

**UNITED STATES
SECURITIES AND EXCHANGE COMMISSION**

Washington, D.C. 20549

FORM 8-K

CURRENT REPORT

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

Date of Report (Date of earliest event reported): **May 16, 2013**

CYCLACEL PHARMACEUTICALS, INC.

(Exact name of registrant as specified in its charter)

Delaware
(State or other jurisdiction
of incorporation)

0-50626
(Commission File Number)

91-1707622
(IRS Employer
Identification No.)

**200 Connell Drive, Suite 1500
Berkeley Heights, NJ 07922**
(Address of principal executive offices and zip code)

Registrant's telephone number, including area code: **(908) 517-7330**

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

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

- 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))

Item 1.01 Entry into a Material Definitive Agreement.

On May 16, 2013, Cyclacel Pharmaceuticals, Inc. (the "**Company**") entered into an underwriting agreement (the "**Underwriting Agreement**") with JMP Securities LLC as representative of the several underwriters named therein (the "**Underwriters**") relating to the public offering and sale of up to 6,666,667 shares of the Company's common stock, par value \$0.001 (the "**Shares**"), at a price to the public of \$3.00 per share (the "**Offering**"). The Company has also granted the underwriters a 30-day option to purchase up to an aggregate of 166,667 Shares to cover over-allotments, if any. The Company expects net proceeds from the sale of the Shares, after deducting for the Underwriters' discounts and commissions and other offering expenses, to be approximately \$18.5 million, or approximately \$19.0 million if the underwriters exercise in full their overallotment option.

The Offering is being made pursuant to the Company's effective shelf registration statement on Form S-3 (Registration Nos. 333-187801). The Offering is expected to close on May 21, 2013.

The Underwriting Agreement contains customary representations, warranties and agreements by the Company, customary conditions to closing, indemnification obligations of the Company and the Underwriters, including for liabilities under the Securities Act of 1933, as amended, other obligations of the parties and termination provisions. The representations, warranties and covenants contained in the Underwriting Agreement were made only for purposes of such agreement and as of specific dates, were solely for the benefit of the parties to such agreement and may be subject to limitations agreed upon by the contracting parties. Subject to certain exceptions, the Company and all of the Company's directors and executive officers also agreed not to sell or transfer any shares of common stock of the Company for 90 days after May 16, 2013 without first obtaining the consent of JMP Securities LLC.

A copy of the Underwriting Agreement is attached hereto as Exhibit 1.1 and is incorporated herein by reference. The foregoing description of the terms of the Underwriting is qualified in its entirety by reference to such exhibit. A copy of the opinion of Mintz, Levin, Cohn, Ferris, Glovsky and Popeo, P.C. relating to the legality of the issuance and sale of the Shares is attached as Exhibit 5.1 hereto.

Item 8.01 Other Events.

On May 15, 2013, the Company issued a press release announcing the launching of the Offering. On May 16, 2013, the Company issued a press release announcing, among other things, the pricing of the Offering. A copy of each press release is attached hereto as Exhibits 99.1 and 99.2, respectively, and incorporated herein by reference.

Neither the filing of the press releases as exhibits to this Current Report on Form 8-K nor the inclusion in the press releases of a reference to the Company's internet address shall, under any circumstances, be deemed to incorporate the information available at the Company's internet address into this Current Report on Form 8-K. The information available at the Company's internet address is not part of this Current Report on Form 8-K or any other report filed by it with the Securities and Exchange Commission.

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Item 9.01 Financial Statements and Exhibits.

(d) The following exhibits are filed with this Report:

<u>Exhibit No.</u>	<u>Description</u>
1.1	Underwriting Agreement, dated May 16, 2013, between Cyclacel Pharmaceuticals, Inc. and JMP Securities LLC
5.1	Opinion of Mintz, Levin, Cohn, Ferris, Glovsky and Popeo, P.C.
23.1	Consent of Mintz, Levin, Cohn, Ferris, Glovsky and Popeo, P.C. (included in Exhibit 5.1)
99.1	Press release, dated May 15, 2013, announcing the launching of the public offering
99.2	Press release, dated May 16, 2013, announcing the pricing of the public offering

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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 thereunto duly authorized.

CYCLACEL PHARMACEUTICALS, INC.

By: /s/ Paul McBarron
Name: Paul McBarron
Title: Executive Vice President—Finance,
Chief Financial Officer and
Chief Operating Officer

Date: May 16, 2013

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CYCLACEL PHARMACEUTICALS, INC.
(a Delaware corporation)
6,666,667 Shares

UNDERWRITING AGREEMENT

Dated: May 16, 2013

CYCLACEL PHARMACEUTICALS, INC.
(a Delaware corporation)
6,666,667 Shares

UNDERWRITING AGREEMENT

May 16, 2013

JMP Securities LLC
450 Park Avenue, 5th Floor
New York, NY 10022

As Representative of the several Underwriters
listed on Schedule A hereto.

Ladies and Gentlemen:

Cyclacel Pharmaceuticals, Inc., a Delaware corporation (the "Company"), confirms its agreement with JMP Securities LLC ("JMP") and each of the other Underwriters named in Schedule A hereto (collectively, the "Underwriters," which term shall also include any underwriter substituted as hereinafter provided in Section 10 hereof), for whom JMP is acting as representative (in such capacity, the "Representative"), with respect to (i) the issue and sale by the Company and the purchase by the Underwriters, acting severally and not jointly, of the respective numbers of shares of common stock, par value \$0.001 per share (the "Common Stock") of the Company set forth in said Schedule A and (ii) the grant by the Company to the Underwriters, acting severally and not jointly, of the option described in Section 2(b) hereof to purchase all or any part of 166,667 additional shares of Common Stock. The aforesaid 6,666,667 shares of Common Stock (the "Initial Securities") to be purchased by the Underwriters and all or any part of the 166,667 shares of Common Stock subject to the option described in Section 2(b) hereof (the "Option Securities") are herein called, collectively, the "Securities."

The Company understands that the Underwriters propose to make a public offering of the Securities as soon as the Representative deems advisable after this Agreement has been executed and delivered.

The Company has prepared and filed with the Securities and Exchange Commission (the "Commission") a registration statement on Form S-3 (No. 333-187801), including the related preliminary prospectus or prospectuses, covering the registration of the Securities under the Securities Act of 1933, as amended (the "1933 Act"). Promptly after execution and delivery of this Agreement, the Company will prepare and file a prospectus in accordance with the provisions of Rule 430B ("Rule 430B") of the rules and regulations of the Commission under the 1933 Act (the "1933 Act Regulations") and paragraph (b) of Rule 424 ("Rule 424(b)") of the 1933 Act Regulations. The information included in such prospectus that was omitted from such registration statement at the time it became effective but that is deemed to be part of and included in such registration statement at the time it became effective pursuant to Rule 430B (or Rule 430A of the 1933 Act Regulations, as applicable) is referred to as "Rule 430B Information." Each prospectus used in connection with the offering of the Securities that omitted the Rule 430B Information is herein called a "preliminary prospectus." Such registration statement, at any given time, including all exhibits, financial schedules and the documents incorporated by reference therein pursuant to Item 12 of Form S-3 under the 1933 Act, as amended or supplemented from time to time, and the documents otherwise deemed to be a part thereof or included therein by 1933 Act Regulations (including by Rules 430A or 430B, as applicable), is herein called the "Registration Statement." Any registration statement filed pursuant to Rule 462(b) of the 1933 Act Regulations is herein referred to as the "Rule 462(b) Registration Statement," and after such filing, if applicable, the term "Registration Statement" shall include the Rule 462(b) Registration Statement. The final prospectus in the form first furnished to the Underwriters for use in connection with the offering of the Securities, including the documents incorporated by reference therein pursuant to Item 12 of Form S-3 under the 1933 Act at the time of the execution of this Agreement and any preliminary prospectuses that form a part thereof, is herein called the "Prospectus." For purposes of this Agreement, all references to the Registration Statement, any preliminary prospectus, the Prospectus or any amendment or supplement to any of the foregoing shall be deemed to include the copy filed with the Commission pursuant to its Electronic Data Gathering, Analysis and Retrieval system ("EDGAR").

All references in this Agreement to financial statements and schedules and other information which is "contained," "included" or "stated" in the Registration Statement, any preliminary prospectus or the Prospectus (or other references of like import) shall be deemed to mean and include all such financial statements and schedules and other information which is incorporated by reference in or otherwise deemed by 1933 Act Regulations to be a part of or included in the Registration Statement, any preliminary prospectus or the Prospectus, as the case may be; and all references in this Agreement to amendments or supplements to the Registration Statement, any preliminary prospectus or the Prospectus shall be deemed to mean and include the filing of any document under the Securities Exchange Act of 1934, as amended (the "1934 Act"), which is incorporated by reference in or otherwise deemed by 1933 Act Regulations to be a part of or included in the Registration Statement, such preliminary prospectus or the Prospectus, as the case may be.

Section 1. Representations and Warranties.

(a) Representations and Warranties by the Company. The Company represents and warrants to each Underwriter as of the date hereof, as of the Applicable Time referred to in Section 1(a)(i) hereof, as of the Closing Time referred to in Section 2(c) hereof and, if the Company is selling Option Securities on a Date of Delivery, as of each such Date of Delivery, and agrees with each Underwriter, as follows:

(i) Compliance with Registration Requirements. The Company meets the requirements for use of Form S-3 under the 1933 Act. Each of the Registration Statement, any Rule 462(b) Registration Statement and any post-effective amendment thereto has become effective under the 1933 Act and no stop order suspending the effectiveness of the Registration Statement, any Rule 462(b) Registration Statement or any post-effective amendment thereto has been issued under the 1933 Act and no proceedings for that purpose have been instituted or are pending or, to the knowledge of the Company, are contemplated by the Commission, and any request on the part of the Commission for additional information has been complied with. The date of this Agreement is not more than three years subsequent to the initial effective date of the Registration Statement.

At the respective times the Registration Statement, any Rule 462(b) Registration Statement and any post-effective amendments thereto became effective and at the Closing Time, the Registration Statement, the Rule 462(b) Registration Statement and any amendments and supplements thereto complied and will comply in all material respects with the requirements of the 1933 Act and the 1933 Act Regulations and did not and, as amended, as applicable, will not contain an untrue statement of a material fact or omit to state a material fact required to be stated therein or necessary to make the statements therein not misleading. Neither the Prospectus nor any amendments or supplements thereto (including any prospectus wrapper), at the time the Prospectus or any such amendment or supplement was issued and at the Closing Time, included or, as amended or supplemented, as applicable, will include an untrue statement of a material fact or omitted or, as amended or supplemented, as applicable, will omit to state a material fact necessary in order to make the statements therein, in the light of the circumstances under which they were made, not misleading.

As of the Applicable Time (as defined below), neither (x) the Issuer General Use Free Writing Prospectus(es) (as defined below) issued at or prior to the Applicable Time, the Statutory Prospectus (as defined below) and the information included on Schedule B hereto (collectively, the “General Disclosure Package”), nor (y) any individual Issuer Limited Use Free Writing Prospectus, when considered together with the General Disclosure Package, included any untrue statement of a material fact or omitted 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.

As used in this subsection and elsewhere in this Agreement:

“Applicable Time” means 8:00 a.m. (Eastern time) on May 16, 2013 or such other time as agreed upon in writing by the Company and the Representative.

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“Issuer Free Writing Prospectus” means any “issuer free writing prospectus,” as defined in Rule 433 of the 1933 Act Regulations (“Rule 433”), relating to the Securities that (i) is required to be filed with the Commission by the Company, (ii) is a “road show for an offering that is a written communication” within the meaning of Rule 433(d)(8)(i) whether or not required to be filed with the Commission or (iii) is exempt from filing pursuant to Rule 433(d)(5)(i) because it contains a description of the Securities or of the offering that does not reflect the final terms, in each case in the form filed or required to be filed with the Commission or, if not required to be filed, in the form required to be retained in the Company’s records pursuant to Rule 433(g).

“Issuer General Use Free Writing Prospectus” means any Issuer Free Writing Prospectus that is intended for general distribution to prospective investors (other than a “*bona fide* electronic road show,” as defined in Rule 433), as evidenced by its being specified in Schedule D hereto.

“Issuer Limited Use Free Writing Prospectus” means any Issuer Free Writing Prospectus that is not an Issuer General Use Free Writing Prospectus.

“Statutory Prospectus” as of any time means the prospectus relating to the Securities that is included in the Registration Statement immediately prior to that time, including any document incorporated by reference therein and any preliminary or other prospectus deemed to be a part thereof.

Each Issuer Free Writing Prospectus, as of its issue date and at all subsequent times through the completion of the public offer and sale of the Securities or until any earlier date that the issuer notified or notifies the Representative as described in Section 3(e), did not, does not and will not include any information that conflicted, conflicts or will conflict with the information contained in the Registration Statement or the Prospectus, including any document incorporated by reference therein, and any preliminary or other prospectus deemed to be a part thereof that has not been superseded or modified.

The representations and warranties in this subsection shall not apply to statements in or omissions from the Registration Statement, the Prospectus or any Issuer Free Writing Prospectus, or any amendment or supplement to the foregoing, made in reliance upon and in conformity with written information furnished to the Company by any Underwriter through the Representative expressly for use therein.

Each preliminary prospectus (including the prospectus filed as part of the Registration Statement as originally filed or as part of any amendment thereto) complied when so filed in all material respects with the 1933 Act Regulations and each preliminary prospectus and the Prospectus delivered to the Underwriters for use in connection with this offering was identical to the electronically transmitted copies thereof filed with the Commission pursuant to EDGAR, except to the extent permitted by Regulation S-T.

At the time of filing the Registration Statement, any Rule 462(b) Registration Statement and any post-effective amendments thereto and at the date hereof, the Company was not and is not an “ineligible issuer,” as defined in Rule 405 of the 1933 Act Regulations.

(ii) Incorporated Documents. The documents incorporated or deemed to be incorporated by reference in the Registration Statement and the Prospectus, when they became effective or at the time they were or hereafter are filed with the Commission, complied and will comply in all material respects with the requirements of the 1934 Act, and the rules and regulations of the Commission under the 1934 Act (the “1934 Regulations”).

(iii) Independent Accountants. The accountants who certified the financial statements and supporting schedules included or incorporated by reference in the Registration Statement are independent public accountants as required by the 1933 Act and the 1933 Act Regulations and Rule 3600T of the Public Company Accounting Oversight Board.

(iv) Financial Statements. The financial statements and schedules included or incorporated by reference in the Registration Statement, the General Disclosure Package and the Prospectus present fairly the financial condition of the Company and its consolidated subsidiaries as of the respective dates thereof and the results of operations and cash flows of the Company and its consolidated subsidiaries for the respective periods covered thereby, all in conformity with generally accepted accounting principles (“GAAP”) applied on a consistent basis throughout the periods involved. The selected consolidated

(v) No Material Adverse Change in Business. Subsequent to the respective dates as of which information is given in the Registration Statement, the General Disclosure Package or the Prospectus, except as set forth in or contemplated thereby (exclusive of any amendments or supplements thereto subsequent to the date of this Agreement), (i) there has not occurred any material adverse change, or any development involving a prospective material adverse change, in the condition, financial or otherwise, or in the earnings, business or operations of the Company and its consolidated subsidiaries, taken as a whole (a “Material Adverse Effect”), (ii) there has not been and will not have been any change in the capitalization of the Company (other than in connection with the grant or exercise of options or other awards to purchase the Common Stock granted pursuant to the Company’s stock incentive plans from the shares reserved therefor), (iii) the Company has not incurred and will not incur, except in the ordinary course of business as described in the General Disclosure Package, any material liabilities or obligations, direct or contingent, (iv) the Company has not entered into and will not enter into, except in the ordinary course of business as described in the General Disclosure Package, any material transactions other than pursuant to this Agreement and the transactions referred to herein and (v) the Company has not and will not have paid or declared any dividends or other distributions of any kind on any class of its capital stock.

(vi) Good Standing of the Company. The Company and each of its subsidiaries has been duly incorporated and is validly existing as a corporation in good standing under the laws of the jurisdiction of its organization, with corporate power and authority to own its properties and conduct its business as described in the General Disclosure Package and the Prospectus. The Company and each of its subsidiaries is duly qualified to do business as a foreign corporation in good standing in all other jurisdictions in which such qualification is required, whether by reason of its ownership or lease of property or the conduct of its business, except to the extent that the failure to be so qualified or be in good standing would not have a Material Adverse Effect.

(vii) Subsidiaries. The Company owns or controls, directly or indirectly, only the following corporations, partnerships, limited liability partnerships, limited liability companies, associations or other entities: Cyclacel Limited, a private limited company organized under the laws of England and Wales; and ALIGN Pharmaceuticals, LLC, a private limited liability company organized under the laws of Delaware.

(viii) Capitalization. The authorized, issued and outstanding capital stock of the Company is as set forth in the Prospectus (except for subsequent issuances, if any, pursuant to this Agreement, pursuant to reservations, agreements or employee, director and/or consultant benefit or equity incentive plans referred to in the Prospectus or pursuant to the exercise or conversion of convertible securities or options referred to in the Prospectus). The shares of issued and outstanding capital stock of the Company have been duly authorized and validly issued and are fully paid and non-assessable; the stockholders of the Company have no statutory, contractual preemptive or similar rights with respect to its Common Stock; none of the outstanding shares of capital stock of the Company are or will have been issued in violation of any statutory, contractual preemptive or similar rights of any security holder of the Company.

(ix) Authorization of Agreement. This Agreement has been duly authorized, executed and delivered by the Company.

(x) Authorization and Description of Securities. The Securities to be purchased by the Underwriters from the Company have been duly authorized for issuance and sale to the Underwriters pursuant to this Agreement and, when issued and delivered by the Company pursuant to this Agreement against payment of the consideration set forth herein, will be validly issued and fully paid and non-assessable; the Common Stock conform as to legal matters in all material respects to the respective descriptions thereof contained in the General Disclosure Package and the Prospectus and such descriptions conform to the rights set forth in the instruments defining the same; no holder of the Securities will be subject to personal liability by reason of being such a holder; and the issuance of the Securities is not subject to any preemptive or other similar rights of any security holder of the Company that have not been validly waived.

(xi) Absence of Defaults and Conflicts. The Company is not (i) except as described with respect to the payment of dividends on the Company’s 6% Convertible Exchangeable Preferred Stock (“Preferred Stock”) in the Registration Statement, the General Disclosure Package and the Prospectus, in violation of its charter or by-laws or (ii) in default in the performance or observance of any obligation, agreement, covenant or condition contained in any contract, indenture, mortgage, deed of trust, loan or credit agreement, note, lease or other agreement or instrument to which the Company is a party or by which it may be bound, or to which any of the property or assets of the Company is subject (collectively, “Agreements and Instruments”), except for any default under such Agreements and Instruments that could not, individually or in the aggregate, have a Material Adverse Effect; and the execution, delivery and performance of this Agreement and the consummation of the transactions contemplated herein (including the issuance and sale of the Securities and the use of the proceeds from the sale of the Securities as described in the Prospectus under the caption “Use of Proceeds”) and compliance by the Company with its obligations hereunder have been duly authorized by all necessary corporate action by the Company and do not and will not, whether with or without the giving of notice or passage of time or both, conflict with or constitute a breach of, or default or Repayment Event (as defined below) under, or result in the creation or imposition of any lien, charge or encumbrance upon any property or assets of the Company or any of its subsidiaries pursuant to, the Agreements and Instruments, nor will such action result in any violation of the provisions of the charter or by-laws of the Company or any applicable law, statute, rule, regulation, judgment, order, writ or decree of any government, government instrumentality or court, domestic or foreign, having jurisdiction over the Company or any of its subsidiaries or any of their respective assets, properties or operations. As used herein, a “Repayment Event” means any event or condition which gives the holder of any note, debenture or other evidence of indebtedness (or any person acting on such holder’s behalf) the right to require the repurchase, redemption or repayment of all or a portion of such indebtedness by the Company or any of its subsidiaries.

(xii) Absence of Labor Dispute. No labor problem or dispute with the employees of the Company or any of its subsidiaries exists or, to the Company’s knowledge, is threatened or imminent, except for any such threatened or imminent labor problem or dispute that would not, individually or in the aggregate, have a Material Adverse Effect. The Company is not aware that any key employee or significant group of employees of the Company plans to terminate employment with the Company or any of its subsidiaries.

(xiii) Absence of Proceedings. There are no legal or governmental proceedings pending or, to the knowledge of the Company, threatened, to which the Company or any of its subsidiaries is a party or to which any of the properties of the Company or any of its subsidiaries is subject (i) other than proceedings accurately described in all material respects in the General Disclosure Package and proceedings that would not have a Material

Adverse Effect on the Company and its subsidiaries, taken as a whole, or, if determined adversely to the Company, would not materially and adversely affect the power or ability of the Company to perform its obligations under this Agreement or to consummate the transactions contemplated by the General Disclosure Package or (ii) that are required to be described in the Registration Statement or the General Disclosure Package and are not so described; and there are no statutes, regulations, contracts or other documents that are required to be described in the Registration Statement or the General Disclosure Package or to be filed as exhibits to the Registration Statement that are not described or filed as required. The General Disclosure Package contains in all material respects the same description of the foregoing matters contained in the Prospectus.

(xiv) Nasdaq and 1934 Act. The Company is subject to and in compliance in all material respects with the reporting requirements of Section 13 or Section 15(d) of the 1934 Act. The Common Stock is registered pursuant to Section 12(b) of the 1934 Act and is listed on the Nasdaq Global Market, and the Company has taken no action designed to, or reasonably likely to have the effect of, terminating the registration of the Common Stock under the 1934 Act or delisting the Common Stock from the Nasdaq Global Market, nor has the Company received any notification that the Commission or the Nasdaq Stock Market LLC (“Nasdaq”) is contemplating terminating such registration or listing. No consent, approval, authorization or order of, or filing, notification or registration with, the Nasdaq Global Market is required for the listing and trading of the Securities on the Nasdaq Global Market, except for (i) a Notification Form: Listing of Additional Shares and (ii) a Notification Form: Change in the Number of Shares Outstanding. The Company is in compliance in all material respects with all applicable corporate governance requirements set forth in the Nasdaq Marketplace Rules.

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(xv) Possession of Intellectual Property. The Company owns, possesses or has valid, binding and enforceable rights to use the Company Intellectual Property (as defined below). Except as described in the General Disclosure Package and the Prospectus, (A) the Company has not received any written notice, nor to the Company’s knowledge, any other notice, of any infringement by the Company or any of its subsidiaries with respect to any Intellectual Property (as defined below) of any third party, (B) the discoveries, inventions, products or processes of the Company described in the General Disclosure Package or the Prospectus do not, to the Company’s knowledge, infringe or interfere with any right or valid patent claim of any third party, (C) neither the Company nor any of its subsidiaries is obligated to pay a royalty, grant a license or provide other consideration to any third party in connection with the Company Intellectual Property, (D) no third party has any ownership rights in or to any Company Intellectual Property that fall outside the scope of the in-licensed intellectual property rights of the Company. All Company Intellectual Property consisting of patents and patent applications (the “Company Patents”) has been duly and properly filed; the Company is not aware of any facts required to be disclosed to the United States Patent and Trademark Office (the “PTO”) that were not disclosed to the PTO and which would preclude the grant of a patent for the Company Patents; and the Company is not aware of any facts which would preclude it from having clear title to the Company Patents that have been identified by the Company as being owned by the Company. For purposes of this Agreement, “Intellectual Property” means patents, patent rights, trademarks, servicemarks, trade dress rights, copyrights, trade names and domain names, and all registrations and applications for each of the foregoing, trade secrets, know-how (including other unpatented and/or unpatentable proprietary or confidential information, systems or procedures), inventions and technology, and “Company Intellectual Property” means Intellectual Property that is reasonably necessary or used in any material respect to conduct the business of the Company and its subsidiaries, as described in the General Disclosure Package and the Prospectus.

(xvi) No Shareholder Approval Required. No approval of the shareholders of the Company under the rules and regulations of Nasdaq is required for the Company to issue and deliver to the Underwriters the Securities.

(xvii) Absence of Further Requirements. No consent, approval, authorization or order of, or any filing or declaration with, any court or governmental agency or body is required for the consummation by the Company of the transactions on its part contemplated herein, including the offering and sale of the Securities, except such as have been obtained or as may be required under the 1933 Act, the 1933 Act Regulations, state securities laws or the rules and regulations of the Financial Industry Regulatory Authority, Inc. (“FINRA”) or The Nasdaq Stock Market.

(xviii) Absence of Manipulation. The Company has not taken, nor will the Company take, directly or indirectly, any action which is designed to or which has constituted or which would be expected to cause or result in stabilization or manipulation of the price of any security of the Company to facilitate the sale or resale of the Securities.

(xix) Possession of Licenses and Permits. The Company possesses all certificates, authorizations, registrations, permits, licenses, approvals and consents (collectively, “Governmental Licenses”) issued by the appropriate federal, state, local or foreign regulatory agencies or bodies necessary to conduct the business of the Company and its subsidiaries as described in the General Disclosure Package and the Prospectus, including without limitation, all such certificates, authorizations, registrations, permits, licenses, approvals and consents required by the United States Food and Drug Administration (the “FDA”), the United States Drug Enforcement Administration or any other federal, state, local or foreign agencies or bodies engaged in the regulation of clinical trials, pharmaceuticals, biologics or biohazardous substances or materials, except where the failure so to possess such Governmental Licenses would not, singly or in the aggregate, have a Material Adverse Effect; the Company is in compliance with the terms and conditions of all such Governmental Licenses, except where the failure so to comply would not, singly or in the aggregate, have a Material Adverse Effect; all of the Governmental Licenses are valid and in full force and effect, except when the invalidity of such Governmental Licenses or the failure of such Governmental Licenses to be in full force and effect would not, singly or in the aggregate, have a Material Adverse Effect; and the Company has not received any notice of proceedings relating to the revocation or modification of any such Governmental Licenses which, singly or in the aggregate, if the subject of an unfavorable decision, ruling or finding, would have a Material Adverse Effect. To the extent required by applicable laws and regulations of the FDA, the Company has submitted to the FDA an Investigational New Drug Application or amendment or supplement thereto for each investigational cancer drug and corresponding clinical trial it has conducted or sponsored or is conducting or sponsoring, all such submissions were in material compliance with applicable laws and rules and regulations when submitted and no material deficiencies have been asserted by the FDA with respect to any such submissions.

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(xx) Preclinical Studies and Tests and Clinical Trials. The Company and each of its subsidiaries has operated and currently is in compliance in all material respects with the United States Federal Food, Drug, and Cosmetic Act, all applicable rules and regulations of the FDA and other applicable federal, state, local and foreign governmental bodies exercising comparable authority. The preclinical studies and tests and clinical trials conducted by or on behalf of the Company or any of its subsidiaries that are described in the General Disclosure Package or the Prospectus were, and, if still pending, are being, conducted in all material respects in accordance with applicable law and regulations; the descriptions of such studies, tests and trials, and the results thereof, conducted by or on behalf of the Company contained in the General Disclosure Package or the Prospectus are accurate and complete in all material respects; the Company is not aware of any tests, studies or trials not described or referred to in the General Disclosure Package and the Prospectus, the results

of which reasonably call into question the results of the tests, studies and trials described or referred to in the General Disclosure Package and the Prospectus; and the Company has not received any notice or correspondence from the FDA or any foreign, state or local governmental body exercising comparable authority, or any Institutional Review Board or comparable authority requiring the termination, suspension, clinical hold or material modification of any tests, studies or trials, which termination, suspension or clinical hold or material modification would have a Material Adverse Effect.

(xxi) Title to Property. The Company and its subsidiaries do not own any real property. The Company and its subsidiaries have good title to all personal property owned by them that is material to the business of the Company and its subsidiaries, in each case, free and clear of all mortgages, pledges, liens, security interests, claims, restrictions or encumbrances of any kind except such as (a) are described in the General Disclosure Package and the Prospectus or (b) do not singly or in the aggregate, materially affect the value of such property and do not materially interfere with the use made and proposed to be made of such property by the Company or any of its subsidiaries; and all of the leases and subleases material to the business of the Company and its subsidiaries and under which they hold properties described in the General Disclosure Package or the General Disclosure Package and the Prospectus, are in full force and effect, and, except as described in the Prospectus, the Company has no notice of any material claim of any sort that has been asserted by anyone adverse to the rights of the Company or any of its subsidiaries under any of the leases or subleases mentioned above, or affecting or questioning the rights of the Company or any of its subsidiaries to the continued possession of the leased or subleased premises under any such lease or sublease.

(xxii) Investment Company Act. The Company is not required, and upon the issuance and sale of the Securities as herein contemplated and the application of the net proceeds therefrom as described in the Prospectus will not be required, to register as an “investment company” under the Investment Company Act of 1940, as amended (the “1940 Act”).

(xxiii) Environmental Laws. The Company and each of its subsidiaries (a) are in compliance with any and all applicable federal, state, local and foreign laws, rules, regulations, decisions and orders relating to the protection of human health and safety, the environment or hazardous or toxic substances or wastes, pollutants or contaminants (collectively, “Environmental Laws”); (b) have received and are in compliance with all permits, licenses or other approvals required of it under applicable Environmental Laws to conduct its business; and (c) have not received notice of any actual or potential liability for the investigation or remediation of any disposal or release of hazardous or toxic substances or wastes, pollutants or contaminants regulated under any Environmental Laws, except in each case as would not, individually or in the aggregate, have a Material Adverse Effect.

(xxiv) Registration Rights. Except as set forth in the General Disclosure Package and the Prospectus, there are no persons with rights to have any securities registered pursuant to the Registration Statement, which rights have not been waived or complied with, nor, except as set forth in the General Disclosure Package and the Prospectus, are there any persons with rights to have any securities otherwise registered by the Company under the 1933 Act.

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(xxv) Accounting Controls and Disclosure Controls.

(A) The Company and its consolidated subsidiaries maintain a system of internal accounting controls sufficient to provide reasonable assurances that (w) transactions are executed in accordance with management’s general or specific authorization; (x) transactions are recorded as necessary to permit preparation of financial statements in conformity with GAAP and to maintain accountability for assets; (y) access to assets is permitted only in accordance with management’s general or specific authorization; and (z) the recorded accountability for assets is compared with the existing assets at reasonable intervals and appropriate action is taken with respect to any differences. Except as described in the Prospectus, since the end of the Company’s most recent audited fiscal year, there has been (1) no material weakness in the Company’s internal control over financial reporting (whether or not remediated) and (2) no change in the Company’s internal control over financial reporting that has materially affected, or is reasonably likely to materially affect, the Company’s internal control over financial reporting.

(B) The Company and its consolidated subsidiaries employ disclosure controls and procedures that are designed to ensure that information required to be disclosed by the Company in the reports that it files or submits under the 1934 Act is recorded, processed, summarized and reported, within the time periods specified in the Commission’s rules and forms, and is accumulated and communicated to the Company’s management, including its principal executive officer or officers and the principal financial officer or officers, as appropriate, to allow timely decisions regarding disclosure.

(xxvi) Compliance with the Sarbanes-Oxley Act. To the extent that the Sarbanes-Oxley Act of 2002, as amended, and the rules and regulations promulgated by the Commission and the Nasdaq Global Market thereunder (“Sarbanes-Oxley Act”) has been applicable to the Company and its subsidiaries, there is no and there has been no failure on the part of the Company or any of its subsidiaries or any of their respective directors or officers, in their capacities as such, to comply in all material respects with the Sarbanes-Oxley Act, including Section 402 related to loans and Sections 302 and 906 related to certifications.

(xxvii) FINRA Matters. Except as disclosed in writing to the Representative, neither the Company nor, to the Company’s knowledge, the Company’s officers, directors or affiliates (within the meaning of FINRA Conduct Rule 2720(f)), directly or indirectly controls, is controlled by, or is under common control with, or is an associated person (within the meaning of Article I, paragraph (ff) of the By-laws of FINRA) of any member firm of FINRA.

(xxviii) Payment of Taxes. The Company and its subsidiaries have filed all United States federal income tax returns that have been required to be filed and has paid all taxes shown thereon or otherwise assessed, which are due and payable, except assessments against which appeals have been or will be promptly taken and as to which adequate reserves have been provided. The Company and its subsidiaries have filed all other tax returns that are required to have been filed by them pursuant to applicable state, local or foreign law, except insofar as the failure to file such returns would not have a Material Adverse Effect, and has paid all taxes shown thereon or otherwise assessed, which are due and payable, except assessments against which appeals have been or will be promptly taken and as to which adequate reserves have been provided. The Company and its subsidiaries have no tax deficiency that has been or, to the best knowledge of the Company, might be asserted or threatened against it that could have a Material Adverse Effect.

(xxix) Insurance. The Company carries or is entitled to the benefits of insurance, with financially sound and reputable insurers, in such amounts and covering such risks as are appropriate in the judgment of management to protect the Company and its business, and all such insurance is in full force and effect. The Company has no reason to believe that it will not be able (a) to renew its existing insurance coverage as and when such policies expire

or (b) 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 have a Material Adverse Effect. The Company has not been denied any insurance coverage which it has sought or for which it has applied.

(xxx) Statistical and Market-Related Data. Any statistical and market-related data included in the Registration Statement, the General Disclosure Package and the Prospectus are based on or derived from sources that the Company believes to be reliable and accurate, and, to the extent required by such sources, the Company has obtained the written consent to the use of such data from such sources.

(xxxii) Foreign Corrupt Practices Act. Neither the Company nor, to the knowledge of the Company, any director, officer, agent, employee, affiliate or other person acting on behalf of the Company is aware of or has taken any action, directly or indirectly, that would result in a violation by such persons of the Foreign Corrupt Practices Act of 1977, as amended, and the rules and regulations thereunder (the “FCPA”), including, without limitation, making use of the mails or any means or instrumentality of interstate commerce corruptly in furtherance of an offer, payment, promise to pay or authorization of the payment of any money, or other property, gift, promise to give, or authorization of the giving of anything of value to any “foreign official” (as such term is defined in the FCPA) or any foreign political party or official thereof or any candidate for foreign political office, in contravention of the FCPA; and the Company has, and, to the knowledge of the Company, its affiliates have, conducted their businesses in material 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.

(xxxiii) Money Laundering Laws. The operations of the Company and its subsidiaries are and have been conducted at all times in material compliance with applicable financial recordkeeping and reporting requirements of the Currency and Foreign Transactions Reporting Act of 1970, as amended, the money laundering statutes of all applicable jurisdictions, the rules and regulations thereunder and any related or similar 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 with respect to the Money Laundering Laws is pending or, to the best knowledge of the Company, threatened.

(xxxiiii) OFAC. Neither the Company nor, to the knowledge of the Company, any director, officer, agent, employee, affiliate or person acting on behalf of the Company 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.

(xxxv) Regulatory Status. The Company has (i) orally, to the Underwriters or to counsel to the Underwriters, fairly summarized in all material respects the substance of all of its material communications with representatives of the FDA; and (ii) no knowledge of any pending communication from the FDA, that would cause the Company to revise its strategy for seeking marketing approval from the FDA for any of the Company’s other products under development as described in the Registration Statement, the General Disclosure Package and the Prospectus.

(xxxvi) Forward-Looking Statements. No forward-looking statement (within the meaning of Section 27A of the 1933 Act and Section 21E of the 1934 Act) contained in either the Registration Statement, the General Disclosure Package or the Prospectus has been made or reaffirmed without a reasonable basis or has been disclosed other than in good faith.

(b) Officer’s Certificates. Any certificate signed by any officer of the Company delivered to the Representative or to counsel for the Underwriters shall be deemed a representation and warranty by the Company to each Underwriter as to the matters covered thereby.

Section 2. Sale and Delivery to Underwriters; Closing.

(a) Initial Securities. On the basis of the representations and warranties herein contained and subject to the terms and conditions herein set forth, the Company agrees to sell to each Underwriter, severally and not jointly, and each Underwriter, severally and not jointly, agrees to purchase from the Company, at the price per share set forth in Schedule B, the number of Initial Securities set forth in Schedule A opposite the name of such Underwriter, plus any additional number of Initial Securities which such Underwriter may become obligated to purchase pursuant to the provisions of Section 10 hereof.

(b) Option Securities. In addition, on the basis of the representations and warranties herein contained and subject to the terms and conditions herein set forth, the Company hereby grants an option to the Underwriters, severally and not jointly, to purchase up to an additional 166,667 shares of Common Stock at the price per share set forth in Schedule B, less an amount per share equal to any dividends or distributions declared by the Company and payable on the Initial Securities but not payable on the Option Securities. The option hereby granted may be exercised for 30 days after the date hereof and may be exercised in whole or in part from time to time upon notice by the Representative to the Company setting forth the number of Option Securities as to which the several Underwriters are then exercising the option and the time and date of payment and delivery for such Option Securities. Any such time and date of delivery (a “Date of Delivery”) shall be determined by the Representative, but shall not be later than seven full business days after the exercise of said option, nor in any event prior to the Closing Time. If the option is exercised as to all or any portion of the Option Securities, each of the Underwriters, acting severally and not jointly, will purchase that proportion of the total number of Option Securities then being purchased which the number of Initial Securities set forth in Schedule A opposite the name of such Underwriter bears to the total number of Initial Securities, subject, in each case, to such adjustments as the Representative in its sole discretion shall make to eliminate any sales or purchases of fractional shares.

(c) Payment. Payment of the purchase price for, and delivery of certificates for, the Initial Securities shall be made at the offices of Goodwin Procter LLP, 620 Eighth Avenue, New York, NY 10018, or at such other place as shall be agreed upon by the Representative and the Company, at 9:00 A.M. (Eastern time) on the fourth (third, if the pricing occurs before 4:30 P.M. (Eastern time) on any given day) business day after the date hereof (unless postponed in accordance with the provisions of Section 10), or such other time not later than ten business days after such date as shall be agreed upon by the Representative and the Company (such time and date of payment and delivery being herein called “Closing Time”).

In addition, in the event that any or all of the Option Securities are purchased by the Underwriters, payment of the purchase price for, and delivery of certificates for, such Option Securities shall be made at the above mentioned offices, or at such other place as shall be agreed upon by the Representative and

the Company, on each Date of Delivery as specified in the notice from the Representative to the Company.

Payment shall be made to the Company by wire transfer of immediately available funds to a bank account designated by the Company against delivery to the Representative for the respective accounts of the Underwriters of certificates for the Securities to be purchased by them. It is understood that each Underwriter has authorized the Representative, for its account, to accept delivery of, receipt for, and make payment of the purchase price for, the Initial Securities and the Option Securities, if any, which it has agreed to purchase. Subject to Section 10, JMP, individually and not as representative of the Underwriters, may (but shall not be obligated to) make payment of the purchase price for the Initial Securities and the Option Securities, if any, to be purchased by any Underwriter whose funds have not been received by the Closing Time, but such payment shall not relieve such Underwriter from its obligations hereunder.

(d) *Denominations; Registration.* Certificates for the shares comprising the Securities shall be in such denominations and registered in such names as the Representative may request in writing at least one full business day before the Closing Time. The certificates for the shares comprising the Securities will be made available for examination and packaging by the Representative in the city of New York not later than 10:00 A.M. (Eastern time) on the business day prior to the Closing Time.

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Section 3. Covenants of the Company. The Company covenants with each Underwriter as follows:

(a) *Compliance with Securities Regulations and Commission Requests.* The Company, subject to Section 3(b), will comply with the requirements of Rule 430B, and will promptly notify the Representative, and confirm the notice in writing, (i) when any post-effective amendment to the Registration Statement shall become effective, or any supplement to the Prospectus or any amended Prospectus shall have been filed, (ii) of the receipt of any comments from the Commission, (iii) of any request by the Commission for any amendment to the Registration Statement or any amendment or supplement to the Prospectus or any document incorporated by reference therein or otherwise deemed to be a part thereof or for additional information, (iv) of the issuance by the Commission of any stop order suspending the effectiveness of the Registration Statement or of any order preventing or suspending the use of any preliminary prospectus, or of the suspension of the qualification of the Securities for offering or sale in any jurisdiction, or of the initiation or threatening of any proceedings for any of such purposes or of any examination pursuant to Section 8(e) of the 1933 Act concerning the Registration Statement and (v) if the Company becomes the subject of a proceeding under Section 8A of the 1933 Act in connection with the offering of the Securities. The Company will effect the filings required under Rule 424(b), in the manner and within the time period required by Rule 424(b) (without reliance on Rule 424(b)(8)), and will take such steps as it deems necessary to ascertain promptly whether the form of prospectus transmitted for filing under Rule 424(b) was received for filing by the Commission and, in the event that it was not, it will promptly file such prospectus. The Company will make every reasonable effort to prevent the issuance of any stop order and, if any stop order is issued, to obtain the lifting thereof at the earliest possible moment.

(b) *Filing of Amendments and Exchange Act Documents.* The Company will give the Representative notice of its intention to file or prepare any amendment to the Registration Statement (including any filing under Rule 462(b)) or any amendment, supplement or revision to either any preliminary prospectus (including any prospectus included in the Registration Statement at the time it became effective) or to the Prospectus, and will furnish the Representative with copies of any such documents a reasonable amount of time prior to such proposed filing or use, as the case may be, and will not file or use any such document to which the Representative or counsel for the Underwriters shall object. The Company has given the Representative notice of any filings made pursuant to the 1934 Act or the 1934 Act Regulations within 48 hours prior to the Applicable Time; the Company will give the Representative notice of its intention to make any such filing from the Applicable Time to the Closing Time and will furnish the Representative with copies of any such documents a reasonable amount of time prior to such proposed filing, as the case may be, and will not file or use any such document to which the Representative or counsel for the Underwriters shall object.

(c) *Delivery of Registration Statements.* The Company has furnished or will deliver to the Representative and counsel for the Underwriters, without charge, signed copies of the Registration Statement as originally filed and of each amendment thereto (including exhibits filed therewith) and signed copies of all consents and certificates of experts, and will also deliver to the Representative, without charge, a conformed copy of the Registration Statement as originally filed and of each amendment thereto (without exhibits) for each of the Underwriters. The copies of the Registration Statement and each amendment thereto furnished to the Underwriters will be identical to the electronically transmitted copies thereof filed with the Commission pursuant to EDGAR, except to the extent permitted by Regulation S-T.

(d) *Delivery of Prospectuses.* The Company has delivered to each Underwriter, without charge, as many copies of each preliminary prospectus as such Underwriter reasonably requested, and the Company hereby consents to the use of such copies for purposes permitted by the 1933 Act. The Company will furnish to each Underwriter, without charge, during the period when the Prospectus is required to be delivered under the 1933 Act, such number of copies of the Prospectus (as amended or supplemented) as such Underwriter may reasonably request. The Prospectus and any amendments or supplements thereto furnished to the Underwriters will be identical to the electronically transmitted copies thereof filed with the Commission pursuant to EDGAR, except to the extent permitted by Regulation S-T.

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(e) *Continued Compliance with Securities Laws.* The Company will comply with the 1933 Act and the 1933 Act Regulations and the 1934 Act and 1934 Act Regulations so as to permit the completion of the distribution of the Securities as contemplated in this Agreement and in the Prospectus. If at any time when a prospectus is required by the 1933 Act to be delivered in connection with sales of the Securities, any event shall occur or condition shall exist as a result of which it is necessary, in the opinion of counsel for the Underwriters or for the Company, to amend the Registration Statement or amend or supplement the Prospectus in order that the Prospectus will not include any untrue statements of a material fact or omit to state a material fact necessary in order to make the statements therein not misleading in the light of the circumstances existing at the time it is delivered to a purchaser, or if it shall be necessary, in the opinion of such counsel, at any such time to amend the Registration Statement or amend or supplement the Prospectus in order to comply with the requirements of the 1933 Act or the 1933 Act Regulations, the Company will promptly prepare and file with the Commission, subject to Section 3(b), such amendment or supplement as may be necessary to correct such statement or omission or to make the Registration Statement or the Prospectus comply with such requirements, and the Company will furnish to the Underwriters such number of copies of such amendment or supplement as the Underwriters may reasonably request. If at any time following issuance of an Issuer Free Writing Prospectus there occurred or occurs an event or development as a result of which such Issuer Free Writing Prospectus conflicted or would conflict with the information contained in the Registration Statement relating to the Securities or included or would include an untrue statement of a material fact or omitted or would omit to state a material fact

necessary in order to make the statements therein, in the light of the circumstances, prevailing at that subsequent time, not misleading, the Company will promptly notify the Representative and will promptly amend or supplement, at its own expense, such Issuer Free Writing Prospectus to eliminate or correct such conflict, untrue statement or omission.

(f) *Blue Sky Qualifications.* The Company will use its best efforts, in cooperation with the Underwriters, to qualify the Securities for offering and sale under the applicable securities laws of such states and other jurisdictions (domestic or foreign) as the Representative may designate and to maintain such qualifications in effect for a period of not less than one year from the later of the effective date of the Registration Statement and any Rule 462(b) Registration Statement; provided, however, that the Company shall not be obligated to file any general consent to service of process or to qualify as a foreign corporation or as a dealer in securities in any jurisdiction in which it is not so qualified or to subject itself to taxation in respect of doing business in any jurisdiction in which it is not otherwise so subject.

(g) *Rule 158.* The Company will timely file such reports pursuant to the 1934 Act as are necessary in order to make generally available to its security holders as soon as practicable an earnings statement for the purposes of, and to provide to the Underwriters the benefits contemplated by, the last paragraph of Section 11(a) of the 1933 Act.

(h) *Use of Proceeds.* The Company will use the net proceeds received by it from the sale of the Securities in the manner specified in the Prospectus under "Use of Proceeds."

(i) *Listing.* The Company will use its best efforts to effect and maintain the listing of the Securities on the Nasdaq Global Market.

(j) *Restriction on Sale of Securities.* For the period specified below (the "Lock-Up Period"), the Company will not, directly or indirectly, take any of the following actions with respect to its Common Stock or any securities convertible into or exchangeable or exercisable for its Common Stock ("Lock-Up Securities"): (i) offer, sell, issue, contract to sell, pledge or otherwise dispose of, Lock-Up Securities, (ii) offer, sell, issue, contract to sell, contract to purchase or grant any option, right or warrant to purchase Lock-Up Securities, (iii) enter into any swap, hedge or any other agreement that transfers, in whole or in part, the economic consequences of ownership of Lock-Up Securities, (iv) establish or increase a put equivalent position or liquidate or decrease a call equivalent position in Lock-Up Securities within the meaning of Section 16 of the 1934 Act or (v) file with the Commission a registration statement under the 1933 Act relating to Lock-Up Securities, or publicly disclose the intention to take any such action, without the prior written consent of JMP, except (a) the Securities to be sold hereunder, (b) the issuance by the Company of shares of Lock-Up Securities upon the exercise of an option or warrant or the conversion of a security outstanding on the date hereof which have been described in the Registration Statement, the General Disclosure Package and the Prospectus, (c) the issuance by the Company of shares of Lock-Up Securities upon the conversion of the Preferred Stock outstanding on the date hereof, which have been described in the Registration Statement, the General Disclosure Package and the Prospectus or (d) the issuance of stock options and other stock-based awards (or the issuance of shares of Common Stock upon exercise thereof) to eligible participants pursuant to stock incentive plans of the Company described in the Registration Statement, the General Disclosure Package or the Prospectus. The initial Lock-Up Period will commence on the date hereof and continue for ninety (90) days after the date of the commencement of the public offering of the Securities or such earlier date that the Representative consents to in writing. Notwithstanding the foregoing, if (A) during the last 17 days of the initial 90-day Lock-Up Period, the Company issues an earnings release or material news or a material event relating to the Company occurs; or (B) prior to the expiration of the initial 90-day Lock-Up Period, the Company announces that it will release earnings results during the 16-day period beginning on the last day of the 90-day period, the Lock-Up Period shall continue until the expiration of the 18-day period beginning on the issuance of the earnings release or the occurrence of the material news or material event. The Company shall promptly notify the Representative of any earnings release, news or event that may give rise to an extension of the initial 90-day Lock-Up Period.

(k) *Reporting Requirements.* The Company, during the period when the Prospectus is required to be delivered under the 1933 Act, will file all documents required to be filed with the Commission pursuant to the 1934 Act within the time periods required by the 1934 Act and the rules and regulations of the Commission thereunder.

(l) *Issuer Free Writing Prospectuses.* The Company represents and agrees that, unless it obtains the prior consent of the Representative, and each Underwriter represents and agrees that, unless it obtains the prior consent of the Company and the Representative, it has not made and will not make any offer relating to the Securities that would constitute an "issuer free writing prospectus," as defined in Rule 433, or that would otherwise constitute a "free writing prospectus," as defined in Rule 405, required to be filed with the Commission. Any such free writing prospectus consented to by the Representative or by the Company and the Representative, as the case may be, is hereinafter referred to as a "Permitted Free Writing Prospectus." The Company represents that it has treated and agrees that it will treat each Permitted Free Writing Prospectus as an "issuer free writing prospectus," as defined in Rule 433, and has complied and will comply with the requirements of Rule 433 applicable to any Permitted Free Writing Prospectus, including timely filing with the Commission where required, legending and record keeping.

Section 4. Payment of Expenses.

(a) *Expenses.* The Company will pay or cause to be paid all expenses incident to the performance of its obligations under this Agreement, including (i) the preparation, printing and filing of the Registration Statement (including financial statements and exhibits) as originally filed and of each amendment thereto, (ii) the preparation, printing and delivery to the Underwriters of this Agreement and such other documents as may be required in connection with the offering, purchase, sale, issuance or delivery of the Securities, (iii) the preparation, issuance and delivery of the certificates for the Securities to the Underwriters, including any stock or other transfer taxes and any stamp or other duties payable upon the sale, issuance or delivery of the Securities to the Underwriters, (iv) the fees and disbursements of the Company's counsel, accountants and other advisors, (v) the qualification of the Securities under securities laws in accordance with the provisions of Section 3(f) hereof, including filing fees and the reasonable fees and disbursements of counsel for the Underwriters in connection therewith and in connection with the preparation of the Blue Sky Survey and any supplement thereto, (vi) the printing and delivery to the Underwriters of copies of each preliminary prospectus, any Permitted Free Writing Prospectus and of the Prospectus and any amendments or supplements thereto and any costs associated with electronic delivery of any of the foregoing by the Underwriters to investors, (vii) the preparation, printing and delivery to the Underwriters of copies of the Blue Sky Survey and any supplement thereto, (viii) the fees and expenses of any transfer agent or registrar for the Securities, (ix) the costs and expenses of the Company relating to investor presentations on any "road show" undertaken in connection with the marketing of the Securities, including without limitation, expenses associated with the production of road show slides and graphics, fees and expenses of any consultants engaged in connection with the road show presentations, travel and lodging expenses of the representatives and officers of the Company and any such consultants, and the cost of aircraft and other transportation chartered in connection with the road show, (x) the filing fees incident to, and the reasonable fees and disbursements of counsel to the Underwriters in connection with, the review by FINRA of the terms of the sale of the

Securities, (xi) the fees and expenses incurred in connection with the listing of the Securities on the Nasdaq Global Market, (xii) the costs and expenses (including without limitation any damages or other amounts payable in connection with legal or contractual liability) associated with the reforming of any contracts for sale of the Securities made by the Underwriter caused by a breach of the representation contained in the third paragraph of Section 1(a)(i), and (xiii) all other reasonable fees and disbursements of counsel to the underwriters; provided, however, that the fees and disbursements of counsel for the Underwriters contemplated in clause (xiii) shall not exceed \$120,000. It is understood that, subject to this Section and Section 4(b) hereof, the Underwriters will pay all of their costs and expenses, including fees and disbursements of their counsel not payable by the Company pursuant to the preceding sentence.

(b) *Termination of Agreement.* If this Agreement is terminated by the Representative in accordance with the provisions of Section 5 or Section 9(a)(i) hereof, the Company shall reimburse the Underwriters for all of their accountable out-of-pocket expenses, including the reasonable fees and disbursements of counsel for the Underwriters.

Section 5. Conditions of Underwriters' Obligations. The obligations of the several Underwriters hereunder are subject to the accuracy of the representations and warranties of the Company contained in Section 1 hereof and in certificates of any officer of the Company delivered pursuant to the provisions hereof, to the performance by the Company of its covenants and other obligations hereunder that are required to be performed or satisfied by it at or prior to the Closing Time, and to the following further conditions:

(a) *Effectiveness of Registration Statement.* The Registration Statement, including any Rule 462(b) Registration Statement, has become effective and at the Closing Time no stop order suspending the effectiveness of the Registration Statement shall have been issued under the 1933 Act or proceedings therefor initiated or threatened by the Commission, and any request on the part of the Commission for additional information shall have been complied with to the reasonable satisfaction of counsel to the Underwriters. A prospectus containing the Rule 430B Information shall have been filed with the Commission in the manner and within the time frame required by Rule 424(b) without reliance on Rule 424(b)(8) or a post-effective amendment providing such information shall have been filed and declared effective in accordance with the requirements of Rule 430B.

(b) *Opinion of Counsel for the Company.* At the Closing Time, the Representative shall have received the favorable opinion and negative assurance letter, dated as of the Closing Time, of (i) Mintz, Levin Cohn Ferris Glovsky and Popeo, PC, counsel for the Company, and (ii) D Young & Co and Nelson Mullins Riley & Scarborough LLP, intellectual property counsel to the Company, each in form and substance satisfactory to the Representative and counsel for the Underwriters, together with signed or reproduced copies of such letters for each of the other Underwriters with respect to such matters as the Representative may reasonably request.

(c) *Opinion of Counsel for Underwriters.* At Closing Time, the Representative shall have received the favorable opinion and negative assurance letter, dated as of the Closing Time, of Goodwin Procter LLP, counsel for the Underwriters, together with signed or reproduced copies of such letter for each of the other Underwriters with respect to such matters as the Representative may reasonably request.

(d) *Officers' Certificate.* At Closing Time, there shall not have been, since the date hereof or since the respective dates as of which information is given in the Prospectus or the General Disclosure Package, any Material Adverse Effect, and the Representative shall have received a certificate of the President or another executive officer of the Company and of the principal financial or principal accounting officer of the Company, dated as of Closing Time, to the effect that (i) there has been no such Material Adverse Effect, (ii) the representations and warranties in Section 1(a) hereof are true and correct with the same force and effect as though expressly made at and as of Closing Time, (iii) the Company has complied with all agreements and satisfied all conditions on its part to be performed or satisfied at or prior to Closing Time, and (iv) no stop order suspending the effectiveness of the Registration Statement has been issued and no proceedings for that purpose have been instituted or are pending or, to their knowledge, contemplated by the Commission.

(e) *Accountant's Comfort Letter.* At the time of the execution of this Agreement, the Representative shall have received from Ernst & Young LLP letters dated such date, in form and substance satisfactory to the Representative and counsel for the Underwriters, together with signed or reproduced copies of such letters for each of the other Underwriters containing statements and information of the type ordinarily included in accountants' "comfort letters" to underwriters with respect to the financial statements and certain financial information contained in the Registration Statement and the Prospectus.

(f) *Bring-down Comfort Letter.* At Closing Time, the Representative shall have received from Ernst & Young LLP letters, dated as of Closing Time, to the effect that they reaffirm the statements made in the letter furnished pursuant to subsection (e) of this Section, except that the specified date referred to shall be a date not more than three business days prior to Closing Time.

(g) *Approval of Listing.* At Closing Time, the Securities shall have been approved for inclusion in the NASDAQ Global Market, subject only to official notice of issuance.

(h) *Lock-up Agreements.* At the date of this Agreement, the Representative shall have received a lock-up agreement in form and substance satisfactory to the Representative signed by the persons listed on Schedule C hereto.

(i) *No Objection.* FINRA shall not have raised any objection with respect to the fairness and reasonableness of the underwriting terms and arrangements.

(j) *Conditions to Purchase of Option Securities.* In the event that the Underwriters exercise their option provided in Section 2(b) hereof to purchase all or any portion of the Option Securities, the representations and warranties of the Company contained herein and the statements in any certificates furnished by the Company shall be true and correct as of each Date of Delivery and, at the relevant Date of Delivery, the Representative shall have received:

(i) Officers' Certificates. Certificate, dated such Date of Delivery, of the President or another executive officer of the Company and of the principal financial or principal accounting officer of the Company confirming that the certificate delivered at the Closing Time pursuant to Section 5(d) hereof remains true and correct as of such Date of Delivery.

(ii) Opinion of Counsel for Company. If requested by the Representatives, the favorable opinion and negative assurance letter of (i) Mintz, Levin Cohn Ferris Glovsky and Popeo, PC, counsel for the Company, and (ii) D Young & Co and Nelson Mullins Riley & Scarborough LLP, intellectual property counsel to the Company, each in form and substance satisfactory to the Representative and counsel for the Underwriters, dated such Date of Delivery, relating to the Option Securities to be purchased on such Date of Delivery and otherwise to the same effect as the opinion required by Section 5(b) hereof.

(iii) Opinion of Counsel for Underwriters. If requested by the Representatives, the favorable opinion and negative assurance letter, dated as of the Closing Time, of Goodwin Procter LLP, counsel for the Underwriters, dated such Date of Delivery, relating to the Option Securities to be purchased on such Date of Delivery and otherwise to the same effect as the opinion required by Section 5(d) hereof.

(vi) Bring-down Comfort Letter. If requested by the Representatives, a letter from Ernst & Young LLP, in form and substance satisfactory to the Representative and dated such Date of Delivery, substantially in the same form and substance as the letter furnished to the Representatives pursuant to Section 5(f) hereof, except that the “specified date” in the letter furnished pursuant to this paragraph shall be a date not more than three business days prior to such Date of Delivery.

(k) Additional Documents. At Closing Time counsel for the Underwriters shall have been furnished with such documents and opinions as they may require for the purpose of enabling them to pass upon the issuance and sale of the Securities as herein contemplated, or in order to evidence the accuracy of any of the representations or warranties, or the fulfillment of any of the conditions, herein contained; and all proceedings taken by the Company in connection with the issuance and sale of the Securities as herein contemplated shall be satisfactory in form and substance to the Representative and counsel for the Underwriters.

(l) Termination of Agreement. If any condition specified in this Section shall not have been fulfilled when and as required to be fulfilled, this Agreement, or, in the case of any condition to the purchase of Option Securities on a Date of Delivery which is after the Closing Time, the obligations of the several Underwriters to purchase the relevant Option Securities, may be terminated by the Representative by notice to the Company at any time at or prior to Closing Time and such termination shall be without liability of any party to any other party except as provided in Section 4 and except that Sections 1, 6, 7 and 8 shall survive any such termination and remain in full force and effect.

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Section 6. Indemnification.

(a) Indemnification of Underwriters. The Company agrees to indemnify and hold harmless each Underwriter, each of its affiliates, as such term is defined in Rule 501(b) under the 1933 Act (each, an “Affiliate”), and each of its and their respective directors, officers, members, employees, representatives and agents, and each person, if any, who controls such Underwriter within the meaning of Section 15 of the 1933 Act or Section 20 of the 1934 Act as follows:

(i) against any and all loss, liability, claim, damage and expense whatsoever, as incurred, arising out of any untrue statement or alleged untrue statement of a material fact contained in the Registration Statement (or any amendment thereto), including the Rule 430B Information or the omission or alleged omission therefrom of a material fact required to be stated therein or necessary to make the statements therein not misleading or arising out of any untrue statement or alleged untrue statement of a material fact included in any preliminary prospectus, any Issuer Free Writing Prospectus or the Prospectus (or any amendment or supplement thereto), or the omission or alleged omission therefrom of a material fact necessary in order to make the statements therein, in the light of the circumstances under which they were made, not misleading;

(ii) against any and all loss, liability, claim, damage and expense whatsoever, as incurred, to the extent of the aggregate amount paid in settlement of any litigation, or any investigation or proceeding by any governmental agency or body, commenced or threatened, or of any claim whatsoever based upon any such untrue statement or omission, or any such alleged untrue statement or omission; provided that (subject to Section 6(d) below) any such settlement is effected with the written consent of the Company; and

(iii) against any and all expense whatsoever, as incurred (including the reasonable fees and disbursements of counsel chosen by the Representative), reasonably incurred in investigating, preparing or defending against any litigation, or any investigation or proceeding by any governmental agency or body, commenced or threatened, or any claim whatsoever based upon any such untrue statement or omission, or any such alleged untrue statement or omission, to the extent that any such expense is not paid under (i) or (ii) above;

provided, however, that this indemnity agreement shall not apply to any loss, liability, claim, damage or expense to the extent, but only to the extent, arising out of any untrue statement or omission or alleged untrue statement or omission made in reliance upon and in conformity with written information furnished to the Company by any Underwriter through the Representative expressly for use in the Registration Statement (or any amendment thereto), including the Rule 430B Information, or any preliminary prospectus, any Issuer Free Writing Prospectus or the Prospectus (or any amendment or supplement thereto).

(b) Indemnification of Company, Directors and Officers. Each Underwriter severally agrees to indemnify and hold harmless the Company, its directors, each of its officers who signed the Registration Statement, and each person, if any, who controls the Company within the meaning of Section 15 of the 1933 Act or Section 20 of the 1934 Act against any and all loss, liability, claim, damage and expense described in the indemnity contained in Section 6(a) above, as incurred, but only with respect to untrue statements or omissions, or alleged untrue statements or omissions, made in the Registration Statement (or any amendment thereto), including the Rule 430B Information or any preliminary prospectus, any Issuer Free Writing Prospectus or the Prospectus (or any amendment or supplement thereto) in reliance upon and in conformity with written information furnished to the Company by such Underwriter through the Representative expressly for use therein; provided, however, that the obligation of each Underwriter to indemnify the Company (including any controlling person, director or officer thereof) shall be limited to the net proceeds received by the Company from such Underwriter.

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(c) Actions against Parties; Notification. Each indemnified party shall give notice as promptly as reasonably practicable to each indemnifying party of any action commenced against it in respect of which indemnity may be sought hereunder, but failure to so notify an indemnifying party shall not relieve such indemnifying party from any liability hereunder to the extent it is not materially prejudiced as a result thereof and in any event shall not relieve it

from any liability which it may have otherwise than on account of this indemnity agreement. In the case of parties indemnified pursuant to Section 6(a) above, counsel to the indemnified parties shall be selected by the Representative and, in the case of parties indemnified pursuant to Section 6(b) above, counsel to the indemnified parties shall be selected by the Company. An indemnifying party may participate at its own expense in the defense of any such action and, to the extent it shall elect, jointly with any other indemnifying party, assume the defense thereof, with counsel reasonably satisfactory to such indemnified parties; provided, however, that counsel to the indemnifying party shall not (except with the consent of the indemnified party) also be counsel to the indemnified party. In no event shall the indemnifying parties be liable for fees and expenses of more than one counsel (in addition to any local counsel) separate from their own counsel for all indemnified parties in connection with any one action or separate but similar or related actions in the same jurisdiction arising out of the same general allegations or circumstances; provided further, however, that after notice from the indemnifying party to an indemnified party that the indemnifying party has elected to assume the defense of any action, the indemnifying party shall not be liable to such indemnified party for any legal fees or expenses of any other counsel or any other expenses, in each case subsequently incurred by such indemnified party, in connection with the defense thereof other than reasonable costs of investigation. The indemnified party will have the right to employ its own counsel in any such action, but the fees, expenses and other charges of such counsel will be at the expense of such indemnified party unless (i) the employment of counsel by the indemnified party has been authorized in writing by the indemnifying party, (ii) the named parties to any such proceeding (including any impleaded parties) include both the indemnifying party and the indemnified party and representation of both parties by the same counsel would be inappropriate due to actual or potential differing interests between them (in which case the indemnifying party will not have the right to direct the defense of such action on behalf of the indemnified party), or (iii) the indemnifying party has not in fact employed counsel reasonably satisfactory to the indemnified party to assume the defense of such action within a reasonable time after receiving notice of the commencement of the action, in each of which cases the reasonable fees, disbursements and other charges of counsel will be at the expense of the indemnifying party or parties. No indemnifying party shall, without the prior written consent of the indemnified parties, settle or compromise or consent to the entry of any judgment with respect to any litigation, or any investigation or proceeding by any governmental agency or body, commenced or threatened, or any claim whatsoever in respect of which indemnification or contribution could be sought under this Section 6 or Section 7 hereof (whether or not the indemnified parties are actual or potential parties thereto), unless such settlement, compromise or consent (x) includes an unconditional release of each indemnified party from all liability arising out of such litigation, investigation, proceeding or claim and (y) does not include a statement as to or an admission of fault, culpability or a failure to act by or on behalf of any indemnified party.

(d) *Settlement without Consent if Failure to Reimburse.* If at any time an indemnified party shall have requested an indemnifying party to reimburse the indemnified party for fees and expenses of counsel to which it is entitled hereunder, such indemnifying party agrees that it shall be liable for any settlement of the nature contemplated by Section 6(a)(ii) effected without its written consent if (i) such settlement is entered into more than 45 days after receipt by such indemnifying party of the aforesaid request, (ii) such indemnifying party shall have received notice of the terms of such settlement at least 30 days prior to such settlement being entered into and (iii) such indemnifying party shall not have reimbursed such indemnified party in accordance with such request prior to the date of such settlement (other than with respect to fees and expenses that the indemnifying party is contesting in good faith).

Section 7. Contribution. If the indemnification provided for in Section 6 hereof is for any reason unavailable to or insufficient to hold harmless an indemnified party in respect of any losses, liabilities, claims, damages or expenses referred to therein, then each indemnifying party shall contribute to the aggregate amount of such losses, liabilities, claims, damages and expenses incurred by such indemnified party, as incurred, (i) in such proportion as is appropriate to reflect the relative benefits received by the Company on the one hand and the Underwriters on the other hand from the offering of the Securities pursuant to this Agreement or (ii) if the allocation provided by clause (i) 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 of the Underwriters on the other hand in connection with the statements or omissions which resulted in such losses, liabilities, claims, damages or expenses, as well as any other relevant equitable considerations.

The relative benefits received by the Company on the one hand and the Underwriters on the other hand in connection with the offering of the Securities pursuant to this Agreement shall be deemed to be in the same respective proportions as the total net proceeds from the offering of the Securities pursuant to this Agreement (before deducting expenses) received by the Company and the total underwriting discount received by the Underwriters, in each case as set forth on the cover of the Prospectus bear to the aggregate initial public offering price of the Securities as set forth on the cover of the Prospectus.

The relative fault of the Company on the one hand and the Underwriters on the other hand shall be determined by reference to, among other things, whether any such untrue or alleged untrue statement of a material fact or omission or alleged omission to state a material fact relates to information supplied by the Company or by the Underwriters and the parties' relative intent, knowledge, access to information and opportunity to correct or prevent such statement or omission.

The Company and the Underwriters agree that it would not be just and equitable if contribution pursuant to this Section 7 were determined by pro rata allocation (even if the Underwriters were treated as one entity for such purpose) or by any other method of allocation which does not take account of the equitable considerations referred to above in this Section 7. The aggregate amount of losses, liabilities, claims, damages and expenses incurred by an indemnified party and referred to above in this Section 7 shall be deemed to include any legal or other expenses reasonably incurred by such indemnified party in investigating, preparing or defending against any litigation, or any investigation or proceeding by any governmental agency or body, commenced or threatened, or any claim whatsoever based upon any such untrue or alleged untrue statement or omission or alleged omission.

Notwithstanding the provisions of this Section 7, no Underwriter shall be required to contribute any amount in excess of the amount by which the total price at which the Securities underwritten by it and distributed to the public were offered to the public exceeds the amount of any damages which such Underwriter has otherwise been required to pay by reason of any such untrue or alleged untrue statement or omission or alleged omission.

No person guilty of fraudulent misrepresentation (within the meaning of Section 11(f) of the 1933 Act) shall be entitled to contribution from any person who was not guilty of such fraudulent misrepresentation.

For purposes of this Section 7, each person, if any, who controls an Underwriter within the meaning of Section 15 of the 1933 Act or Section 20 of the 1934 Act and each Underwriter's Affiliates and selling agents shall have the same rights to contribution as such Underwriter, and each director of the Company, each officer of the Company who signed the Registration Statement, and each person, if any, who controls the Company within the meaning of Section 15 of the 1933 Act or Section 20 of the 1934 Act shall have the same rights to contribution as the Company. The Underwriters' respective obligations to contribute pursuant to this Section 7 are several in proportion to the number of Initial Securities set forth opposite their respective names in Schedule A hereto and not joint.

Section 8. Representations, Warranties and Agreements to Survive. All representations, warranties and agreements contained in this Agreement or in certificates of officers of the Company submitted pursuant hereto, shall remain operative and in full force and effect regardless of (i) any investigation made by or on behalf of any Underwriter or its Affiliates or selling agents, any person controlling any Underwriter, its officers or directors, or any person controlling the Company and (ii) delivery of and payment for the Securities.

Section 9. Termination of Agreement.

(a) *Termination by the Representative*. The Representative may terminate this Agreement, by notice to the Company, at any time at or prior to Closing Time (i) if there has been, since the time of execution of this Agreement or since the respective dates as of which information is given in the Prospectus or General Disclosure Package, any Material Adverse Effect, which, in the reasonable judgment of the Representative is material and adverse and makes it impractical or inadvisable to market the Securities, (ii) if there has occurred any material adverse change in the financial markets in the United States or the international financial markets, any outbreak of hostilities or escalation thereof or other calamity or crisis or any change or development involving a prospective change in national or international political, financial or economic conditions, in each case the effect of which is such as to make it, in the reasonable judgment of the Representative, impracticable or inadvisable to market the Securities or to enforce contracts for the sale of the Securities, or (iii) if trading in any securities of the Company has been suspended or materially limited by the Commission or the Nasdaq Global Market, or if trading generally on the NYSE MKT or the New York Stock Exchange or in the Nasdaq Global Market has been suspended or materially limited, or minimum or maximum prices for trading have been fixed, or maximum ranges for prices have been required, by any of said exchanges or by such system or by order of the Commission, FINRA or any other governmental authority, or (iv) a material disruption has occurred in commercial banking or securities settlement or clearance services in the United States, or (v) if a banking moratorium has been declared by either Federal or New York authorities.

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(b) *Liabilities*. If this Agreement is terminated pursuant to this Section, such termination shall be without liability of any party to any other party except as provided in Section 4 hereof, and provided further that Sections 1, 6, 7 and 8 shall survive such termination and remain in full force and effect.

(c) *Termination of Lock-Up Agreements and Non-distribution Agreements*. In the event this Agreement is terminated for any reason, the Representative shall contemporaneously terminate or waive in their entirety the agreements referred to in Section 5(h).

Section 10. Default by One or More of the Underwriters. If one or more of the Underwriters shall fail at Closing Time to purchase the Securities which it or they are obligated to purchase under this Agreement (the “Defaulted Securities”), the Representative shall have the right, within 24 hours thereafter, to make arrangements for one or more of the non-defaulting Underwriters, or any other underwriters, to purchase all, but not less than all, of the Defaulted Securities in such amounts as may be agreed upon and upon the terms herein set forth; if, however, the Representative shall not have completed such arrangements within such 24-hour period, then:

(i) if the number of Defaulted Securities does not exceed 10% of the number of Securities to be purchased on such date, each of the non-defaulting Underwriters shall be obligated, severally and not jointly, to purchase the full amount thereof in the proportions that their respective underwriting obligations hereunder bear to the underwriting obligations of all non-defaulting Underwriters, or

(ii) if the number of Defaulted Securities exceeds 10% of the number of Securities to be purchased on such date, this Agreement or, with respect to any Date of Delivery which occurs after the Closing Time, the obligation of the Underwriters to purchase, and the Company to sell, the Option Securities to be purchased and sold on such Date of Delivery shall terminate without liability on the part of any non-defaulting Underwriter.

No action taken pursuant to this Section shall relieve any defaulting Underwriter from liability in respect of its default.

In the event of any such default which does not result in a termination of this Agreement or, in the case of a Date of Delivery which is after the Closing Time, which does not result in a termination of the obligation of the Underwriters to purchase and the Company to sell the relevant Option Securities, as the case may be, either the (i) Representative or (ii) the Company shall have the right to postpone Closing for a period not exceeding seven days in order to effect any required changes in the Registration Statement or Prospectus or in any other documents or arrangements. As used herein, the term “Underwriter” includes any person substituted for an Underwriter under this Section 10.

Section 11. Tax Disclosure. Notwithstanding any other provision of this Agreement, immediately upon commencement of discussions with respect to the transactions contemplated hereby, the Company (and each employee, representative or other agent of the Company) may disclose to any and all persons, without limitation of any kind, the tax treatment and tax structure of the transactions contemplated by this Agreement and all materials of any kind (including opinions or other tax analyses) that are provided to the Company relating to such tax treatment and tax structure. For purposes of the foregoing, the term “tax treatment” is the purported or claimed federal income tax treatment of the transactions contemplated hereby, and the term “tax structure” includes any fact that may be relevant to understanding the purported or claimed federal income tax treatment of the transactions contemplated hereby.

Section 12. Notices. All notices and other communications hereunder shall be in writing and shall be deemed to have been duly given if mailed or transmitted by any standard form of telecommunication. Notices to the Underwriters shall be directed to the Representative, JMP Securities LLC, 450 Park Avenue, 5th Floor, New York, NY 10022, Attention: Margery Fischbein, with copies to Goodwin Procter LLP, 620 Eighth Avenue, New York, NY 10018, Attention: Michael D. Maline, Esq.; notices to the Company shall be directed to it at Cyclacel Pharmaceuticals, Inc., 200 Connell Drive, Suite 1500, Berkeley Heights, NJ, 07922, Attention: Spiro Rombotis, President and Chief Executive Officer, with a copy (which shall not constitute notice) to Mintz, Levin, Cohn, Ferris, Glovsky and Popeo, P.C., The Chrysler Center, 666 Third Avenue, New York, NY 10017, Attention: Joel I. Papernik, Esq.

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Section 13. No Advisory or Fiduciary Relationship. The Company acknowledges and agrees that (a) the purchase and sale of the Securities pursuant to this Agreement, including the determination of the public offering price of the Securities and any related discounts and commissions, is an arm’s-length commercial transaction between the Company, on the one hand, and the several Underwriters, on the other hand, (b) in connection with the offering contemplated hereby and the process leading to such transaction each Underwriter is and has been acting solely as a principal and is not the agent or fiduciary of the Company or its respective stockholders, creditors, employees or any other party, (c) no Underwriter has assumed or will assume an advisory or fiduciary responsibility in favor of the Company with respect to the offering contemplated hereby or the process leading thereto and no Underwriter has any

obligation to the Company with respect to the offering contemplated hereby except the obligations expressly set forth in this Agreement, (d) the Underwriters and their respective affiliates may be engaged in a broad range of transactions that involve interests that differ from those of the Company, and (e) the Underwriters have not provided any legal, accounting, regulatory or tax advice with respect to the offering contemplated hereby and the Company has consulted its own respective legal, accounting, regulatory and tax advisors to the extent it deemed appropriate.

Section 14. Parties. This Agreement shall inure to the benefit of and be binding upon the Underwriters, the Company and their respective successors. Nothing expressed or mentioned in this Agreement is intended or shall be construed to give any person, firm or corporation, other than the Underwriters, the Company and their respective successors and the controlling persons and officers and directors referred to in Sections 6 and 7 and their heirs and legal representatives, any legal or equitable right, remedy or claim under or in respect of this Agreement or any provision herein contained. This Agreement and all conditions and provisions hereof are intended to be for the sole and exclusive benefit of the Underwriters, the Company and their respective successors, and said controlling persons and officers and directors and their heirs and legal representatives, and for the benefit of no other person, firm or corporation. No purchaser of Securities from any Underwriter shall be deemed to be a successor by reason merely of such purchase.

Section 15. GOVERNING LAW. THIS AGREEMENT SHALL BE GOVERNED BY AND CONSTRUED IN ACCORDANCE WITH THE LAWS OF THE STATE OF NEW YORK WITHOUT REGARD TO ITS CONFLICTS OF LAW PRINCIPLES.

Section 16. TIME. TIME SHALL BE OF THE ESSENCE OF THIS AGREEMENT. EXCEPT AS OTHERWISE SET FORTH HEREIN, SPECIFIED TIMES OF DAY REFER TO NEW YORK CITY TIME.

Section 17. Counterparts. This Agreement may be executed in any number of counterparts, each of which shall be deemed to be an original, but all such counterparts shall together constitute one and the same Agreement.

Section 18. Effect of Headings. The Section headings herein are for convenience only and shall not affect the construction hereof.

[Remainder of page intentionally left blank;
Signature page to immediately follow.]

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If the foregoing is in accordance with your understanding of our agreement, please sign and return to the Company a counterpart hereof, whereupon this instrument, along with all counterparts, will become a binding agreement among the Underwriters and the Company in accordance with its terms.

Very truly yours,

CYCLACEL PHARMACEUTICALS, INC.

By: /s/ Spiro Rombotis
Spiro Rombotis
President and Chief Executive Officer

CONFIRMED AND ACCEPTED,
as of the date first above written:

JMP SECURITIES LLC

By: /s/ Stephen Ortiz
Name: Stephen Ortiz
Title: Director of Equity Capital Markets

For themselves and as Representative of the other Underwriters named in Schedule A hereto.

SCHEDULE A

<u>Name of Underwriter</u>	<u>Number of Initial Securities</u>
JMP Securities LLC	4,800,000
Janney Montgomery Scott LLC	1,866,667
Total:	6,666,667

SCHEDULE B

CYCLACEL PHARMACEUTICALS, INC.

1. Offering Size: 6,666,667 shares
2. The initial public offering price per share for the Securities shall be \$3.00.

3. The purchase price per share for the Securities to be paid by the several Underwriters shall be \$2.82, being an amount equal to the initial public offering price set forth above less \$0.18 per share, subject to adjustment in accordance with Section 2(b) for dividends or distributions declared by the Company and payable on the Initial Securities but not payable on the Option Securities.
-

SCHEDULE C

LIST OF PERSONS AND ENTITIES SUBJECT TO LOCK-UP

Dr. Nicholas Bacopoulos

Sir John Banham

Dr. Judy Chiao

Dr. Christopher Henney

Gregory T. Hradsky

Paul McBarron

Spiro Rombotis

Lloyd Sems

Dr. David U'Prichard

SCHEDULE D

ISSUER GENERAL USE FREE WRITING PROSPECTUS

None.

May 16, 2013

Cyclacel Pharmaceuticals, Inc.
200 Connell Drive, Suite 1500
Berkeley Heights, NJ 07922

Ladies and Gentlemen:

You have requested our opinion with respect to certain matters in connection with the sale and issuance by Cyclacel Pharmaceuticals, Inc., a Delaware corporation (the “**Company**”), of up to 6,833,334 shares of the Company’s common stock, par value \$0.001 (the “**Common Stock**”), including 166,667 shares subject to the underwriters’ over-allotment option, pursuant to the Registration Statement on Form S-3 (Registration Statement No. 333-187801), filed with the Securities and Exchange Commission (the “**Commission**”) under the Securities Act of 1933, as amended (the “**Act**”), on April 23, 2013 and declared effective by the Commission on April 22, 2013 (the “**Registration Statement**”), the related prospectus included in the Registration Statement (the “**Base Prospectus**”), and the prospectus supplement relating to the shares of Common Stock filed with the Commission pursuant to Rule 424(b) promulgated under the Act (the “**Prospectus Supplement**” and, together with the Base Prospectus, the “**Prospectus**”). All of the shares of Common Stock are to be issued and sold by the Company as described in the Registration Statement and Prospectus.

In connection with this opinion, we have examined and relied upon the Registration Statement and the Prospectus, the Company’s Amended and Restated Certificate of Incorporation and Amended and Restated Bylaws, each as amended and currently in effect, and the originals or copies certified to our satisfaction of such records, documents, certificates, memoranda and other instruments as in our judgment are necessary or appropriate to enable us to render the opinion expressed below. 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 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.

Members of our firm are admitted to the Bar of the State of New York, and we do not express any opinion as to the laws of any other jurisdiction other than New York, the General Corporation Law of the State of Delaware and the United States federal laws. This opinion is based upon currently existing statutes, rules, regulations and judicial decisions, and we disclaim any obligation to advise you of any change in any of these sources of law or subsequent legal or factual developments which might affect any matters or opinions set forth herein.

Based upon the foregoing and in reliance thereon, and subject to the qualifications herein stated, we are of the opinion that the shares of Common Stock, when issued and sold in accordance with the Registration Statement and the Prospectus, will be validly issued, fully paid and non-assessable.

Mintz, Levin, Cohn, Ferris, Glovsky and Popeo, P.C.

BOSTON | LONDON | LOS ANGELES | NEW YORK | SAN DIEGO | SAN FRANCISCO | STAMFORD | WASHINGTON

Please note that we are opining only as to the matters expressly set forth herein, and no opinion should be inferred as to any other matters. This opinion is based upon currently existing statutes, rules, regulations and judicial decisions, and we disclaim any obligation to advise you of any change in any of these sources of law or subsequent legal or factual developments which might affect any matters or opinions set forth herein.

We consent to the reference to our firm under the caption “Legal Matters” in the Prospectus, the filing of this opinion as an exhibit to a current report on Form 8-K of the Company and the incorporation by reference of this opinion in the Registration Statement. In giving such consent, we do not hereby 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.

Very truly yours,

/s/ Mintz, Levin, Cohn, Ferris, Glovsky and Popeo, P.C.

Mintz, Levin, Cohn, Ferris, Glovsky and Popeo, P.C.



P R E S S R E L E A S E

**CYCLACEL PHARMACEUTICALS ANNOUNCES PROPOSED
PUBLIC OFFERING OF COMMON STOCK**

Berkeley Heights, NJ, May 15, 2013 — Cyclacel Pharmaceuticals, Inc. (NASDAQ: CYCC, NASDAQ: CYCCP; Cyclacel or the Company), today announced that it is offering to sell, subject to market and other conditions, shares of its common stock in an underwritten offering. Cyclacel also expects to grant the underwriters a 30-day option to purchase additional shares of common stock to cover overallocments, if any. All of the shares in this offering are to be sold by Cyclacel.

JMP Securities LLC is acting as the sole book-running manager and Janney Montgomery Scott LLC is acting as co-manager for this offering.

This offering is being made pursuant to an effective shelf registration statement previously filed with the U.S. Securities and Exchange Commission (the "SEC"). A preliminary prospectus supplement and accompanying prospectus describing the terms of this offering will be filed with the SEC. Before investing in this offering, interested parties should read in their entirety the prospectus supplement and the accompanying prospectus and the other documents that Cyclacel has filed with the SEC that are incorporated by reference in such prospectus supplement and the accompanying prospectus, which provide more information about Cyclacel and the offering.

This press release does not constitute an offer to sell or a solicitation of an offer to buy, nor shall there be any sale of these securities in any state or jurisdiction in which such offer, solicitation or sale would be unlawful prior to registration or qualification under the securities laws of any such state or jurisdiction. Any offer, if at all, will be made only by means of a prospectus supplement and accompanying prospectus forming a part of the effective registration statement. Copies of the preliminary prospectus supplement and accompanying prospectus relating to the offering may be obtained, when available, from JMP Securities LLC, 600 Montgomery Street, 10th Floor, San Francisco, California 94111, Attention: Prospectus Department, (415) 835-8985.

Cyclacel intends to file a preliminary prospectus supplement relating to this offering with the SEC, which will be available along with the prospectus filed with the SEC in connection with the shelf registration on the SEC's website at www.sec.gov.

About Cyclacel Pharmaceuticals, Inc.

Cyclacel is a biopharmaceutical company developing oral therapies that target the various phases of cell cycle control for the treatment of cancer and other serious diseases. Sapacitabine, Cyclacel's most advanced product candidate, is the subject of SEAMLESS, a Phase 3 trial being conducted under an SPA with the FDA as front-line treatment for acute myeloid leukemia (AML) in the elderly, and other studies for myelodysplastic syndromes (MDS), chronic lymphocytic leukemia (CLL) and solid tumors including breast, lung, ovarian and pancreatic cancer and in particular those carrying BRCA mutations. Cyclacel's strategy is to build a diversified biopharmaceutical business focused in hematology and oncology based on a development pipeline of novel drug candidates. Please visit www.cyclacel.com for additional information.

x 200 Connell Drive, Suite 1500, Berkeley Heights, New Jersey 07922, USA Tel +1 (908) 517 7330 Fax +1 866 271 3466
o Dundee Technopole, James Lindsay Place, Dundee, DD1 5JJ, UK Tel +44 1382 206 062 Fax +44 1382 206 067
www.cyclacel.com – info@cyclacel.com

Forward-looking Statements

This news release contains certain forward-looking statements that involve risks and uncertainties that could cause actual results to be materially different from historical results or from any future results expressed or implied by such forward-looking statements. Such forward-looking statements include statements regarding, among other things, the efficacy, safety and intended utilization of Cyclacel's product candidates, the conduct and results of future clinical trials, plans regarding regulatory filings, future research and clinical trials and plans regarding partnering activities. Factors that may cause actual results to differ materially include the risk that product candidates that appeared promising in early research and clinical trials do not demonstrate safety and/or efficacy in larger-scale or later clinical trials, trials may have difficulty enrolling, Cyclacel may not obtain approval to market its product candidates, the risks associated with reliance on outside financing to meet capital requirements, and the risks associated with reliance on collaborative partners for further clinical trials, development and commercialization of product candidates. You are urged to consider statements that include the words "may," "will," "would," "could," "should," "believes," "estimates," "projects," "potential," "expects," "plans," "anticipates," "intends," "continues," "forecast," "designed," "goal," or the negative of those words or other comparable words to be uncertain and forward-looking. For a further list and description of the risks and uncertainties the Company faces, please refer to the Company's most recent Annual Report on Form 10-K and other periodic and other filings Cyclacel files with the Securities and Exchange Commission and are available at www.sec.gov. Such forward-looking statements are current only as of the date they are made, and Cyclacel assumes no obligation to update any forward-looking statements, whether as a result of new information, future events or otherwise.

Contact for Cyclacel Pharmaceuticals, Inc.

Investors/Media: Corey Sohmer, (908) 517-7330, csohmer@cyclacel.com

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Cyclacel Pharmaceuticals, Inc.

P R E S S R E L E A S E

CYCLACEL PHARMACEUTICALS ANNOUNCES \$20 MILLION UNDERWRITTEN OFFERING

Berkeley Heights, NJ, May 16, 2013 — Cyclacel Pharmaceuticals, Inc. (NASDAQ: CYCC, NASDAQ: CYCCP; Cyclacel or the Company), today announced the pricing of the underwritten offering of 6,666,667 shares of its common stock at a price to the public of \$3.00 per share. Cyclacel has granted the underwriters a 30-day option to purchase up to an aggregate of 166,667 shares of Common Stock to cover over-allotments, if any. All of the shares of common stock in this offering are to be sold by Cyclacel. The common stock offering is being conducted as a public offering by means of a prospectus supplement. Cyclacel expects to receive gross proceeds of approximately \$20 million from this offering, excluding the underwriters' over-allotment option and before deducting estimated expenses. The Company intends to use the proceeds from this offering to complete the SEAMLESS pivotal Phase 3 trial of its most advanced product candidate, sapacitabine, and general corporate purposes. This offering is expected to close on May 21, 2013, subject to customary closing conditions.

JMP Securities LLC is acting as the sole book-running manager and Janney Montgomery Scott LLC is acting as co-manager for this offering.

This offering is being made pursuant to an effective shelf registration statement previously filed with the U.S. Securities and Exchange Commission (the "SEC"). A preliminary prospectus supplement and accompanying prospectus describing the terms of this offering will be filed with the SEC. Before investing in this offering, interested parties should read in their entirety the prospectus supplement and the accompanying prospectus and the other documents that Cyclacel has filed with the SEC that are incorporated by reference in such prospectus supplement and the accompanying prospectus, which provide more information about Cyclacel and the offering.

This press release does not constitute an offer to sell or a solicitation of an offer to buy, nor shall there be any sale of these securities in any state or jurisdiction in which such offer, solicitation or sale would be unlawful prior to registration or qualification under the securities laws of any such state or jurisdiction. Any offer, if at all, will be made only by means of a prospectus supplement and accompanying prospectus forming a part of the effective registration statement. Copies of the preliminary prospectus supplement and accompanying prospectus relating to the offering may be obtained, when available, from JMP Securities LLC, 600 Montgomery Street, 10th Floor, San Francisco, California 94111, Attention: Prospectus Department, (415) 835-8985.

Cyclacel intends to file a final prospectus supplement relating to this offering with the SEC, which will be available along with the prospectus filed with the SEC in connection with the shelf registration on the SEC's website at www.sec.gov.

About Cyclacel Pharmaceuticals, Inc.

Cyclacel is a biopharmaceutical company developing oral therapies that target the various phases of cell cycle control for the treatment of cancer and other serious diseases. Sapacitabine, Cyclacel's most advanced product candidate, is the subject of SEAMLESS, a Phase 3 trial being conducted under an SPA with the FDA as front-line treatment for acute myeloid leukemia (AML) in the elderly, and other studies for myelodysplastic syndromes (MDS), chronic lymphocytic leukemia (CLL) and solid tumors including breast, lung, ovarian and pancreatic cancer and in particular those carrying BRCA mutations. Cyclacel's strategy is to build

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a diversified biopharmaceutical business focused in hematology and oncology based on a development pipeline of novel drug candidates. Please visit www.cyclacel.com for additional information.

Forward-looking Statements

This news release contains certain forward-looking statements that involve risks and uncertainties that could cause actual results to be materially different from historical results or from any future results expressed or implied by such forward-looking statements. Such forward-looking statements include statements regarding, among other things, the efficacy, safety and intended utilization of Cyclacel's product candidates, the conduct and results of future clinical trials, plans regarding regulatory filings, future research and clinical trials and plans regarding partnering activities. Factors that may cause actual results to differ materially include the risk that product candidates that appeared promising in early research and clinical trials do not demonstrate safety and/or efficacy in larger-scale or later clinical trials, trials may have difficulty enrolling, Cyclacel may not obtain approval to market its product candidates, the risks associated with reliance on outside financing to meet capital requirements, and the risks associated with reliance on collaborative partners for further clinical trials, development and commercialization of product candidates. You are urged to consider statements that include the words "may," "will," "would," "could," "should," "believes," "estimates," "projects," "potential," "expects," "plans," "anticipates," "intends," "continues," "forecast," "designed," "goal," or the negative of those words or other comparable words to be uncertain and forward-looking. For a further list and description of the risks and uncertainties the Company faces, please refer to the Company's most recent Annual Report on Form 10-K and other periodic and other filings Cyclacel files with the Securities and Exchange Commission and are available at www.sec.gov. Such forward-looking statements are current only as of the date they are made, and Cyclacel assumes no obligation to update any forward-looking statements, whether as a result of new information, future events or otherwise.

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