, proceeding or claim by others that the Company infringes, misappropriates or otherwise violates any Intellectual Property Rights or other proprietary rights of others, the Company has not received any written notice of such claim and the Company is unaware of any other facts which would form a reasonable basis for any such claim that would reasonably be expected, individually or in the aggregate, together with any other claims in this subsection (p) to result in a Material Adverse Effect; (E) the Company is not aware of any prior art that could reasonably be expected to render any patent held by or licensed to the Company invalid or any U.S. patent application held by or licensed to the Company unpatentable which prior art was required to be disclosed to the U.S. Patent and Trademark Office during the prosecution of the applicable patent application and which was not so disclosed to the U.S. Patent and Trademark Office; (F) to the Company’s knowledge, all prior art references relevant to the patentability of any pending claim of any patent applications comprising or that have resulted in Intellectual Property Rights known to the Company, applicable inventor(s) or licensors, or any of their counsel during the prosecution of such patent applications that were required to be disclosed to the relevant patent authority were so disclosed by the required time, and, to the best of the Company’s knowledge, neither the Company nor any such inventor, licensor or counsel made any misrepresentation to, or omitted any material fact from, the relevant patent authority during such prosecution; and (G) to the Company’s knowledge, no employee of the Company is in or has ever been in violation in any material respect of any term of any employment contract, patent disclosure agreement, invention assignment agreement, non-competition agreement, non-solicitation agreement, nondisclosure agreement or any restrictive covenant to or with a former employer where the basis of such violation relates to such employee’s employment with the Company, or actions undertaken by the employee while employed with the Company and would reasonably be expected to result, individually or in the aggregate, in a Material Adverse Effect. To the Company’s knowledge, all material technical information developed by and belonging to the Company for which it has not sought, and does not intend to seek, to patent or otherwise protect pursuant to applicable intellectual property laws has been kept confidential or disclosed only under obligations of confidentiality. The Company is not a party to or bound by any options, licenses or agreements with respect to the Intellectual Property Rights of any other person or entity that are required to be set forth in the Prospectus and are not described therein. The most recent Preliminary Prospectus contains in all material respects the same description of the matters set forth in the preceding sentence contained in the Prospectus. None of the technology employed by the Company has been obtained or is being used by the Company in violation of any contractual obligation binding on the Company or, to the Company’s knowledge, any of its officers, directors or employees or otherwise in violation of the rights of any persons, except in each case for such violations that would not reasonably be expected to result in a Material Adverse Effect.

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(kk) Except as described in the most recent Preliminary Prospectus, (A) there are no proceedings that are pending, or known to be contemplated, against the Company or any of its subsidiaries under any laws, regulations, ordinances, rules, orders, judgments, decrees, permits or other legal requirements of any governmental authority, including without limitation any international, national, state, provincial, regional, or local authority, relating to the protection of human health or safety, the environment, or natural resources, or to hazardous or toxic substances or wastes, pollutants or contaminants (“**Environmental Laws**”) in which a governmental authority is also a party, other than such proceedings regarding which it is reasonably believed no monetary sanctions of \$100,000 or more will be imposed, (B) the Company and its subsidiaries are not aware of any issues regarding compliance with Environmental Laws, or liabilities or other obligations under Environmental Laws or concerning hazardous or toxic substances or wastes, pollutants or contaminants, that could reasonably be expected to have a material effect on the capital expenditures, earnings or competitive position of the Company and its subsidiaries, and (C) none of the Company and its subsidiaries anticipates material capital expenditures relating to Environmental Laws.

(ll) No subsidiary of the Company is currently prohibited, directly or indirectly, from paying any dividends to the Company, from making any other distribution on such subsidiary’s capital stock, from repaying to the Company any loans or advances to such subsidiary from the Company or from transferring any of such subsidiary’s property or assets to the Company or any other subsidiary of the Company, except as described in the most recent Preliminary Prospectus.

(mm) Neither the Company nor any of its subsidiaries, nor, to the knowledge of the Company, any director, officer, agent, employee or other person associated with or acting on behalf of the Company or any of its subsidiaries, has (i) used any corporate funds for any unlawful contribution, gift, entertainment or other unlawful expense relating to political activity; (ii) made any direct or indirect unlawful payment to any foreign or domestic government official or employee from corporate funds; (iii) violated or is in violation of any provision of the U.S. Foreign Corrupt Practices Act of 1977 (the “**FCPA**”); or (iv) made any bribe, rebate, payoff, influence payment, kickback or other unlawful payment; and the Company and, to the Company’s knowledge, the Company’s affiliates have conducted their respective businesses in compliance with the FCPA and have instituted and maintain policies and procedures designed to ensure, and which are reasonably expected to continue to ensure, continued compliance therewith.

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(nn) 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 jurisdictions, the rules and regulations thereunder and any related or similar 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, except, in each case, as would not reasonably be expected to have a Material Adverse Effect.

(oo) Neither the Company nor any of its subsidiaries nor, to the knowledge of the Company, any director, officer, agent, employee or affiliate 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 the 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.

(pp) The Company has not distributed and, prior to the later to occur of any Delivery Date and completion of the distribution of the Stock, will not distribute any offering material in connection with the offering and sale of the Stock other than any Preliminary Prospectus, the Prospectus, any Issuer Free Writing Prospectus to which the Underwriter has consented in accordance with Section 1(i) or 5(a)(vi).

(qq) The Company has not taken and will not take, directly or indirectly, any action designed to or that has constituted or that could reasonably be expected to cause or result in the stabilization or manipulation of the price of any security of the Company to facilitate the sale or resale of the shares of the Stock.

(rr) The Stock has been approved for listing on the NASDAQ Capital Market.

(ss) All of the information provided to the Underwriter or to counsel for the Underwriter by the Company, its officers and directors and, to the Company’s knowledge, the holders of any securities (debt or equity) or options to acquire any securities of the Company in connection with letters, filings or other supplemental information, if any, provided pursuant to FINRA Rule 5110 or the National Association of Securities Dealers Inc. (the “**NASD**”) Conduct Rule 2710 or 2720 is true, complete and correct. To enable the Underwriter to rely on FINRA Rule 5110(b)(7)(C)(i), (i) the Company was subject to the requirements of Section 12 or 15(d) of the Exchange Act and filed all the material required to be filed pursuant to Sections 13, 14 or 15(d) of the Exchange Act for a period of at least thirty-six calendar months immediately preceding the date of this Agreement; (ii) the Company filed in a timely manner all reports required to be filed pursuant to Section 13, 14 or 15(d) of the Exchange Act during the twelve calendar months and any portion of a month immediately preceding the date of this Agreement; (iii) the last reported sale price of the Company’s common stock on the NASDAQ Capital Market on February 2, 2011 was \$6.20; (iv) as of such date, there were greater than 30,000,000 shares of the Company’s common stock outstanding and held by non-affiliates of the Company; and (v) the Company has annual trading volume of 3 million shares or more.

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(tt) The studies, tests and preclinical and clinical trials conducted by or on behalf of the Company were and, if still pending, are being conducted in compliance with experimental protocols, procedures and controls pursuant to accepted professional scientific standards and all applicable laws and authorizations, including, without limitation, the Federal Food, Drug and Cosmetic Act and the rules and regulations promulgated thereunder, except where the failure to be in compliance has not resulted and would not reasonably be expected to result in a Material Adverse Effect; the descriptions of the results of such studies, tests and trials contained in any applicable Prospectus are accurate and complete in all material respects and fairly present the data derived from such studies, tests and trials; except to the extent disclosed in any applicable Prospectus, the Company is not aware of any studies, tests or trials, the results of which the Company believes reasonably call into question the study, test, or trial results described or referred to in any applicable Prospectus when viewed in the context in which such results are described and the clinical state of development; and the Company has not received any notices or correspondence from any applicable governmental authority requiring the termination, suspension or material modification of any studies, tests or preclinical or clinical trials conducted by or on behalf of the Company.

Any certificate signed by any officer of the Company and delivered to the Underwriter or counsel for the Underwriter in connection with the offering of the Stock shall be deemed a representation and warranty by the Company, as to matters covered thereby, to the Underwriter.

2. *Purchase of the Stock by the Underwriter.* On the basis of the representations and warranties contained in, and subject to the terms and conditions of, this Agreement, the Company agrees to sell the Firm Stock to the Underwriter, and the Underwriter agrees to purchase the Firm Stock.

In addition, the Company grants to the Underwriter an option to purchase up to 1,440,000 additional shares of Option Stock. Such option is exercisable in the event that the Underwriter sells more shares of Common Stock than the number of Firm Stock in the offering and as set forth in Section 4 hereof.

The price of both the Firm Stock and any Option Stock purchased by the Underwriter shall be \$5.425 per share.

The Company shall not be obligated to deliver any of the Firm Stock or Option Stock to be delivered on the applicable Delivery Date, except upon payment for all such Stock to be purchased on such Delivery Date as provided herein.

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3. Offering of Stock by the Underwriter. The Underwriter proposes to offer the Firm Stock for sale upon the terms and conditions to be set forth in the Prospectus.

4. Delivery of and Payment for the Stock. Delivery of and payment for the Firm Stock shall be made at 10:00 A.M., New York City time, on the third full business day following the date of this Agreement or at such other date or place as shall be determined by agreement between the Underwriter and the Company. This date and time are sometimes referred to as the “**Initial Delivery Date.**” Delivery of the Firm Stock shall be made to the Underwriter against payment by the Underwriter and of the aggregate purchase price of the Firm Stock being sold by the Company to or upon the order of the Company of the purchase price by wire transfer in immediately available funds to the accounts specified by the Company. Time shall be of the essence, and delivery at the time and place specified pursuant to this Agreement is a further condition of the obligation of the Underwriter hereunder. The Company shall deliver the Firm Stock through the facilities of DTC unless the Underwriter shall otherwise instruct.

The option granted in Section 2 will expire 30 days after the date of this Agreement and may be exercised in whole or from time to time in part by written notice being given to the Company by the Underwriter; *provided* that if such date falls on a day that is not a business day, the option granted in Section 2 will expire on the next succeeding business day. Such notice shall set forth the aggregate number of shares of Option Stock as to which the option is being exercised, the names in which the shares of Option Stock are to be registered, the denominations in which the shares of Option Stock are to be issued and the date and time, as determined by the Underwriter, when the shares of Option Stock are to be delivered; *provided, however*, that this date and time shall not be earlier than the Initial Delivery Date nor earlier than the second business day after the date on which the option shall have been exercised nor later than the fifth business day after the date on which the option shall have been exercised. Each date and time the shares of Option Stock are delivered is sometimes referred to as an “**Option Stock Delivery Date,**” and the Initial Delivery Date and any Option Stock Delivery Date are sometimes each referred to as a “**Delivery Date.**”

Delivery of the Option Stock by the Company and payment for the Option Stock by the Underwriter shall be made at 10:00 A.M., New York City time, on the date specified in the corresponding notice described in the preceding paragraph or at such other date or place as shall be determined by agreement between the Underwriter and the Company. On the Option Stock Delivery Date, the Company shall deliver or cause to be delivered the Option Stock to the Underwriter against payment by the Underwriter and of the respective aggregate purchase prices of the Option Stock being sold by the Company to or upon the order of the Company of the purchase price by wire transfer in immediately available funds to the accounts specified by the Company. Time shall be of the essence, and delivery at the time and place specified pursuant to this Agreement is a further condition of the obligation of the Underwriter hereunder. The Company shall deliver the Option Stock through the facilities of DTC unless the Underwriter shall otherwise instruct.

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5. *Further Agreements of the Company and the Underwriter.* (a) The Company agrees:

(i) To prepare the Prospectus in a form approved by the Underwriter and to file such Prospectus pursuant to Rule 424(b) under the Securities Act not later than the Commission's close of business on the second business day following the execution and delivery of this Agreement; to make no further amendment or any supplement to the Registration Statement or the Prospectus prior to the last Delivery Date except as provided herein; to advise the Underwriter, promptly after it receives notice thereof, of the time when any amendment or supplement to the Registration Statement or the Prospectus has been filed and to furnish the Underwriter with copies thereof; to file promptly all reports and any definitive proxy or information statements required to be filed by the Company with the Commission pursuant to Section 13(a), 13(c), 14 or 15(d) of the Exchange Act subsequent to the date of the Prospectus and for so long as the delivery of a prospectus is required in connection with the offering or sale of the Stock; to advise the Underwriter, promptly after it receives notice thereof, of the issuance by the Commission of any stop order or of any order preventing or suspending the use of the Prospectus or any Issuer Free Writing Prospectus, of the suspension of the qualification of the Stock for offering or sale in any jurisdiction, of the initiation or threatening of any proceeding or examination for any such purpose or of any request by the Commission for the amending or supplementing of the Registration Statement, the Prospectus or any Issuer Free Writing Prospectus or for additional information; and, in the event of the issuance of any stop order or of any order preventing or suspending the use of the Prospectus or any Issuer Free Writing Prospectus or suspending any such qualification, to use promptly its best efforts to obtain its withdrawal;

(ii) To furnish promptly to the Underwriter and to counsel for the Underwriter a signed copy of the Registration Statement as originally filed with the Commission, and each amendment thereto filed with the Commission, including all consents and exhibits filed therewith;

(iii) To deliver promptly to the Underwriter such number of the following documents as the Underwriter shall reasonably request: (A) conformed copies of the Registration Statement as originally filed with the Commission and each amendment thereto (in each case excluding exhibits other than this Agreement and the computation of per share earnings), (B) each Preliminary Prospectus, the Prospectus and any amended or supplemented Prospectus, (C) each Issuer Free Writing Prospectus and (D) any document incorporated by reference in any Preliminary Prospectus or the Prospectus; and, if the delivery of a prospectus is required at any time after the date hereof in connection with the offering or sale of the Stock or any other securities relating thereto and if at such time any events shall have occurred as a result of which the Prospectus as then amended or supplemented would include an untrue statement of a material fact or omit to state any material fact necessary in order to make the statements therein, in the light of the circumstances under which they were made when such Prospectus is delivered, not misleading, or, if for any other reason it shall be necessary to amend or supplement the Prospectus or to file under the Exchange Act any document incorporated by reference in the Prospectus in order to comply with the Securities Act or the Exchange Act, to notify the Underwriter and, upon its request, to file such document and to prepare and furnish without charge to the Underwriter and to any dealer in securities as many copies as the Underwriter may from time to time reasonably request of an amended or supplemented Prospectus that will correct such statement or omission or effect such compliance;

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(iv) To file promptly with the Commission any amendment or supplement to the Registration Statement or the Prospectus that may, in the judgment of the Company or the Underwriter, be required by the Securities Act or requested by the Commission;

(v) Prior to filing with the Commission any amendment or supplement to the Registration Statement or the Prospectus, any document incorporated by reference in the Prospectus or any amendment to any document incorporated by reference in the Prospectus, to furnish a copy thereof to the Underwriter and counsel for the Underwriter and obtain the consent of the Underwriter to the filing;

(vi) Not to make any offer relating to the Stock that would constitute an Issuer Free Writing Prospectus without the prior written consent of the Underwriter.

(vii) To comply with all applicable requirements of Rule 433 with respect to any Issuer Free Writing Prospectus; and if at any time after the date hereof any events shall have occurred as a result of which any Issuer Free Writing Prospectus, as then amended or supplemented, would conflict with the information in the Registration Statement, the most recent Preliminary Prospectus or the Prospectus or would include an untrue statement of a material fact or omit to state any material fact necessary in order to make the statements therein, in the light of the circumstances under which they were made, not misleading, or, if for any other reason it shall be necessary to amend or supplement any Issuer Free Writing Prospectus, to notify the Underwriter and, upon its request, to file such document and to prepare and furnish without charge to the Underwriter as many copies as the Underwriter may from time to time reasonably request of an amended or supplemented Issuer Free Writing Prospectus that will correct such conflict, statement or omission or effect such compliance;

(viii) As soon as practicable after the Effective Date and in any event not later than 16 months after the date hereof, to make generally available to the Company's security holders and to deliver to the Underwriter an earnings statement of the Company and its subsidiaries (which need not be audited) complying with Section 11(a) of the Securities Act and the Rules and Regulations;

(ix) Promptly from time to time to take such action as the Underwriter may reasonably request to qualify the Stock for offering and sale under the securities laws of Canada and such other jurisdictions as the Underwriter may request and to comply with such laws so as to permit the continuance of sales and dealings therein in such jurisdictions for as long as may be necessary to complete the distribution of the Stock; *provided* that in connection therewith the Company shall not be required to (i) qualify as a foreign corporation in any jurisdiction in which it would not otherwise be required to so qualify, (ii) file a general consent to service of process in any such jurisdiction or (iii) subject itself to taxation in any jurisdiction in which it would not otherwise be subject;

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(x) For a period commencing on the date hereof and ending on the 90th day after the date of the Prospectus (the “**Lock-Up Period**”), not to, directly or indirectly, (1) offer for sale, sell, pledge or otherwise dispose of (or enter into any transaction or device that is designed to, or could be expected to, result in the disposition by any person at any time in the future of) any shares of Common Stock or securities convertible into or exchangeable for Common Stock (other than the Stock and shares issued pursuant to employee benefit plans, qualified stock option plans or other employee compensation plans existing on the date hereof, or pursuant to agreements existing on the date hereof and disclosed in the Prospectus), or sell or grant options, rights or warrants with respect to any shares of Common Stock or securities convertible into or exchangeable for Common Stock (other than the grant of options pursuant to option plans existing on the date hereof and disclosed in the Prospectus); provided, however, that the Company may issue shares of Common Stock or securities convertible into or exchangeable for Common Stock to one or more counterparties in connection with the consummation of a strategic partnership, joint venture, collaboration, merger or the acquisition or license of any business products or technology (a “**Strategic Transaction**”) including without limitation an issuance of 3,636,926 shares of Common Stock that is contingent upon satisfaction of a development milestone under a Stock Purchase Agreement dated January 6, 2011 with Intrexon Corporation (the “**Intrexon Shares**”) (provided that (A) the sum of the aggregate number of shares of Common Stock so issued in connection with Strategic Transactions (other than the Intrexon Shares) shall not exceed 5% of the total outstanding shares of Common Stock immediately following the completion of this offering of Stock and (B) prior to the issuance of such shares of Common Stock each recipient of such Common Stock agrees in writing not to sell, offer, dispose of or otherwise transfer any such Common Stock during such Lock-Up Period without the prior written consent of the Underwriter (which consent may be withheld at the sole discretion of the Underwriter)), (2) enter into any swap or other derivatives transaction that transfers to another, in whole or in part, any of the economic benefits or risks of ownership of such shares of Common Stock, whether any such transaction described in clause (1) or (2) above is to be settled by delivery of Common Stock or other securities, in cash or otherwise, (3) file or cause to be filed a registration statement, including any amendments, with respect to the registration of any shares of Common Stock or securities convertible, exercisable or exchangeable into Common Stock or any other securities of the Company (other than any registration statement on Form S-8) or (4) publicly disclose the intention to do any of the foregoing, in each case without the prior written consent of Barclays Capital Inc. and to cause each officer, director and stockholder of the Company set forth on Schedule 1 hereto to furnish to the Underwriter, prior to the Initial Delivery Date, a letter or letters, substantially in the form of Exhibit A hereto (the “**Lock-Up Agreements**”); notwithstanding the foregoing, if (1) 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 (2) 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 the restrictions imposed in this paragraph shall continue to apply until the expiration of the 18-day period beginning on the issuance of the earnings release or the announcement of the material news or the occurrence of the material event, unless Barclays Capital Inc. waives such extension in writing; except that such extension will not apply if (i) the shares of Common Stock are “actively traded securities” (as defined in Regulation M), (ii) the Company meets the applicable requirements of paragraph (a)(1) of Rule 139 under the Securities Act in the manner contemplated by NASD Conduct Rule 2711(f)(4), and (iii) the provisions of NASD Conduct Rule 2711(f)(4) do not restrict the publishing or distribution of any research reports relating to the Company published or distributed by the Underwriter during the 15 days before or after the last day of the Lock-Up Period (before giving effect to such extension);

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(xi) To apply the net proceeds from the sale of the Stock being sold by the Company as set forth in the Prospectus;

(b) The Underwriter agrees that the Underwriter shall not include any “issuer information” (as defined in Rule 433) in any “free writing prospectus” (as defined in Rule 405) used or referred to by the Underwriter without the prior consent of the Company (any such issuer information with respect to whose use the Company has given its consent, “**Permitted Issuer Information**”); *provided* that (i) no such consent shall be required with respect to any such issuer information contained in any document filed by the Company with the Commission prior to the use of such free writing prospectus and (ii) “issuer information,” as used in this Section 5(b), shall not be deemed to include information prepared by or on behalf of the Underwriter on the basis of or derived from issuer information.

6. *Expenses.* The Company agrees, whether or not the transactions contemplated by this Agreement are consummated or this Agreement is terminated, to pay all costs, expenses, fees and taxes incident to and in connection with (a) the authorization, issuance, sale and delivery of the Stock and any stamp duties or other taxes payable in that connection, and the preparation and printing of certificates for the Stock; (b) the preparation, printing and filing under the Securities Act of the Registration Statement (including any exhibits thereto), any Preliminary Prospectus, the Prospectus, any Issuer Free Writing Prospectus and any amendment or supplement thereto; (c) the distribution of the Registration Statement (including any exhibits thereto), any Preliminary Prospectus, the Prospectus, any Issuer Free Writing Prospectus and any amendment or supplement thereto, or any document incorporated by reference therein, all as provided in this Agreement; (d) the production and distribution of this Agreement and any other related documents in connection with the offering, purchase, sale and delivery of the Stock; (e) any required review by the FINRA of the terms of sale of the Stock (including related fees and expenses of counsel to the Underwriter in an amount that is not greater than \$10,000); (f) the listing of the Stock on the NASDAQ Capital Market and/or any other exchange; (g) the qualification of the Stock under the securities laws of the several jurisdictions as provided in Section 5(a)(ix) and the preparation, printing and distribution of a Blue Sky Memorandum (including related fees and expenses of counsel to the Underwriter); (h) the preparation, printing and distribution of one or more versions of the Preliminary Prospectus and the Prospectus for distribution in Canada, often in the form of a Canadian “wrapper” (including related fees and expenses of Canadian counsel to the Underwriter in an amount that is not greater than \$10,000); (i) the investor presentations on any “road show” undertaken in connection with the marketing of the Stock, including, without limitation, expenses associated with any electronic roadshow, travel and lodging expenses of the representatives and officers of the Company and the cost of any aircraft chartered in connection with the road show; and (j) all other costs and expenses incident to the performance of the obligations of the Company under this Agreement; *provided* that, except as provided in this Section 6 and in Section 10, the Underwriter shall pay its own costs and expenses, including the costs and expenses of its counsel, any transfer taxes on the Stock which it may sell and the expenses of advertising any offering of the Stock made by the Underwriter.

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7. *Conditions of Underwriter's Obligations.* The obligations of the Underwriter hereunder are subject to the accuracy, when made and on each Delivery Date, of the representations and warranties of the Company contained herein, to the performance by the Company of its obligations hereunder, and to each of the following additional terms and conditions:

(a) The Prospectus shall have been timely filed with the Commission in accordance with Section 5(a)(i); the Company shall have complied with all filing requirements applicable to any Issuer Free Writing Prospectus used or referred to after the date hereof; no stop order suspending the effectiveness of the Registration Statement or preventing or suspending the use of the Prospectus or any Issuer Free Writing Prospectus shall have been issued and no proceeding or examination for such purpose shall have been initiated or threatened by the Commission; and any request of the Commission for inclusion of additional information in the Registration Statement or the Prospectus or otherwise shall have been complied with.

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

(c) The Underwriter shall not have discovered and disclosed to the Company on or prior to such Delivery Date that the Registration Statement, the Prospectus or the Pricing Disclosure Package, or any amendment or supplement thereto, contains an untrue statement of a fact which, in the opinion of Cooley LLP, counsel for the Underwriter, is material or omits to state a fact which, in the opinion of such counsel, is material and is required to be stated therein or is necessary to make the statements therein not misleading.

(d) All corporate proceedings and other legal matters incident to the authorization, form and validity of this Agreement, the Stock, the Registration Statement, the Prospectus and any Issuer Free Writing Prospectus, and all other legal matters relating to this Agreement and the transactions contemplated hereby shall be reasonably satisfactory in all material respects to counsel for the Underwriter, and the Company shall have furnished to such counsel all documents and information that it may reasonably request to enable them to pass upon such matters.

(e) Maslon Edelman Borman & Brand, LLP shall have furnished to the Underwriter its written opinion and negative assurance letter, as counsel to the Company, each addressed to the Underwriter and dated such Delivery Date, in form and substance reasonably satisfactory to the Underwriter, each substantially in the form attached hereto as Exhibits B-1 and B-2 respectively.

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(f) Ropes & Gray LLP shall have furnished to the Underwriter its negative assurance letter, as intellectual property counsel to the Company, addressed to the Underwriter and dated such Delivery Date, in form and substance reasonably satisfactory to the Underwriter, substantially in the form attached hereto as Exhibit C.

(g) WilmerHale LLP shall have furnished to the Underwriter its written opinion, as intellectual property counsel to the Company, addressed to the Underwriter and dated such Delivery Date, in form and substance reasonably satisfactory to the Underwriter, substantially in the form attached hereto as Exhibit D.

(h) The Underwriter shall have received from Cooley LLP, counsel for the Underwriter, such opinion and negative assurance letter, dated such Delivery Date, with respect to the issuance and sale of the Stock, the Registration Statement, the Prospectus and the Pricing Disclosure Package and other related matters as the Underwriter may reasonably require, and the Company shall have furnished to such counsel such documents as it reasonably request for the purpose of enabling them to pass upon such matters.

(i) At the time of execution of this Agreement, the Underwriter shall have received from Caturano and Company, Inc. a letter, in form and substance satisfactory to the Underwriter, addressed to the Underwriter and dated the date hereof (i) confirming that they are independent public accountants within the meaning of the Securities Act and are in compliance with the applicable requirements relating to the qualification of accountants under Rule 2-01 of Regulation S-X of the Commission, and (ii) stating, as of the date hereof (or, with respect to matters involving changes or developments since the respective dates as of which specified financial information is given in the most recent Preliminary Prospectus, as of a date not more than three days prior to the date hereof), the conclusions and findings of such firm with respect to the financial information and other matters ordinarily covered by accountants' "comfort letters" to underwriters in connection with registered public offerings.

(j) With respect to the letter of Caturano and Company, Inc. referred to in the preceding paragraph and delivered to the Underwriter concurrently with the execution of this Agreement (the "**Caturano initial letter**"), the Company shall have furnished to the Underwriter a letter (the "**Caturano bring-down letter**") of such accountants, addressed to the Underwriter and dated such Delivery Date (i) confirming that they are independent public accountants within the meaning of the Securities Act and are in compliance with the applicable requirements relating to the qualification of accountants under Rule 2-01 of Regulation S-X of the Commission, (ii) stating, as of the date of the Caturano bring-down letter (or, with respect to matters involving changes or developments since the respective dates as of which specified financial information is given in the Prospectus, as of a date not more than three days prior to the date of the Caturano bring-down letter), the conclusions and findings of such firm with respect to the financial information and other matters covered by the Caturano initial letter and (iii) confirming in all material respects the conclusions and findings set forth in the Caturano initial letter.

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(k) At the time of execution of this Agreement, the Underwriter shall have received from McGladrey & Pullen, LLP a letter, in form and substance satisfactory to the Underwriter, addressed to the Underwriter and dated the date hereof (i) confirming that they are independent public accountants within the meaning of the Securities Act and are in compliance with the applicable requirements relating to the qualification of accountants under Rule 2-01 of Regulation S-X of the Commission, and (ii) stating, as of the date hereof (or, with respect to matters involving changes or developments since the respective dates as of which specified financial information is given in the most recent Preliminary Prospectus, as of a date not more than three days prior to the date hereof), the conclusions and findings of such firm with respect to the financial information and other matters ordinarily covered by accountants' "comfort letters" to underwriters in connection with registered public offerings.

(l) With respect to the letter of McGladrey & Pullen, LLP referred to in the preceding paragraph and delivered to the Underwriter concurrently with the execution of this Agreement (the "**McGladrey initial letter**"), the Company shall have furnished to the Underwriter a letter (the "**McGladrey bring-down letter**") of such accountants, addressed to the Underwriter and dated such Delivery Date (i) confirming that they are independent public accountants within the meaning of the Securities Act and are in compliance with the applicable requirements relating to the qualification of accountants under Rule 2-01 of Regulation S-X of the Commission, (ii) stating, as of the date of the McGladrey bring-down letter (or, with respect to matters involving changes or developments since the respective dates as of which specified financial information is given in the Prospectus, as of a date not more than three days prior to the date of the McGladrey bring-down letter), the conclusions and findings of such firm with respect to the financial information and other matters covered by the McGladrey initial letter and (iii) confirming in all material respects the conclusions and findings set forth in the McGladrey initial letter.

(m) The Company shall have furnished to the Underwriter a certificate, dated such Delivery Date, of its Chief Executive Officer and its Chief Financial Officer stating that:

(i) The representations, warranties and agreements of the Company in Section 1 are true and correct on and as of such Delivery Date, and the Company has complied with all its agreements contained herein and satisfied all the conditions on its part to be performed or satisfied hereunder at or prior to such Delivery Date;

(ii) No stop order suspending the effectiveness of the Registration Statement has been issued; and no proceedings or examination for that purpose have been instituted or, to the knowledge of such officers, threatened; and

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(iii) They have carefully examined the Registration Statement, the Prospectus and the Pricing Disclosure Package, and, in their opinion, (A) (1) the Registration Statement, as of the Effective Date, (2) the Prospectus, as of its date and on the applicable Delivery Date, or (3) the Pricing Disclosure Package, as of the Applicable Time, did not and do not contain any 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 Effective Date, no event has occurred that should have been set forth in a supplement or amendment to the Registration Statement, the Prospectus or any Issuer Free Writing Prospectus that has not been so set forth;

(n) (i) Neither the Company nor any of its subsidiaries shall have sustained, since the date of the latest audited financial statements included or incorporated by reference in the most recent Preliminary Prospectus, any loss or interference with its business from fire, explosion, flood or other calamity, whether or not covered by insurance, or from any labor dispute or court or governmental action, order or decree or (ii) since such date there shall not have been any change in the capital stock or long-term debt of the Company or any of its subsidiaries or any change, or any development involving a prospective change, in or affecting the condition (financial or otherwise), results of operations, stockholders' equity, properties, management, business or prospects of the Company and its subsidiaries taken as a whole, the effect of which, in any such case described in clause (i) or (ii), is, in the judgment of the Underwriter, so material and adverse as to make it impracticable or inadvisable to proceed with the public offering or the delivery of the Stock being delivered on such Delivery Date on the terms and in the manner contemplated in the Prospectus.

(o) Subsequent to the execution and delivery of this Agreement (i) no downgrading shall have occurred in the rating accorded the Company's debt securities or preferred stock by any "nationally recognized statistical rating organization" (as that term is defined by the Commission for purposes of Rule 436(g)(2) of the Rules and Regulations), and (ii) no such organization shall have publicly announced that it has under surveillance or review, with possible negative implications, its rating of any of the Company's debt securities or preferred stock.

(p) Subsequent to the execution and delivery of this Agreement there shall not have occurred any of the following: (i) trading in securities generally on the New York Stock Exchange or the American Stock Exchange or in the over-the-counter market, or trading in any securities of the Company on any exchange or in the over-the-counter market, shall have been suspended or materially limited or the settlement of such trading generally shall have been materially disrupted or minimum prices shall have been established on any such exchange or such market by the Commission, by such exchange or by any other regulatory body or governmental authority having jurisdiction, (ii) a banking moratorium shall have been declared by federal or state authorities, (iii) the United States shall have become engaged in hostilities, there shall have been an escalation in hostilities involving the United States or there shall have been a declaration of a national emergency or war by the United States or (iv) there shall have occurred such a material adverse change in general economic, political or financial conditions, including, without limitation, as a result of terrorist activities after the date hereof (or the effect of international conditions on the financial markets in the United States shall be such), as to make it, in the judgment of the Underwriter, impracticable or inadvisable to proceed with the public offering or delivery of the Stock being delivered on such Delivery Date on the terms and in the manner contemplated in the Prospectus.

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

(r) The Lock-Up Agreements between the Underwriter and the officers, directors and stockholders of the Company set forth on Schedule 1, delivered to the Underwriter on or before the date of this Agreement, shall be in full force and effect on such Delivery Date.

All opinions, letters, evidence and certificates mentioned above or elsewhere in this Agreement shall be deemed to be in compliance with the provisions hereof only if they are in form and substance reasonably satisfactory to counsel for the Underwriter.

#### 8. *Indemnification and Contribution.*

(a) The Company shall indemnify and hold harmless the Underwriter, its directors, officers and employees and each person, if any, who controls the Underwriter within the meaning of Section 15 of the Securities Act, from and against any loss, claim, damage or liability, joint or several, or any action in respect thereof (including, but not limited to, any loss, claim, damage, liability or action relating to purchases and sales of Stock), to which the Underwriter or that director, officer, employee or controlling person may become subject, under the Securities Act or otherwise, insofar as such loss, claim, damage, liability or action arises out of, or is based upon, (i) any untrue statement or alleged untrue statement of a material fact contained in (A) any Preliminary Prospectus, the Registration Statement, the Prospectus or in any amendment or supplement thereto, (B) any Issuer Free Writing Prospectus or in any amendment or supplement thereto or (C) any Permitted Issuer Information used or referred to in any "free writing prospectus" (as defined in Rule 405) used or referred to by the Underwriter, (D) any "road show" (as defined in Rule 433) not constituting an Issuer Free Writing Prospectus (a "**Non-Prospectus Road Show**") or (E) any Blue Sky application or other document prepared or executed by the Company (or based upon any written information furnished by the Company for use therein) specifically for the purpose of qualifying any or all of the Stock under the securities laws of any state or other jurisdiction (any such application, document or information being hereinafter called a "**Blue Sky Application**") or (ii) the omission or alleged omission to state in any Preliminary Prospectus, the Registration Statement, the Prospectus, any Issuer Free Writing Prospectus or in any amendment or supplement thereto or in any Permitted Issuer Information, any Non-Prospectus Road Show or any Blue Sky Application, any material fact required to be stated therein or necessary to make the statements therein not misleading, and shall reimburse the Underwriter and each such director, officer, employee or controlling person promptly upon demand for any legal or other expenses reasonably incurred by the Underwriter or that director, officer, employee or controlling person in connection with investigating or defending or preparing to defend against any such loss, claim, damage, liability or action as such expenses are incurred; *provided, however*, that the Company shall not be liable in any such case to the extent that any such loss, claim, damage, liability or action arises out of, or is based upon, any untrue statement or alleged untrue statement or omission or alleged omission made in any Preliminary Prospectus, the Registration Statement, the Prospectus, any Issuer Free Writing Prospectus or in any such amendment or supplement thereto or in any Permitted Issuer Information, any Non-Prospectus Road Show or any Blue Sky Application, in reliance upon and in conformity with written information concerning the Underwriter furnished to the Company by the Underwriter specifically for inclusion therein, which information consists solely of the information specified in Section 8(e). The foregoing indemnity agreement is in addition to any liability which the Company may otherwise have to the Underwriter or to any director, officer, employee or controlling person of the Underwriter.

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(b) The Underwriter shall indemnify and hold harmless the Company, its directors, officers and employees, and each person, if any, who controls the Company within the meaning of Section 15 of the Securities Act, from and against any loss, claim, damage or liability, joint or several, or any action in respect thereof, to which the Company or any such director, officer, employee or controlling person may become subject, under the Securities Act or otherwise, insofar as such loss, claim, damage, liability or action arises out of, or is based upon, (i) any untrue statement or alleged untrue statement of a material fact contained in any Preliminary Prospectus, the Registration Statement, the Prospectus, any Issuer Free Writing Prospectus or in any amendment or supplement thereto or in any Non-Prospectus Road Show or Blue Sky Application, or (ii) the omission or alleged omission to state in any Preliminary Prospectus, the Registration Statement, the Prospectus, any Issuer Free Writing Prospectus or in any amendment or supplement thereto or in any Non-Prospectus Road Show or Blue Sky Application, any material fact required to be stated therein or necessary to make the statements therein not misleading, but in each case only to the extent that the untrue statement or alleged untrue statement or omission or alleged omission was made in reliance upon and in conformity with written information concerning the Underwriter furnished to the Company by the Underwriter specifically for inclusion therein, which information is limited to the information set forth in Section 8(e). The foregoing indemnity agreement is in addition to any liability that the Underwriter may otherwise have to the Company or any such director, officer, employee or controlling person.

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(c) Promptly after receipt by an indemnified party under this Section 8 of notice of any claim or the commencement of any action, the indemnified party shall, if a claim in respect thereof is to be made against the indemnifying party under this Section 8, notify the indemnifying party in writing of the claim or the commencement of that action; *provided, however*, that the failure to notify the indemnifying party shall not relieve it from any liability which it may have under this Section 8 except to the extent it has been materially prejudiced by such failure and, *provided, further*, that the failure to notify the indemnifying party shall not relieve it from any liability which it may have to an indemnified party otherwise than under this Section 8. If any such claim or action shall be brought against an indemnified party, and it shall notify the indemnifying party thereof, the indemnifying party shall be entitled to participate therein and, to the extent that it wishes, jointly with any other similarly notified indemnifying party, to assume the defense thereof with counsel reasonably satisfactory to the indemnified party. After notice from the indemnifying party to the indemnified party of its election to assume the defense of such claim or action, the indemnifying party shall not be liable to the indemnified party under this Section 8 for any legal or other expenses subsequently incurred by the indemnified party in connection with the defense thereof other than reasonable costs of investigation; *provided, however*, that the indemnified party shall have the right to employ counsel to represent jointly the indemnified party and those other indemnified parties and their respective directors, officers, employees and controlling persons who may be subject to liability arising out of any claim in respect of which indemnity may be sought under this Section 8 if (i) the indemnified party and the indemnifying party shall have so mutually agreed; (ii) the indemnifying party has failed within a reasonable time to retain counsel reasonably satisfactory to the indemnified party; (iii) the indemnified party and its directors, officers, employees and controlling persons shall have reasonably concluded that there may be legal defenses available to them that are different from or in addition to those available to the indemnifying party; or (iv) the named parties in any such proceeding (including any impleaded parties) include both the indemnified parties or their respective directors, officers, employees or controlling persons, on the one hand, and the indemnifying party, on the other hand, and representation of both sets of parties by the same counsel would be inappropriate due to actual or potential differing interests between them, and in any such event the fees and expenses of such separate counsel shall be paid by the indemnifying party. No indemnifying party shall (i) without the prior written consent of the indemnified parties (which consent shall not be unreasonably withheld), settle or compromise or consent to the entry of any judgment with respect to any pending or threatened claim, action, suit or proceeding in respect of which indemnification or contribution may be sought hereunder (whether or not the indemnified parties are actual or potential parties to such claim or action) unless such settlement, compromise or consent includes an unconditional release of each indemnified party from all liability arising out of such claim, action, suit or proceeding and does not include any findings of fact or admissions of fault or culpability as to the indemnified party, or (ii) be liable for any settlement of any such action effected without its written consent (which consent shall not be unreasonably withheld), but if settled with the consent of the indemnifying party or if there be a final judgment for the plaintiff in any such action, the indemnifying party agrees to indemnify and hold harmless any indemnified party from and against any loss or liability by reason of such settlement or judgment.

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(d) If the indemnification provided for in this Section 8 shall for any reason be unavailable to or insufficient to hold harmless an indemnified party under Section 8(a) or 8(b) in respect of any loss, claim, damage or liability, or any action in respect thereof, referred to therein, then each indemnifying party shall, in lieu of indemnifying such indemnified party, contribute to the amount paid or payable by such indemnified party as a result of such loss, claim, damage or liability, or action in respect thereof, (i) in such proportion as shall be appropriate to reflect the relative benefits received by the Company, on the one hand, and the Underwriter, on the other, from the offering of the Stock 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, with respect to the statements or omissions that resulted in such loss, claim, damage or liability, or action in respect thereof, 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, with respect to such offering shall be deemed to be in the same proportion as the total net proceeds from the offering of the Stock purchased under this Agreement (before deducting expenses) received by the Company, as set forth in the table on the cover page of the Prospectus, on the one hand, and the total underwriting discounts and commissions received by the Underwriter with respect to the shares of the Stock purchased under this Agreement, as set forth in the table on the cover page of the Prospectus, on the other hand. The relative fault shall be determined by reference to whether the 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 or the Underwriter, the intent of the parties and their relative knowledge, access to information and opportunity to correct or prevent such statement or omission. The Company and the Underwriter agree that it would not be just and equitable if contributions pursuant to this Section 8(d) were to be determined by pro rata allocation or by any other method of allocation that does not take into account the equitable considerations referred to herein. The amount paid or payable by an indemnified party as a result of the loss, claim, damage or liability, or action in respect thereof, referred to above in this Section 8(d) shall be deemed to include, for purposes of this Section 8(d), any legal or other expenses reasonably incurred by such indemnified party in connection with investigating or defending any such action or claim. Notwithstanding the provisions of this Section 8(d), the Underwriter shall not be required to contribute any amount in excess of the amount by which the net proceeds from the sale of the Stock underwritten by it exceeds the amount of any damages that the Underwriter has otherwise paid or become liable to pay by reason of any untrue or alleged untrue statement or omission or alleged omission. No person guilty of fraudulent misrepresentation (within the meaning of Section 11(f) of the Securities Act) shall be entitled to contribution from any person who was not guilty of such fraudulent misrepresentation.

(e) The Underwriter confirms and the Company acknowledges and agrees that the statements regarding delivery of shares by the Underwriter set forth on the cover page of, and the concession and reallowance figures and the paragraphs relating to stabilization by the Underwriter appearing under the caption "Underwriting" in, the most recent Preliminary Prospectus and the Prospectus are correct and constitute the only information concerning the Underwriter furnished in writing to the Company by or on behalf of the Underwriter specifically for inclusion in any Preliminary Prospectus, the Registration Statement, the Prospectus, any Issuer Free Writing Prospectus or in any amendment or supplement thereto or in any Non-Prospectus Road Show.

9. *Termination.* The obligations of the Underwriter hereunder may be terminated by the Underwriter by notice given to and received by the Company prior to delivery of and payment for the Firm Stock if, prior to that time, any of the events described in Sections 7(n), 7(o) and 7(p) shall have occurred or if the Underwriter shall decline to purchase the Stock for any reason permitted under this Agreement.

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10. *Reimbursement of Underwriter's Expenses.* If the Company shall fail to tender the Stock for delivery to the Underwriter for any reason or (b) the Underwriter shall decline to purchase the Stock for any reason permitted under this Agreement, the Company will reimburse the Underwriter for all reasonable out-of-pocket expenses (including fees and disbursements of counsel) incurred by the Underwriter in connection with this Agreement and the proposed purchase of the Stock, and upon demand the Company shall pay the full amount thereof to the Underwriter.

11. *Research Analyst Independence.* The Company acknowledges that the Underwriter's research analysts and research departments are required to be independent from its investment banking division and are subject to certain regulations and internal policies, and that the Underwriter's research analysts may hold views and make statements or investment recommendations and/or publish research reports with respect to the Company and/or the offering that differ from the views of its investment banking division. The Company hereby waives and releases, to the fullest extent permitted by law, any claims that the Company may have against the Underwriter with respect to any conflict of interest that may arise from the fact that the views expressed by its independent research analysts and research departments may be different from or inconsistent with the views or advice communicated to the Company by the Underwriter's investment banking division. The Company acknowledges that the Underwriter is a full service securities firm and as such from time to time, subject to applicable securities laws, may effect transactions for its own account or the account of its customers and hold long or short positions in debt or equity securities of the companies that may be the subject of the transactions contemplated by this Agreement.

12. *No Fiduciary Duty.* The Company acknowledges and agrees that in connection with this offering, sale of the Stock or any other services the Underwriter may be deemed to be providing hereunder, notwithstanding any preexisting relationship, advisory or otherwise, between the parties or any oral representations or assurances previously or subsequently made by the Underwriter: (i) no fiduciary or agency relationship between the Company and any other person, on the one hand, and the Underwriter, on the other, exists; (ii) the Underwriter is not acting as an advisor, expert or otherwise, to the Company, including, without limitation, with respect to the determination of the public offering price of the Stock, and such relationship between the Company, on the one hand, and the Underwriter, on the other, is entirely and solely commercial, based on arms-length negotiations; (iii) any duties and obligations that the Underwriter may have to the Company shall be limited to those duties and obligations specifically stated herein; and (iv) the Underwriter and its affiliates may have interests that differ from those of the Company. The Company hereby waives any claims that the Company may have against the Underwriter with respect to any breach of fiduciary duty in connection with this offering.

13. *Notices, Etc.* All statements, requests, notices and agreements hereunder shall be in writing, and:

(a) if to the Underwriter, shall be delivered or sent by mail or facsimile transmission to Barclays Capital Inc., 745 Seventh Avenue, New York, New York 10019, Attention: Syndicate Registration (Fax: 646-834-8133), with a copy, in the case of any notice pursuant to Section 8, to the Director of Litigation, Office of the General Counsel, Barclays Capital Inc., 745 Seventh Avenue, New York, New York 10019;

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(b) if to the Company, shall be delivered or sent by mail or facsimile transmission to the address of the Company set forth in the Registration Statement, Attention: Chief Executive Officer (Fax: (646) 214-0711).

Any such statements, requests, notices or agreements shall take effect at the time of receipt thereof. The Company shall be entitled to act and rely upon any request, consent, notice or agreement given or made by Barclays Capital Inc.

14. *Persons Entitled to Benefit of Agreement.* This Agreement shall inure to the benefit of and be binding upon the Underwriter, the Company, and their respective successors. This Agreement and the terms and provisions hereof are for the sole benefit of only those persons, except that (A) the representations, warranties, indemnities and agreements of the Company contained in this Agreement shall also be deemed to be for the benefit of the directors, officers and employees of the Underwriter and each person or persons, if any, who control the Underwriter within the meaning of Section 15 of the Securities Act and (B) the indemnity agreement of the Underwriter contained in Section 8(b) of this Agreement shall be deemed to be for the benefit of the directors of the Company, the officers of the Company who have signed the Registration Statement and any person controlling the Company within the meaning of Section 15 of the Securities Act. Nothing in this Agreement is intended or shall be construed to give any person, other than the persons referred to in this Section 14, any legal or equitable right, remedy or claim under or in respect of this Agreement or any provision contained herein.

15. *Survival.* The respective indemnities, representations, warranties and agreements of the Company and the Underwriter contained in this Agreement or made by or on behalf of them, respectively, pursuant to this Agreement, shall survive the delivery of and payment for the Stock and shall remain in full force and effect, regardless of any investigation made by or on behalf of any of them or any person controlling any of them.

16. *Definition of the Terms "Business Day" and "Subsidiary".* For purposes of this Agreement, (a) "**business day**" means each Monday, Tuesday, Wednesday, Thursday or Friday that is not a day on which banking institutions in New York are generally authorized or obligated by law or executive order to close and (b) "**subsidiary**" has the meaning set forth in Rule 405 of the Rules and Regulations.

17. *Governing Law.* This Agreement shall be governed by and construed in accordance with the laws of the State of New York.

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

19. *Headings.* The headings herein are inserted for convenience of reference only and are not intended to be part of, or to affect the meaning or interpretation of, this Agreement.

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If the foregoing correctly sets forth the agreement between the Company and the Underwriter, please indicate your acceptance in the space provided for that purpose below.

Very truly yours,

**ZIOPHARM ONCOLOGY, INC.**

By:                   /s/ Jonathan Lewis                  

Name: Jonathan Lewis, M.D., Ph.D.

Title: Chief Executive Officer

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Accepted:

**BARCLAYS CAPITAL INC.**

By: \_\_\_\_\_ /s/ Victoria Hale  
*Authorized Representative*

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**SCHEDULE 1**

PERSONS DELIVERING LOCK-UP AGREEMENTS

Directors and Officers

Jonathan Lewis  
Richard Bagley  
Murray Brennan  
James Cannon  
Wyche Fowler, Jr.  
Randal J. Kirk  
Timothy McInerney  
Michael Weiser

Stockholders

Intrexon Corporation

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EXHIBIT A

LOCK-UP LETTER AGREEMENT

LOCK-UP LETTER AGREEMENT

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

Ladies and Gentlemen:

The undersigned understands that you (the “**Underwriter**”) propose to enter into an Underwriting Agreement (the “**Underwriting Agreement**”) providing for the purchase by you of shares (the “**Stock**”) of Common Stock, par value \$0.001 per share (the “**Common Stock**”), of ZIOPHARM Oncology, Inc., a Delaware corporation (the “**Company**”), and that the Underwriters propose to reoffer the Stock to the public (the “**Offering**”).

In consideration of the execution of the Underwriting Agreement by the Underwriter, and for other good and valuable consideration, the undersigned hereby irrevocably agrees that, without the prior written consent of Barclays Capital Inc., the undersigned will not, directly or indirectly, (1) offer for sale, sell, pledge, or otherwise dispose of (or enter into any transaction or device that is designed to, or could be expected to, result in the disposition by any person at any time in the future of) any shares of Common Stock (including, without limitation, shares of Common Stock that may be deemed to be beneficially owned by the undersigned in accordance with the rules and regulations of the Securities and Exchange Commission and shares of Common Stock that may be issued upon exercise of any options or warrants) or securities convertible into or exercisable or exchangeable for Common Stock, (2) enter into any swap or other derivatives transaction that transfers to another, in whole or in part, any of the economic benefits or risks of ownership of shares of Common Stock, whether any such transaction described in clause (1) or (2) above is to be settled by delivery of Common Stock or other securities, in cash or otherwise, (3) make any demand for or exercise any right or cause to be filed a registration statement, including any amendments thereto, with respect to the registration of any shares of Common Stock or securities convertible into or exercisable or exchangeable for Common Stock or any other securities of the Company or (4) publicly disclose the intention to do any of the foregoing, for a period commencing on the date hereof and ending on the 90th day after the date of the Prospectus relating to the Offering (such 90-day period, the “**Lock-Up Period**”); provided, that this paragraph shall not restrict after March 31, 2011 the sale of shares of common stock by a member of the Company’s Board of Directors upon the vesting of shares of restricted common stock outstanding as of the date of this Lock-Up Letter Agreement as necessary to satisfy tax withholding obligations; provided further, that such dispositions and sales shall not exceed 40% of the number of shares of restricted common stock so vesting.

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Notwithstanding the foregoing, if (1) 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 (2) 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 the restrictions imposed by this Lock-Up Letter Agreement shall continue to apply until the expiration of the 18-day period beginning on the issuance of the earnings release or the announcement of the material news or the occurrence of the material event, unless Barclays Capital Inc. waives such extension in writing, except that such extension will not apply if, 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 (A) the shares of Stock are “actively traded securities” (as defined in Regulation M), (B) the Company meets the applicable requirements of paragraph (a)(1) of Rule 139 under the Securities Act of 1933, as amended (the “**Securities Act**”) in the manner contemplated by NASD Conduct Rule 2711(f)(4), and (C) the provisions of NASD Conduct Rule 2711(f)(4) are not applicable to any research reports relating to the Company published or distributed by any of the Underwriters during the 15 days before or after the last day of the Lock-Up Period (before giving effect to such extension). The undersigned hereby further agrees that, prior to engaging in any transaction or taking any other action that is subject to the terms of this Lock-Up Letter Agreement during the period from the date of this Lock-Up Letter Agreement to and including the 34<sup>th</sup> day following the expiration of the Lock-Up Period, it will give notice thereof to the Company and will not consummate such transaction or take any such action unless it has received written confirmation from the Company that the Lock-Up Period (as such may have been extended pursuant to this paragraph) has expired.

The foregoing restrictions shall not apply to the transfer of any shares of Common Stock owned by the undersigned, either during his or her lifetime or on death, by gift, will or intestate succession to the immediate family of the undersigned or to a trust the beneficiaries of which are exclusively the undersigned and/or a member or members of his immediate family; provided that it shall be a condition to any such transfer that (i) the transferee/donee agrees to be bound by this Lock-Up Letter Agreement (including, without limitation, the restrictions set forth in the preceding sentence) to the same extent as if the transferee/donee were a party hereto, (ii) no filing by any party (donor, donee, transferor or transferee) under the Securities Exchange Act of 1934, as amended (the “**Exchange Act**”), shall be required or shall be voluntarily made in connection with such transfer or distribution (other than a filing on a Form 5, Schedule 13D or Schedule 13G (or 13D-A or 13G-A) made after the expiration of the 90-day period referred to above), (iii) each party (donor, donee, transferor or transferee) shall not be required by law (including without limitation the disclosure requirements of the Securities Act and the Exchange Act) to make, and shall agree to not voluntarily make, any public announcement of the transfer or disposition, and (iv) the undersigned notifies Barclays Capital Inc. at least two business days prior to the proposed transfer or disposition (except with respect to any transfer or disposition of shares of Common Stock by the undersigned as the result of the death of the undersigned).

In furtherance of the foregoing, the Company and its transfer agent are hereby authorized to decline to make any transfer of securities if such transfer would constitute a violation or breach of this Lock-Up Letter Agreement.

It is understood that, if the Company notifies the Underwriter that it does not intend to proceed with the Offering, if the Underwriting Agreement does not become effective, or if the Underwriting Agreement (other than the provisions thereof which survive termination) shall terminate or be terminated prior to payment for and delivery of the Stock, the undersigned will be released from its obligations under this Lock-Up Letter Agreement.

The undersigned understands that the Company and the Underwriter will proceed with the Offering in reliance on this Lock-Up Letter Agreement.

Whether or not the Offering actually occurs depends on a number of factors, including market conditions. Any Offering will only be made pursuant to an Underwriting Agreement, the terms of which are subject to negotiation between the Company and the Underwriter.

*[Signature page follows]*

The undersigned hereby represents and warrants that the undersigned has full power and authority to enter into this Lock-Up Letter Agreement and that, upon request, the undersigned will execute any additional documents necessary in connection with the enforcement hereof. Any obligations of the undersigned shall be binding upon the heirs, personal representatives, successors and assigns of the undersigned.

Very truly yours,

By: \_\_\_\_\_

Name:

Title:

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



**EXHIBIT B-1**

**FORM OF OPINION OF ISSUER'S COUNSEL**

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**EXHIBIT B-2**

**FORM OF NEGATIVE ASSURANCE LETTER OF ISSUER'S COUNSEL**

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**EXHIBIT C**

**FORM OF NEGATIVE ASSURANCE LETTER OF ISSUER'S INTELLECTUAL PROPERTY COUNSEL**

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**EXHIBIT D**

**FORM OF OPINION OF ISSUER'S INTELLECTUAL PROPERTY COUNSEL**

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**Exhibit 5.1**

February 4, 2011

ZIOPHARM Oncology, Inc.  
1180 Avenue of the Americas, 19th Floor  
New York, NY 10036

RE: ZIOPHARM Oncology, Inc. Registration Statement on Form S-3 (File No. 333-166444)

Ladies and Gentlemen:

We have acted as counsel to ZIOPHARM Oncology, Inc., a Delaware corporation (the "Company"), in connection with the proposed issuance by the Company of up to 11,040,000 shares (the "Shares") of the Company's common stock, \$0.001 par value per share (the "Common Stock"). The Shares are included in a registration statement on Form S-3 (File No. 333-166444) (the "Registration Statement") filed by the Company with the Securities and Exchange Commission (the "Commission") under the Securities Act of 1933, as amended (the "Act"), a base prospectus dated May 10, 2010 filed with the Commission in the Registration Statement (the "Base Prospectus"), a preliminary prospectus supplement dated February 2, 2011 filed with the Commission pursuant to Rule 424(b) under the Act (together with the Base Prospectus, the "Preliminary Prospectus") and a prospectus supplement dated February 3, 2011 filed with the Commission pursuant to Rule 424(b) under the Act (together with the Base Prospectus, the "Prospectus"). The Shares are being sold pursuant to an underwriting agreement dated February 3, 2011 between the Company and Barclays Capital Inc. (the "Underwriting Agreement").

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

Subject to the foregoing and the other matters set forth herein, it is our opinion that, as of the date hereof, when the Shares shall have been duly registered on the books of the transfer agent and registrar therefor in the name or on behalf of the purchasers, and have been issued by the Company against payment therefor (not less than par value) in the circumstances contemplated by the Underwriting Agreement, the issue and sale of the Shares will have been duly authorized by all necessary corporate action of the Company, and the Shares will be validly issued, fully paid and nonassessable.

This opinion is being furnished in connection with the requirements of Item 601(b)(5) of Regulation S-K promulgated under the Act, and no opinion is expressed herein as to any matter pertaining to the contents of the Registration Statement, the Preliminary Prospectus or the Prospectus, other than as expressly stated herein with respect to the issue of Shares.

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

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This opinion is for your benefit in connection with the Registration Statement and may be relied upon only by you and by persons entitled to rely upon it pursuant to the applicable provisions of the Act. We consent to your filing this opinion as an exhibit to the Company's Form 8-K dated February 4, 2011 and to the reference to our firm in the Prospectus under the heading "Legal Matters." In giving such consent, we do not thereby admit that we are in the category of persons whose consent is required under Section 7 of the Act or the rules and regulations of the Commission thereunder.

Very truly yours,

/s/ Maslon Edelman Borman & Brand, LLP

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**ZIOPHARM PRICES PUBLIC OFFERING OF COMMON STOCK**

**NEW YORK, NY – February 3, 2011** - ZIOPHARM Oncology, Inc. (NASDAQ: ZIOP) today announced the pricing of an underwritten public offering of 9,600,000 shares of its common stock at a price to the public of \$5.75 per share. The public offering is expected to close on or about February 8, 2011, subject to customary closing conditions. In addition, ZIOPHARM Oncology has granted the underwriter a 30-day option to purchase up to 1,440,000 additional shares of common stock to cover overallotments.

Barclays Capital Inc. is acting as sole book-running manager in this offering.

The securities described above are being offered by ZIOPHARM pursuant to a shelf registration statement previously filed with and declared effective by the Securities and Exchange Commission (the "SEC") on May 13, 2010. Copies of the prospectus supplement and 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](mailto: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 ZIOPHARM Oncology, Inc.**

ZIOPHARM Oncology is a biopharmaceutical company engaged in the development and commercialization of a diverse portfolio of cancer therapeutics. The Company is currently focused on several clinical programs. Palifosfamide (Zymafos™ or ZIO-201) references a novel composition (tris formulation) that is the functional active metabolite of ifosfamide, a standard of care for treating sarcoma and other cancers. Darinaparsin (Zinapar™ or ZIO-101) is a novel organic arsenic being developed for the treatment of various hematologic and solid cancers. Indibulin (Zybulin™ or ZIO-301) is a novel, oral tubulin binding agent that targets both mitosis and cancer cell migration. ZIOPHARM is also pursuing the development of novel DNA-based biotherapeutics in the field of cancer pursuant to a partnering arrangement with Intrexon Corporation. The partnership includes a clinical-stage product candidate in a Phase Ib study and a second product candidate that is the basis of an Investigational New Drug application that ZIOPHARM expects to submit during the first half of 2011. ZIOPHARM's operations are located in Boston, MA with an executive office in New York.

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**Forward-Looking Safe Harbor Statement**

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

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