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): March 8, 2018

Checkpoint Therapeutics, Inc.

(Exact Name of Registrant as Specified in Charter)

Delaware (State or Other Jurisdiction of Incorporation) 000-55506

(Commission File Number)

47-2568632 (IRS Employer Identification No.)

2 Gansevoort Street, 9th Floor New York, New York 10014 (Address of Principal Executive Offices)

<u>(781) 652-4500</u>

(Registrant's telephone number, including area code)

Ch	eck the appropriate box below if the Form 8-K filing is intended to simultaneously satisfy the filing obligation of the registrant under any of the following provisions:
	Written communications pursuant to Rule 425 under the Securities Act. Soliciting material pursuant to Rule 14a-12 under the Exchange Act. Pre-commencement communications pursuant to Rule 14d-2b under the Exchange Act. Pre-commencement communications pursuant to Rule 13e-4(c) under the Exchange Act.
	icate by check mark whether the registrant is an emerging growth company as defined in Rule 405 of the Securities Act of 1933 (§230.405 of this chapter) or Rule 12b-2 of Securities Exchange Act of 1934 (§240.12b-2 of this chapter).
Em	erging growth company 区
	n emerging growth company, indicate by check mark if the registrant has elected not to use the extended transition period for complying with any new or revised financial ounting standards provided pursuant to Section 13(a) of the Exchange Act.

Item 1.01. Entry into a Material Definitive Agreement.

On March 8, 2018, Checkpoint Therapeutics, Inc., a Delaware Corporation ("Checkpoint" or the "Company") entered into an underwriting agreement (the "Underwriting Agreement") with National Securities Corporation, as representative of the several underwriters named therein (the "Underwriters"). Pursuant to the Underwriting Agreement, the Company agreed to sell to the Underwriters, and the Underwriters agreed to purchase for resale to the public, in a firm commitment underwritten public offering, 4,600,000 shares (the "Firm Shares") of the Company's common stock, \$0.0001 par value per share (the "Common Stock"), at a price to the public of \$4.35 per share, less underwriting discounts and commissions. In addition, pursuant to the Underwriting Agreement, the Company has granted the Underwriters an option, exercisable for 45 days, to purchase up to an additional 690,000 shares of Common Stock (the "Additional Shares" and, together with the Shares, the "Offered Shares"). The sale of the Offered Shares was registered pursuant to a Registration Statement (No. 333-221493) on Form S-3, which was filed by the Company with the Securities and Exchange Commission on November 9, 2017, and declared effective on December 1, 2017. A copy of the Underwriting Agreement is attached hereto as Exhibit 1.1 and is incorporated by reference herein.

National Securities Corporation, a wholly owned subsidiary of National Holdings Corporation is acting as sole book running manager for the offering. H.C. Wainwright & Co is acting as lead manager. Lake Street Capital Markets, LLC, is acting as a qualified independent underwriter within the meaning of FINRA Rule 5121 in connection with this offering.

The net proceeds to the Company are expected to be approximately \$18,100,000, assuming no exercise of the option to purchase Additional Shares and after deducting underwriting discounts and commissions and estimated expenses payable by the Company associated with the offering.

The Underwriting Agreement contains customary representations, warranties and agreements by the Company, customary conditions to closing, indemnification obligations of the Company and the Underwriter, including for liabilities under the Securities Act of 1933, as amended, other obligations of the parties and termination provisions.

Alston & Bird LLP, counsel to the Company, delivered an opinion as to the validity of the Offered Shares, a copy of which is attached hereto as Exhibit 5.1 and is incorporated by reference herein.

Item 8.01. Other Events.

On March 8, 2018, the Company entered into an underwriting agreement with the Underwriters. Pursuant to the Underwriting Agreement, the Company agreed to sell to the Underwriters, and the Underwriters agreed to purchase for resale to the public, 4,600,000 shares of the Company's Common Stock, along with the option to purchase, exercisable for 45 days, up to an additional 690,000 shares. This Current Report on Form 8-K is being filed in part to incorporate the Expense Table set forth below and the opinion by reference into such Registration Statement.

Securities and Exchange Commission Registration Fee	\$*
Legal Fees and Expenses	\$100,000
Accountants' Fees and Expenses	\$50,000
Printing and Duplicating Fees	\$50,000
Transfer Agent's Fees and Expenses	\$10,000
Miscellaneous Expenses	\$15,000
•	
Total	\$225,000**

^{*}Previously paid

^{**}Excludes reimbursement of Underwriters' expenses

Item 9.01. Financial Statements and Exhibits.

(d) Exhibits.

The following exhibits are filed as part of this report:

Number	Description
1.1	Underwriting Agreement, entered into by Checkpoint Therapeutics, Inc. on March 8, 2018, with National Securities Corporation.
<u>5.1</u>	Opinion of Alston & Bird LLP.
23.1	Consent of Alston & Bird LLP (included in the opinion filed as Exhibit 5.1).

SIGNATURES

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

CHECKPOINT THERAPEUTICS, INC.

(Registrant)

Date: March 8, 2018 By: /s/ James F. Oliviero

Name: James F. Oliviero

Title: President and Chief Executive Officer

4,600,000 SHARES

CHECKPOINT THERAPEUTICS, INC.

COMMON STOCK

UNDERWRITING AGREEMENT

March 8, 2018

National Securities Corporation
As representative of the several Underwriters
Named in Schedule V hereto
200 Vesey St
25th Floor
New York, NY 10281

Ladies and Gentlemen:

Checkpoint Therapeutics, Inc., a Delaware corporation (the "<u>Company</u>"), proposes, subject to the terms and conditions stated herein, to issue and sell to the Underwriters named in <u>Schedule V</u> hereto (the "<u>Underwriters</u>"), for whom National Securities Corporation is acting as representative (the "<u>Representative</u>"), an aggregate of 4,600,000 authorized but unissued shares (the "<u>Firm Shares</u>") of the Company's common stock, \$0.0001 par value per share (the "<u>Common Stock</u>"), and, at the election of the Underwriters, upon the terms and conditions stated herein, up to 690,000 additional shares (the "<u>Additional Shares</u>") of Common Stock solely to cover over-allotments, if any (the Firm Shares and the Additional Shares that the Underwriters elect to purchase pursuant to <u>Section 3</u> hereof being collectively called the "<u>Securities</u>").

The Company hereby confirms its engagement of Lake Street Capital Markets, LLC (the 'QIU'') as, and QIU hereby confirms its agreement with the Company to render services as, the "qualified independent underwriter," within the meaning of Rule 5121 of the Financial Industry Regulatory Authority, Inc. ("FINRA") with respect to the offering and sale of the Securities. The QIU, solely in its capacity as the qualified independent underwriter and not otherwise, is referred to herein as the "QIU." The Company and the QIU agree that the QIU will receive a fixed fee of \$50,000, to be paid by the Company at the time of the Closing, for serving as qualified independent underwriter in connection with the offering. In addition, the Company, whether or not the transactions contemplated hereunder are consummated or this Agreement is terminated, will pay or cause to be paid all expenses (including the reasonable fees and disbursements of separate counsel to the QIU) incurred in connection with serving as the QIU (up to a maximum of \$5,000), with such amount to be paid by the Company upon request of the QIU at or before the time of the Closing.

The Company and the Underwriters hereby confirm their agreement with respect to the purchase and sale of the Securities as follows:

1. REGISTRATION STATEMENT AND PROSPECTUS. The Company has prepared and filed with the Securities and Exchange Commission (the "Commission") a registration statement on Form S-3 (File No. 333-221493) under the Securities Act of 1933, as amended (the "Securities Act"), and the rules and regulations (the "Rules and Regulations") of the Commission promulgated thereunder, and such amendments to such registration statement as may have been required to the date of this Agreement. Such registration statement has been declared effective by the Commission. Such registration statement, at any given time, including amendments thereto at such time, the exhibits and any schedules thereto at such time, the documents incorporated by reference therein pursuant to Item 12 of Form S-3 under the Securities Act at such time and the documents and information otherwise deemed to be a part thereof or included therein by Rule 430B under the Securities Act or otherwise pursuant to the Rules and Regulations at such time, is herein called the "Registration Statement." The Registration Statement at the time it originally became effective is herein called the 'Original Registration Statement."

The Company proposes to file with the Commission pursuant to Rule 424 under the Securities Act a final prospectus supplement relating to the Securities to a form of prospectus included in the Registration Statement relating to the Securities in the form heretofore delivered to the Underwriters. Such prospectus in the form in which it appears in the Registration Statement is hereinafter called the "Base Prospectus." Such supplemental form of prospectus, in the form in which it shall be filed with the Commission pursuant to Rule 424(b) (including the Base Prospectus as so supplemented) is hereinafter called the "Prospectus." Any preliminary form of Prospectus which is filed or used prior to filing of the Prospectus is hereinafter called a "Preliminary Prospectus." Any reference herein to the Base Prospectus, any Preliminary Prospectus or the Prospectus shall be deemed to include the documents incorporated by reference therein pursuant to Item 12 of Form S-3 under the Securities Act as of the date of such prospectus.

For purposes of this Agreement, all references to the Registration Statement, the Base Prospectus, any Preliminary Prospectus, the Prospectus or any amendment or supplement to any of the foregoing shall be deemed to include the copy filed with the Commission pursuant to its Electronic Data Gathering, Analysis and Retrieval System ("EDGAR"). All references in this Agreement to amendments or supplements to the Registration Statement, the Base Prospectus, any Preliminary Prospectus or the Prospectus shall be deemed to mean and include the subsequent filing of any document under the Securities Exchange Act of 1934, as amended (the "Exchange Act"), which is deemed to be incorporated by reference therein or otherwise deemed by the Rules and Regulations to be a part thereof.

As used in this Agreement:

"Time of Sale" means 8:00 a.m. (Eastern Time) on the date of this Agreement.

"Time of Sale Disclosure Package" means the Issuer General Free Writing Prospectus(es) issued at or prior to the Time of Sale, the Base Prospectus, as amended or supplemented immediately prior the Time of Sale, the Preliminary Prospectus, the information included in Section 3(a) of this Agreement, and any information set forth in Schedule I to this Agreement, considered together.

"Issuer Free Writing Prospectus" means any "issuer free writing prospectus," as defined in Rule 433 under the Securities Act, relating to the Securities that (A) is required to be filed with the Commission by the Company, or (B) is exempt from filing pursuant to Rule 433(d)(5)(i) under the Securities Act because it contains a description of the Securities or of the offering that does not reflect the final terms, in each case in the form filed or required to be filed with the Commission or, if not required to be filed, in the form retained in the Company's records pursuant to Rule 433(g) under the Securities Act.

"Issuer General Free Writing Prospectus" means any Issuer Free Writing Prospectus that is intended for general distribution to prospective investors, as evidenced by its being specified in Schedule II to this Agreement.

"Issuer Limited-Use Free Writing Prospectus" means any Issuer Free Writing Prospectus that is not an Issuer General Free Writing Prospectus.

2. REPRESENTATIONS AND WARRANTIES OF THE COMPANY.

- (a) The Company represents and warrants to, and agrees with, the Underwriters and the QIU as follows:
- (i) Registration Statement and Prospectuses. Each of the Registration Statement and any post-effective amendment thereto has become effective under the Securities Act. No stop order suspending the effectiveness of the Registration Statement or any post-effective amendment thereto has been issued under the Securities Act, no order preventing or suspending the use of any preliminary prospectus or the Prospectus has been issued and no proceedings for any of those purposes have been instituted or are pending or, to the Company's knowledge, threatened by the Commission. The Company has complied with each request (if any) from the Commission for additional information. At the time the Original Registration Statement was filed with the Commission, the Company met the then-applicable requirements for use of Form S-3 under the Securities Act. The Company meets the requirements for use of Form S-3 under the Securities Act. Pursuant to General Instruction I.B.1. of Form S-3, the issuance of the Firm Shares and the Additional Shares is eligible to be registered pursuant to the Prospectus filed as part of the Company's effective Registration Statement and is not subject to the limitations of General Instruction I.B.6 of Form S-3.

Each of the Registration Statement and any post-effective amendment thereto, at the time it became effective, complied in all material respects with the requirements of the Securities Act and the Rules and Regulations. Each preliminary prospectus (if any), the Prospectus and any amendment or supplement thereto, at the time each was filed with the Commission, complied in all material respects with the requirements of the Securities Act and the Rules and Regulations. Each preliminary prospectus (if any) delivered to the Underwriters for use in connection with this offering and the Prospectus was or 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.

(ii) Accurate Disclosure. Neither the Registration Statement nor any amendment thereto, at its effective time, at all other subsequent times until the expiration of the Prospectus Delivery Period (as hereinafter defined) or at the Closing Time, contained, contains or will contain an untrue statement of a material fact or omitted, omits or will omit to state a material fact required to be stated therein or necessary to make the statements therein not misleading. The Time of Sale Disclosure Package did not, as of the Time of Sale, include an untrue statement of a material fact or omit to state a material fact necessary in order to make the statements therein, in the light of the circumstances under which they were made, not misleading. Neither the Prospectus nor any amendment or supplement thereto (including any prospectus wrapper), as of its issue date or date of first use within the meaning of the Rules and Regulations, at the time of any filing with the Commission pursuant to Rule 424(b) under the Securities Act, at all other subsequent times until the expiration of the Prospectus Delivery Period or at the Closing Time, included, includes or will include an untrue statement of a material fact or omitted, omits or will omit to state a material fact necessary in order to make the statements therein, in the light of the circumstances under which they were made, not misleading.

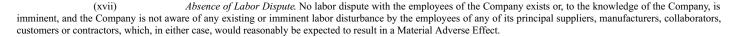
The representations and warranties in this subsection shall not apply to statements in or omissions from the Registration Statement (or any amendment thereto), the Time of Sale Disclosure Package or the Prospectus (or any amendment or supplement thereto) made in reliance upon and in conformity with written information furnished to the Company by the Underwriters and the QIU expressly for use therein. For purposes of this Agreement, the only information so furnished shall be the information under the heading "Underwriting (Conflicts of Interest) – Electronic Distribution" contained in the Prospectus (the "<u>Underwriter Information</u>").

- (iii) Free Writing Prospectuses. Each Issuer Free Writing Prospectus, as of its issue date and at all subsequent times through the Prospectus Delivery Period or until any earlier date that the Company notified or notifies the Underwriters and the QIU as described in Section 4(a)(iii)(B), did not, does not and will not include any information that conflicted, conflicts or will conflict with the information contained in the Registration Statement, any Preliminary Prospectus or the Base Prospectus. The foregoing sentence does not apply to statements in or omissions from any Issuer Free Writing Prospectus based upon and in conformity with written information furnished to the Company by the Underwriters specifically for use therein.
- (iv) Emerging Growth Company Status. From the time of the initial filing of the Registration Statement with the Commission through the date hereof, the Company has been and is an "emerging growth company," as defined in Section 2(a) of the Securities Act (an "Emerging Growth Company").
- (v) Independent Accountants. BDO USA, LLP ("BDO" or the "Auditor") and EisnerAmper LLP ("EA"), the accountants who certified the financial statements included or incorporated by reference in the Registration Statement, the Time of Sale Disclosure Package and the Prospectus, are independent public accountants as required by the Securities Act, the Rules and Regulations and the Public Company Accounting Oversight Board and neither BDO nor EA is in violation of the auditor independence requirements of the Sarbanes-Oxley Act of 2002.

- (vi) Incorporated Documents. The documents incorporated by reference in the Registration Statement, the Time of Sale Disclosure Package and the Prospectus, when they were filed with the Commission, complied in all material respects with the requirements of the Exchange Act and the rules and regulations of the Commission thereunder, and none of such documents contained any untrue statement of a material fact or omitted to state a material fact necessary to make the statements therein, in the light of the circumstances under which they were made, not misleading; and any further documents so filed and incorporated by reference in the Registration Statement, the Prospectus or the Time of Sale Disclosure Package, when such documents are filed with the Commission, will conform in all material respects to the requirements of the Exchange Act and will not contain any untrue statement of a material fact or omit to state a material fact necessary to make the statements therein, in the light of the circumstances under which they were made, not misleading.
- (vii) Financial Statements; Non-GAAP Financial Measures. The financial statements included or incorporated by reference in the Registration Statement, the Time of Sale Disclosure Package and the Prospectus, together with the related schedules and notes, present fairly, in all material respects, the financial position of the Company at the dates indicated and the statement of operations, stockholders' equity and cash flows of the Company for the periods specified; said financial statements have been prepared in conformity with U.S. generally accepted accounting principles ("GAAP") applied on a consistent basis throughout the periods involved except, in the case of unaudited financial statements, subject to normal year-end audit adjustments and the exclusion of certain footnotes as permitted by the applicable rules of the Commission. The selected financial data incorporated by reference in the Registration Statement, the Time of Sale Disclosure Package and the Prospectus present fairly, in all material respects, the information shown therein and have been compiled on a basis consistent with that of the audited financial statements incorporated by reference therein. Except as included therein, no historical or pro forma financial statements or supporting schedules are required to be included or incorporated by reference in the Registration Statement, the Time of Sale Disclosure Package or the Prospectus under the Securities Act or the Rules and Regulations.
- (viii) No Material Adverse Change in Business Except as otherwise stated therein, since the respective dates as of which information is given in the Registration Statement, the Time of Sale Disclosure Package or the Prospectus, (A) there has been no material adverse change in the condition, financial or otherwise, or in the earnings, business affairs or business prospects of the Company, considered as one entity, whether or not arising in the ordinary course of business (a "Material Adverse Effect"), (B) there have been no transactions entered into by the Company, considered as one entity, other than those in the ordinary course of business, which are material, individually or in the aggregate, to the Company, (C) there has been no dividend or distribution of any kind declared, paid or made by the Company on any class of its capital stock, (D) there has not been any change in the capital stock (other than a change in the number of outstanding shares of Common stock due to the issuance of shares upon the exercise of outstanding options or warrants or the settlement of outstanding restricted stock units), (E) there has not been any material change in the short-term or long-term debt of the Company except for the extinguishment thereof, and (F) there has not been any issuance of options, warrants, convertible securities or other rights to purchase the capital stock of the Company (other than issuances of equity compensation awards under equity compensation arrangements approved by the Board of Directors of the Company or committee thereof comprised entirely of independent directors).

- (ix) Good Standing of the Company. The Company has been duly incorporated and is validly existing as a corporation in good standing under the laws of the State of Delaware and has corporate power and authority to own, lease and operate its properties and to conduct its business as described in the Registration Statement, the Time of Sale Disclosure Package and the Prospectus and to enter into and perform its obligations under this Agreement; and the Company is duly qualified as a foreign corporation to transact business and is in good standing in each other jurisdiction in which such qualification is required, whether by reason of the ownership or leasing of property or the conduct of business, except where the failure so to qualify or to be in good standing would not reasonably be expected to result in a Material Adverse Effect.
 - (x) Subsidiaries. The Company has no subsidiaries.
- (xi) Capitalization. The authorized, issued and outstanding shares of capital stock of the Company are as set forth in the Registration Statement, the Time of Sale Disclosure Package and the Prospectus under the caption "Description of Capital Stock", as supplemented by the third paragraph under the caption "Dilution" in the Prospectus (except for subsequent issuances, if any, pursuant to this Agreement, pursuant to reservations, agreements or employee benefit plans referred to in the Registration Statement, the Time of Sale Disclosure Package and the Prospectus, or pursuant to the exercise of convertible securities, options or warrants referred to in the Registration Statement, the Time of Sale Disclosure Package and the Prospectus). The outstanding shares of capital stock of the Company have been duly authorized and validly issued and are fully paid and non-assessable. None of the outstanding shares of capital stock of the Company were issued in violation of the preemptive or other similar rights of any securityholder of the Company.
- (xii) Authorization of Agreement. This Agreement has been duly authorized, executed and delivered by the Company and constitutes a valid, legal and binding obligation of the Company, enforceable in accordance with its terms, except as rights to indemnity hereunder may be limited by federal or state securities laws and except as such enforceability may be limited by insolvency, reorganization or similar laws affecting the rights of creditors generally and subject to general principles of equity.
- (xiii) 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; and the issuance of the Securities is not subject to the preemptive or other similar rights of any securityholder of the Company. The Common Stock conforms, in all material respects, to all statements relating thereto contained in the Registration Statement, the Time of Sale Disclosure Package and the Prospectus and such description conforms, in all material respects, to the rights set forth in the instruments defining the same. No holder of Securities will be subject to personal liability solely by reason of being such a holder.

- (xiv) Registration Rights. There are no persons with registration rights or other similar rights to have any securities registered for sale pursuant to the Registration Statement or otherwise registered for sale or sold by the Company under the Securities Act pursuant to this Agreement, other than those rights that have been disclosed in the Registration Statement, the Time of Sale Disclosure Package and the Prospectus and have been validly waived.
- (xv) Listing. The Securities have been approved for listing on the NASDAQ Capital Market ('NASDAQ''), subject only to official notice of issuance. The Common Stock is registered pursuant to Section 12(b) of the Exchange Act and is listed on the NASDAQ and the Company has taken no action designed to, or likely to have the effect of, terminating the registration of the Common Stock under the Exchange Act or delisting the Common Stock from NASDAQ nor has the Company received any notification that the Commission or NASDAQ is contemplating terminating such registration or listing. The Company has complied in all material respects with the applicable requirements of NASDAQ for maintenance of inclusion of the Common Stock on NASDAQ.
- Absence of Violations, Defaults and Conflicts. The Company is not (A) in violation of its charter, bylaws or similar organizational document, (B) 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 its properties or assets are subject (collectively, "Agreements and Instruments"), except for such defaults that would not, singly or in the aggregate, reasonably be expected to result in a Material Adverse Effect, or (C) in violation of any law, statute, rule, regulation, judgment, order, writ or decree of any arbitrator, court, governmental body, regulatory body, administrative agency or other authority, body or agency having jurisdiction over the Company or any of its properties, assets or operations (each, a "Governmental Entity"), except for such violations that would not, singly or in the aggregate, reasonably be expected to result in a Material Adverse Effect. The execution, delivery and performance of this Agreement and the consummation of the transactions contemplated herein and in the Registration Statement, the Time of Sale Disclosure Package and the Prospectus (including the issuance and sale of the Securities and the use of the proceeds from the sale of the Securities as described therein under the caption "Use of Proceeds") and compliance by the Company with its obligations hereunder have been duly authorized by all necessary corporate action 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 properties or assets of the Company pursuant to, the Agreements and Instruments (except for such conflicts, breaches, defaults or Repayment Events or liens, charges or encumbrances that would not, singly or in the aggregate, reasonably be expected to result in a Material Adverse Effect), nor will such action result in any violation of the provisions of the charter, by-laws or similar organizational document of the Company or, except as would not be reasonably expected to result in a Material Adverse Effect and adversely affect the consummation of the transactions contemplated in this Agreement, any applicable law, statute, rule, regulation, judgment, order, writ or decree of any Governmental Entity. 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.



- (xviii) Absence of Proceedings. Except as disclosed in the Registration Statement, the Time of Sale Disclosure Package and the Prospectus, there is no action, suit, proceeding, inquiry or investigation before or brought by any Governmental Entity (including, without limitation, any action, suit, proceeding, inquiry or investigation before or brought by the Food and Drug Administration (the "FDA"), the European Commission, the European Medicines Agency or any other competent authorities of the Member States of the European Economic Area (collectively, the "EMA") or any other Health Regulatory Agency (as defined below)) now pending or, to the knowledge of the Company, threatened, against or affecting the Company; and the aggregate of all pending legal or governmental proceedings to which the Company is a party or of which any of its properties or assets is the subject which are not described in the Registration Statement, the Time of Sale Disclosure Package and the Prospectus, including ordinary routine litigation incidental to the business, would not reasonably be expected to result in a Material Adverse Effect.
- (xix) Accuracy of Exhibits. There are no contracts or documents which are required to be described in the Registration Statement, the Time of Sale Disclosure Package or the Prospectus or to be filed as exhibits to the Registration Statement which have not been so described in all material respects and filed as required.
- (xx) Absence of Further Requirements. No filing with, or authorization, approval, consent, license, order, registration, qualification or decree of, any Governmental Entity is necessary or required for the performance by the Company of its obligations hereunder, in connection with the offering, issuance or sale of the Securities hereunder or the consummation of the transactions contemplated by this Agreement, except such as have been already obtained or as may be required under the Securities Act, the Rules and Regulations, the rules of NASDAQ, state securities laws or the rules of FINRA. No approval of the stockholders of the Company under the rules and regulations of NASDAQ is required for the Company to issue and deliver the Securities to the Underwriters.

(xxi) Possession of Licenses and Permits. The Company possesses such permits, licenses, approvals, consents and other authorizations (collectively, "Governmental Licenses") issued by the appropriate Governmental Entities necessary to conduct its business now operated by it, except where the failure so to possess would not, singly or in the aggregate, be reasonably expected to result in a Material Adverse Effect. The Company is in compliance with the terms and conditions of all Governmental Licenses, except where the failure so to comply would not, singly or in the aggregate, be reasonably expected to result in a Material Adverse Effect. All of the Governmental Licenses are valid and in full force and effect and the Company has not received any notice of proceedings relating to the revocation or modification of any Governmental Licenses.

(xxii) Title to Property. The Company has good and marketable title to all real property owned and good title to all other properties owned, in each case, free and clear of all mortgages, pledges, liens, security interests, claims, restrictions or encumbrances of any kind except such as are described in the Registration Statement, the Time of Sale Disclosure Package and the Prospectus; and all of the leases and subleases material to the business of the Company, and under which the Company holds properties described in the Registration Statement, the Time of Sale Disclosure Package or the Prospectus, are in full force and effect, and the Company has not received notice of any material claim of any sort that has been asserted by anyone adverse to the rights of the Company under any of the leases or subleases mentioned above, or affecting or questioning the rights of the Company to the continued possession of the leased or subleased premises under any such lease or sublease.

(xxiii) Possession of Intellectual Property. The Company owns or possesses, or it reasonably believes it can acquire on reasonable terms, adequate patents, patent rights, licenses, inventions, copyrights, know-how (including trade secrets and other unpatented and/or unpatentable proprietary or confidential information, systems or procedures), trademarks, service marks, trade names or other intellectual property (collectively, "Intellectual Property") necessary to carry on the business now operated by it, and the Company has not received any notice or is otherwise aware of any infringement of or conflict with asserted rights of others with respect to any Intellectual Property or is aware of any facts or circumstances which would render any Intellectual Property invalid or inadequate to protect the interest of the Company therein.

(xxiv) Environmental Laws. Except as described in the Registration Statement, the Time of Sale Disclosure Package and the Prospectus or would not, singly or in the aggregate, be reasonably expected to result in a Material Adverse Effect, (A) the Company is not in violation of any applicable federal, state, local or foreign statute, law, rule, regulation, ordinance, code, policy or rule of common law or any judicial or administrative interpretation thereof, including any judicial or administrative order, consent, decree or judgment, relating to pollution or protection of human health, the environment (including, without limitation, ambient air, surface water, groundwater, land surface or subsurface strata) or wildlife, including, without limitation, laws and regulations relating to the release or threatened release of hazardous chemicals, pollutants, contaminants, hazardous wastes, toxic substances, hazardous substances, petroleum or petroleum products, asbestos-containing materials or toxic mold (collectively, "Hazardous Materials") or to the manufacture, processing, distribution, use, treatment, storage, disposal, transport or handling of Hazardous Materials (collectively, "Environmental Laws"), (B) the Company has all permits, authorizations and approvals required under any applicable Environmental Laws for the operation of its business and is in compliance with its requirements, (C) there are no pending or, to the Company's knowledge, threatened administrative, regulatory or judicial actions, suits, demands, demand letters, claims, liens, notices of noncompliance or violation, investigations or proceedings relating to any Environmental Law against the Company, and (D) to the Company's knowledge, there are no events or circumstances that would reasonably be expected to form the basis of an order for clean-up or remediation, or an action, suit or proceeding by any private party or Governmental Entity, against or affecting the Company relating to Hazardous Materials or any Environmental Laws.

(xxv) Accounting Controls. The Company maintains a system of internal control over financial reporting (as defined under Rule 13a-15 and 15d-15 under the Exchange Act) and a system of internal accounting controls designed to provide reasonable assurances (A) regarding the reliability of financial reporting and the preparation of financial statements for external purposes in accordance with GAAP; (B) that records are maintained that in reasonable detail accurately and fairly reflect the transactions and dispositions of the assets of the Company; (C) that transactions are recorded as necessary to permit preparation of financial statements in accordance with GAAP, and that receipts and expenditures of the Company are being made only in accordance with authorizations of management and directors of the Company; (D) regarding the prevention or timely detection of unauthorized acquisition, use or disposition of the Company's assets that could have a material effect on the financial statements; and (E) the interactive data in eXtensible Business Reporting Language incorporated by reference in the Registration Statement fairly presents the information called for in all material respects and is prepared in accordance with the Commission's rules and guidelines applicable thereto. Except as described in the Registration Statement, the Time of Sale Disclosure Package and the Prospectus, since the end of each of the Company's most recent audited fiscal year, there has been (1) no material weakness or significant deficiency 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 and adversely affected, or is reasonably likely to materially and adversely affect, the Company's internal control over financial reporting.

(xxvi) Disclosure Controls. The Company has established and maintains disclosure controls and procedures (as defined in Rules 13a-15 and 15d-15 under the Exchange Act) designed to provide reasonable assurance that material information relating to the Company is recorded, processed, summarized and reported, within the time periods specified in the Commission's rules and forms and to ensure that information required to be disclosed by the Company in the reports that it files or submits under the Exchange Act is accumulated and communicated to the Company's management, including its principal executive and principal financial officers, or persons performing similar functions, as appropriate to allow timely decisions regarding required disclosure, and such disclosure controls and procedures were effective as of the last date of the most recent fiscal quarter for which the Company has filed a quarterly or annual report with the Commission. The Company has utilized such controls and procedures in preparing and evaluating the disclosures in the Registration Statement, in the Time of Sale Disclosure Package and in the Prospectus. The Company is not aware of any fraud, whether or not material, that involves management or other employees who have a significant role in the Company's internal control over financial reporting.

(xxvii) Compliance with the Sarbanes-Oxley Act. The Company is in compliance in all material respects with all applicable provisions of the Sarbanes-Oxley Act of 2002 and the rules and regulations promulgated in connection therewith applicable to the Company and its directors and officers.

(xxviii) Payment of Taxes. All United States federal income tax returns of the Company required by law to be filed have been filed and all material taxes shown by such returns or otherwise assessed, which are due and payable, have been paid, except assessments against which appeals have been or will be promptly taken and as to which adequate reserves have been provided. The United States federal income tax returns of the Company through the fiscal year ended December 31, 2016 have been settled and no assessment in connection therewith has been made against the Company. The Company has filed all other tax returns that are required to have been filed by it or have timely requested extensions thereof pursuant to applicable foreign, state, local or other law except insofar as the failure to file such returns would not be reasonably expected to result in a Material Adverse Effect, and have paid all taxes due pursuant to such returns or pursuant to any assessment received by the Company, except for such taxes, if any, as are being contested in good faith and as to which adequate reserves have been established by the Company and except where failure to pay such taxes would not be reasonably expected to result in a Material Adverse Effect. The charges, accruals and reserves on the books of the Company in respect of any income and corporation tax liability for any years not finally determined are adequate to meet any assessments or re-assessments for additional income tax for any years not finally determined, except to the extent of any inadequacy that would not be reasonably expected to result in 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 is generally maintained by companies of established repute and comparable size engaged in the same or similar 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 be reasonably expected to result in a Material Adverse Effect. The Company has not been denied any insurance coverage which it has sought or for which it has applied.

(xxx) 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 Registration Statement, the Time of Sale Disclosure Package and the Prospectus will not be required, to register as an "investment company" under the Investment Company Act of 1940, as amended.

(xxxi) Absence of Manipulation. None of the Company or any affiliate of the Company has taken, nor will the Company or any affiliate take, directly or indirectly, any action which is designed, or would reasonably be expected, to cause or result in, or which constitutes, the stabilization or manipulation of the price of any security of the Company to facilitate the sale or resale of the Securities or to result in a violation of Regulation M under the Exchange Act.

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"), the United Kingdom Bribery Act 2010, as amended (the "U.K. Bribery Act") or any other applicable comparable law (all such laws together with the FCPA and the U.K. Bribery Act, the "Anti-Corruption Laws"), including, without limitation, making 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 political party or official thereof or any candidate for political office, in contravention of the Anti-Corruption Laws and the Company and, to the knowledge of the Company, its affiliates have conducted their businesses in compliance with the Anti-Corruption Laws 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 are and have been conducted at all times in compliance with applicable financial recordkeeping and reporting requirements of the Currency and Foreign Transactions Reporting Act of 1970, as amended, the money laundering statutes of all applicable jurisdictions, the rules and regulations thereunder and any related or similar rules, regulations or guidelines, issued, administered or enforced by any Governmental Entity (collectively, the "Money Laundering Laws"); and no action, suit or proceeding by or before any Governmental Entity involving the Company with respect to the Money Laundering Laws is pending or, to the knowledge of the Company, threatened.

(xxxiv) OFAC. Neither the Company nor, to the knowledge of the Company, any director, officer, agent, employee, affiliate or representative of the Company is an individual or entity ("Person") currently the subject or target of any sanctions administered or enforced by the United States Government, including, without limitation, the U.S. Department of the Treasury's Office of Foreign Assets Control, the United Nations Security Council, the European Union, Her Majesty's Treasury, or other relevant sanctions authority (collectively, "Sanctions"), nor is the Company located, organized or resident in a country or territory that is the subject of Sanctions; and the Company will not directly or indirectly use the proceeds of the sale of the Securities, or lend, contribute or otherwise make available such proceeds to any joint venture partners or other Person, to fund any activities of or business with any Person, or in any country or territory, that, at the time of such funding, is the subject of Sanctions or in any other manner that will result in a violation by any Person (including any Person participating in the transaction, whether as underwriter, advisor, investor or otherwise) of Sanctions.

(xxxv) Lending Relationship. (i) The Company does not have any material lending or other relationship with any bank or lending affiliate of any of the Underwriters and (ii) the Company does not intend to use any of the proceeds from the sale of the Securities to repay any outstanding debt owed to any affiliate of any of the Underwriters.

(xxxvi) Statistical and Market-Related Data. Any statistical and market-related data included in the Registration Statement, the Time of Sale Disclosure Package or the Prospectus are based on or derived from sources that the Company believes, after reasonable inquiry, to be reliable and accurate in all material respects and, to the extent required, the Company has obtained the written consent to the use of such data from such sources.

(xxxvii) No Rated Securities. The Company does not have any debt securities or preferred shares that are rated by any "nationally recognized statistical rating agency" (as that term is defined in Section 3(a)(62) of the Exchange Act).

(xxxviii) Health Care Authorizations. The Company has submitted and possesses, or qualifies for applicable exemptions to, such valid and current registrations, listings, approvals, clearances, licenses, certificates, authorizations or permits and supplements or amendments thereto (collectively, "Health Care Authorizations") issued or required by the appropriate local, state, federal, national, supranational or other foreign regulatory agencies or bodies (collectively, "Health Regulatory Agencies") necessary to conduct its business as described in the Registration Statement, the Time of Sale Disclosure Package and the Prospectus, including, without limitation, all such Health Care Authorizations required by the FDA, the Australian Therapeutic Goods Administration ("TGA"), the Thailand Ministry of Public Health ("MOPH"), the Department of Health and Human Services, the European Commission, the EMA or any other Health Regulatory Agencies engaged in the regulation of Biologics (as defined in the Public Health Service Act of 1944, as amended (42 U.S.C. 6A et seq.), except as would not be reasonably expected to result in a Material Adverse Effect. The Company has not received any notice of proceedings, or have any knowledge of any threatened proceedings, relating to the revocation or modification of, or non-compliance with, any such Health Care Authorization, except where such revocation, modification or non-compliance would not result in a Material Adverse Effect.

Compliance with Health Care Laws. The Company is, and has been, in compliance with all applicable Health Care Laws, and (xxxix) has not engaged in activities which are, as applicable, cause for false claims liability, civil penalties, or mandatory or permissive exclusion from Medicare, Medicaid or any other state, federal or national health care program, except where such noncompliance, false claims liability or civil penalties would not reasonably be expected to, singly or in the aggregate, result in a Material Adverse Effect. For purposes of this Agreement, "Health Care Laws" means all health care laws applicable to the Company, including, but not limited to: the Federal Food, Drug, and Cosmetic Act (21 U.S.C. Section 301 et seq.), the Anti-Kickback Statute (42 U.S.C. Section 1320a-7b(b)), the Civil Monetary Penalties Law (42 U.S.C. § 1320a-7a), the Physician Payments Sunshine Act (42 U.S.C. § 1320a-7h), the Civil False Claims Act (31 U.S.C. Section 3729 et seq.), the criminal False Claims Law (42 U.S.C. § 1320a-7b(a)), all criminal laws relating to health care fraud and abuse, including but not limited to 18 U.S.C. Sections 286 and 287, and the health care fraud criminal provisions under the U.S. Health Insurance Portability and Accountability Act of 1996 ("HIPAA") (42 U.S.C. Section 1320d et seq.), the exclusion laws (42 U.S.C. § 1320a-7), Basic Health and Human Services Policy for Protection of Human Research Subjects "Common Rule" as codified and enforced by the Department of Health and Human Services in 45 C.F.R. part 46 and enforced by FDA under 21 C.F.R. part 50, Laboratory Animal Welfare Act of 1966, HIPAA, as amended by the Health Information Technology for Economic and Clinical Health Act (42 U.S.C. Section 17921 et seq.), Medicare (Title XVIII of the Social Security Act), Medicaid (Title XIX of the Social Security Act), any and all other applicable comparable local, state, federal, national, supranational and foreign health care laws and the regulations promulgated pursuant to such laws, each as amended from time to time. The Company has not received written notice of any claim, action, suit, proceeding, hearing, enforcement, investigation, arbitration or other action from any court or arbitrator or governmental or regulatory authority or third party alleging that any product operation or activity is in material violation of any Health Care Laws, and, to the knowledge of the Company, no such claim, action, suit, proceeding, hearing, enforcement, investigation, arbitration or other action is threatened. The Company has not received any written notice of adverse filing, warning letter, untitled letter or other correspondence or notice from the FDA, the European Commission, the EMA or any other Health Regulatory Agencies, or any other court or arbitrator, alleging or asserting material noncompliance with the Health Care Laws. The Company is not a party to and have no ongoing reporting obligations pursuant to any corporate integrity agreements, deferred prosecution agreements, monitoring agreements, consent decrees, settlement orders, plans of correction or similar agreements with or imposed by any governmental or regulatory authority. Additionally, neither the Company, nor, to the knowledge of the Company, any of its employees, officers or directors has been excluded, suspended or debarred from participation in any U.S. federal health care program or human research study or trial or, to the knowledge of the Company, is subject to a governmental inquiry, investigation, proceeding, or other similar action that could reasonably be expected to result in debarment, suspension or exclusion.

Research Studies and Trials. (A) The research studies and trials conducted by or, to the Company's knowledge, on behalf of, or sponsored by, the Company, or in which the Company has participated, that are described in the Registration Statement, the Time of Sale Disclosure Package or the Prospectus, or the results of which are referred to in the Registration Statement, the Time of Sale Disclosure Package or the Prospectus, as applicable, were and, if still pending, are being, conducted in all material respects in accordance with applicable experimental protocols, procedures and controls pursuant to, where applicable, accepted professional and scientific standards for products or product candidates comparable to those being developed by the Company and all applicable statutes, rules and regulations of the FDA, National Institute of Health Department of Health and Human Services, the European Commission, the EMA and any other Health Regulatory Agencies to which it is subject; (B) the descriptions of the results of such studies and trials contained in the Registration Statement, the Time of Sale Disclosure Package or the Prospectus do not contain any misstatement of a material fact or omit to state a material fact necessary to make such statements not misleading; (C) the Company has no knowledge of any research studies or trials not described in the Disclosure Package and the Prospectus the results of which reasonably call into question in any material respect the results of the research studies and trials described in the Registration Statement, the Time of Sale Disclosure Package or Prospectus; (D) the Company has not received any notices or correspondence from the FDA, the European Commission, the EMA or any Health Regulatory Agency or any institutional review board or comparable authority requiring or threatening the premature termination, suspension, material modification or clinical hold of any research studies or trials conducted by or on behalf of, or sponsored by, the Company or in which the Company has participated that are described in the Registration Statement, the Time of Sale Disclosure Package or the Prospectus, and, to the Company's knowledge, there are no reasonable grounds for the same; (E) there has not been any violation of applicable law or regulation by the Company in any of its product development efforts, submissions or reports to the FDA, the European Commission, the EMA or any other Health Regulatory Agency that could reasonably be expected to require investigation, corrective action or result in enforcement action, except where such violation would not, singly or in the aggregate, result in a Material Adverse Effect; and (F) the research studies and clinical trials of Company are being conducted in an ethical and human manner under state, national or supra-national applicable laws which are either equal or more stringent than applicable laws and regulations enforced by the Department of Health and Human Services and FDA governing human, animal or non-human primate research participants and test subjects and such studies and the clinical trials are conducted under the auspices of a neutral and independent Institutional Animal Care and Use Committee or Institutional Review Board and applicable state, national, or supra national agencies responsible for oversight.

(xli) Health Care Products Manufacturing. The manufacture of the Company's products by or, to the knowledge of the Company, on behalf of the Company is being conducted in compliance with all applicable Health Care Laws, including, without limitation, the FDA's regulation pertaining to Biologics at 21 CFR Part 600, and, to the extent applicable, the respective counterparts thereof promulgated by the European Commission, the EMA, MOPH and TGA or other Health Regulatory Agencies. Except as disclosed in the Registration Statement, the Time of Sale Disclosure Package and the Prospectus, the Company has not had any manufacturing site (whether owned by the Company or, to the knowledge of the Company, that of a third party manufacturer for the Company's products) subject to an FDA, European Commission, EMA or other Health Regulatory Agency "warning letters," or "untitled letters" alleging or asserting material noncompliance with any applicable Health Care Laws, requests to make material changes to the Company's products, processes or operations, or similar correspondence or notice from the FDA, the European Commission, the EMA or other Health Regulatory Agency alleging or asserting material noncompliance with any applicable Health Care Laws, other than those that have been satisfactorily addressed and/or closed with the FDA, the European Commission, the EMA or other Health Regulatory Agency. To the knowledge of the Company, none of the FDA, the European Commission, the EMA or any other Health Regulatory Agency. To the knowledge of the Company, none of the FDA, the European Commission, the EMA or any other Health Regulatory Agency is considering such action.

(xlii) No Brokers' Fees. Other than as contemplated by this Agreement, the Company has not incurred any liability for any finder's or broker's fee or agent's commission in connection with the execution and delivery of this Agreement or the consummation of the transactions contemplated hereby. Within the six (6) months prior to the date the Registration Statement was initially filed with the Commission, the Company has not made any direct or indirect payments (in cash, securities or otherwise) to (i) any person as a finder's or broker's fee, consulting fee or otherwise in consideration of such person raising capital for the Company or introducing to the Company persons who raised or provided capital to the Company, (ii) to any FINRA member, other than in connection with the Controlled Equity Offering Sales Agreement with Cantor Fitzgerald & Co., Ladenburg, Thalmann & Co., Inc. and H.C. Wainwright & Co, LLC dated November 9, 2017, or (iii) to any person or entity that has any direct or indirect affiliation or association with any FINRA member, other than the payment to the Underwriters and the QIU as provided hereunder in connection with the transactions contemplated hereunder. None of the net proceeds of the transactions contemplated hereunder will be paid by the Company to any participating FINRA member or its affiliates, except as specifically authorized herein.

(xliii) Corporate Governance Compliance; Listing Standards. The Company is in compliance with (i) the applicable corporate governance requirements of the Securities Act, the Exchange Act and the rules and regulations thereunder and (ii) the continued listing standards under the NASDAQ Rules, except where the failure to be in compliance would not reasonably be expected to result in delisting or any suspension of trading or other privileges.

(xliv) Accounting Principles. The section entitled "Management's Discussion and Analysis of Financial Condition and Results of Operations—Critical Accounting Policies" in the Company's Annual Report on Form 10-K for the year ended December 31, 2016 and incorporated by reference into the Registration Statement, the Time of Sale Disclosure Package and the Prospectus truly, correctly and completely describes in all material respects (i) accounting policies which the Company believes are the most important in the portrayal of the Company's financial position and results of operations and which require management's most difficult, subjective or complex judgments ("Critical Accounting Policies"), (ii) judgements and uncertainties affecting the application of Critical Accounting Policies, and (iii) the likelihood that materially different amounts would be reported under different conditions or using different assumptions. The Audit Committee of the Board of Directors of the Company and management have reviewed and agreed with the selection, application and disclosure of Critical Accounting Policies and management have consulted with the Auditor regarding such disclosure.

(xlv) Forward-Looking Statements. No forward-looking statement (within the meaning of Section 27A of the Securities Act and Section 21E of the Exchange Act) contained in the Registration Statement, the Time of Sale Disclosure Package or the Prospectus has been made without a reasonable basis or has been disclosed other than in good faith.

(b) Any certificate signed by any officer of the Company and delivered to the Underwriters or the QIU or to the Underwriters' Counsel shall be deemed a representation and warranty by the Company to the Underwriters and the QIU as to the matters covered thereby.

3. PURCHASE, SALE AND DELIVERY OF SECURITIES.

(a) On the basis of the representations, warranties and agreements herein contained, but subject to the terms and conditions herein set forth, (i) the Company agrees to issue and sell to each of the Underwriters, and each of the Underwriters agrees, severally and not jointly, to purchase from the Company, at a purchase price equal to \$4.35 per share (the "Per Share Price"), the Firm Shares as set forth opposite the name of such Underwriter on Schedule V hereto and (ii) in the event and to the extent that the Underwriters shall exercise the election to purchase Additional Shares as provided below, the Company agrees to issue and sell to each of the Underwriters, and each of the Underwriters agrees, severally and not jointly, to purchase from the Company, at the Per Share Price, that portion of the number of Additional Shares as to which such election shall have been exercised (to be adjusted so as to eliminate fractional shares) determined by multiplying such number of Additional Shares by a fraction, the numerator of which is the maximum number of Additional Shares which such Underwriter is entitled to purchase as set forth opposite the name of such Underwriter in Schedule V hereto and the denominator of which is the maximum number of Additional Shares that all of the Underwriters are entitled to purchase hereunder.

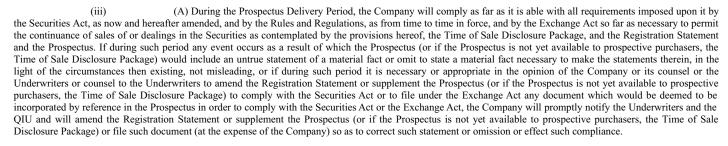
As referenced in Section 3(a)(ii) above, the Company hereby grants to the several Underwriters the option to purchase from the Company an aggregate of up to fifteen percent (15%) Additional Shares, at the Per Share Price. This option may be exercised by the Representative on behalf of the Underwriters at any time (but not more than once) on or before the date that is forty-five (45) days following the Closing Date, by written notice to the Company. Such notice shall set forth the aggregate number of Additional Shares as to which the option is being exercised, and the date and time when the Additional Shares are to be delivered (such date and time being herein referred to as the "Option Closing Date"); provided, however, that the Option Closing Date shall not be earlier than the Closing Date nor later than one business day after the date on which the option shall have been exercised unless the Company and the Underwriters otherwise agree.

Payment of the purchase price and delivery for the Additional Shares shall be made at the Option Closing Date in the same manner and at the same office as the payment for the Firm Shares as set forth in subparagraph (b) below.

(b) The Firm Shares will be delivered by the Company to the Underwriters for the Underwriters' accounts against payment of the purchase price therefor by wire transfer of same day funds payable to the order of the Company, as appropriate, at the offices of National Securities Corporation, 200 Vesey St, 25 th Floor, New York, NY 10281, or such other location as may be mutually acceptable, (1) with respect to the Firm Shares, at 9:00 a.m. Eastern time on the third (or if the Firm Shares are priced, as contemplated by Rule 15c6-1(c) under the Exchange Act, after 4:30 p.m. Eastern time, the fourth) full business day following the date hereof, or at such other time and date as the Representative and the Company determine pursuant to Rule 15c6-1(a) under the Exchange Act (such time and date of delivery being herein referred to as the "Closing Date") and (2) with respect to the Additional Shares, at 9:00 a.m. Eastern time on the Option Closing Date. If the Representative so elects, delivery of the Securities may be made by credit through full fast transfer to the account at The Depository Trust Company designated by the Representative. Certificates representing the Securities, in definitive form and in such denominations and registered in such names as the Representative may request upon at least two business days' prior notice to the Company, will be made available for checking and packaging not later than 10:30 a.m., Pacific time, on the business day next preceding the applicable closing date at the offices of National Securities Corporation, 200 Vesey St, 25th Floor, New York, NY 10281, or such other location as may be mutually acceptable.

COVENANTS.

- (a) The Company covenants and agrees with the Underwriters as follows:
- (i) During the period beginning on the date hereof and ending on the later of the Closing Date (or the Option Closing Date, if applicable) or such date, as in the opinion of counsel for the Underwriters, the Prospectus is no longer required by law to be delivered (or in lieu thereof the notice referred to in Rule 173(a) under the Securities Act is no longer required to be provided), in connection with sales by an underwriter or dealer (the "Prospectus Delivery Period"), prior to amending or supplementing the Registration Statement, the Time of Sale Disclosure Package or the Prospectus, the Company shall furnish to the Underwriters for review a copy of each such proposed amendment or supplement, and the Company shall not file any such proposed amendment or supplement to which the Underwriters reasonably object in writing.
- During the Prospectus Delivery Period, the Company shall promptly advise the Underwriters in writing (i) of the receipt of any comments of, or requests for additional or supplemental information from, the Commission, (ii) of the time and date of any filing of any post-effective amendment to the Registration Statement or any amendment or supplement to any Preliminary Prospectus, the Time of Sale Disclosure Package or the Prospectus, (iii) of the time and date that any post-effective amendment to the Registration Statement becomes effective and (iv) of the issuance by the Commission of any stop order suspending the effectiveness of the Registration Statement or any post-effective amendment thereto or of any order preventing or suspending its use or the use of any Preliminary Prospectus, the Time of Sale Disclosure Package, the Prospectus or any Issuer Free Writing Prospectus, or of any proceedings to remove, suspend or terminate from listing or quotation the Common Stock from any securities exchange upon which it is listed for trading or included or designated for quotation, or of the threatening or initiation of any proceedings for any of such purposes. If the Commission shall enter any such stop order at any time, the Company will use its reasonable efforts to obtain the lifting of such order as soon as reasonably practicable. Additionally, the Company agrees that it shall comply with the provisions of Rules 424(b), 430A and 430B, as applicable, under the Securities Act and will use its reasonable efforts to confirm that any filings made by the Company under Rule 424(b) or Rule 433 were received in a timely manner by the Commission.



- (B) If at any time following issuance of any Issuer Free Writing Prospectus there occurred or occurs an event or development as a result of which such Issuer Free Writing Prospectus conflicted or would conflict with the information contained in the Registration Statement, the Preliminary Prospectus or the Prospectus or included or would include an untrue statement of a material fact or omitted or would omit to state a material fact necessary in order to make the statements therein, in the light of the circumstances prevailing at that subsequent time, not misleading, the Company has promptly notified or promptly will notify the Underwriters and the QIU and has promptly amended or will promptly amend or supplement, at its own expense, such Issuer Free Writing Prospectus to eliminate or correct such conflict, untrue statement or omission.
- (iv) The Company shall take or cause to be taken all necessary action to qualify the Securities for sale under the securities laws of such jurisdictions as the Underwriters reasonably designate and to continue such qualifications in effect so long as required for the distribution of the Securities, except that the Company shall not be required in connection therewith to qualify as a foreign corporation or as a dealer in securities in any state in which it is not so qualified or to execute a general consent to service of process in any state or to subject itself to taxation in respect of doing business in any state in which it is not otherwise required to be so subject.
- (v) The Company will furnish to the Underwriters, the QIU and counsel for the Underwriters, without charge, copies of the Registration Statement, each Preliminary Prospectus, the Prospectus, any Issuer Free Writing Prospectus, and all amendments and supplements to such documents, in each case as soon as available and in such quantities as the Underwriters may from time to time reasonably request.

- (vi) The Company will timely file such reports pursuant to the Exchange Act as are necessary in order to make generally available to its securityholders 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 Securities Act.
- The Company, whether or not the transactions contemplated hereunder are consummated or this Agreement is terminated, will pay or cause to be paid (A) all filing fees and communication expenses relating to the registration of the Securities with the Commission, (B) all filing fees and other expenses (including the reasonable fees and disbursements of counsel to the Representative) incurred in connection with qualification of the Securities for sale under the laws of such jurisdictions as the Representative designates, (C) costs and expenses related to the review of the offer and sale of the Securities hereunder by FINRA, including all filing fees and the reasonable fees and disbursements of counsel to the Representative relating to such review, (D) costs and expenses relating to investor presentations or any "road show" in connection with the offer and sale of the Securities hereunder, including, without limitation, the costs of recording and hosting on the Internet of the Company's road show presentation and any travel expenses of the Company's officers and employees and any other expenses of the Company, (E) fees and expenses incident to listing or continued listing of the Shares on NASDAO and on such other stock exchanges as the Company and the Representative together determine, (F) the fees, disbursements and expenses of the Company's counsel, accountants and other advisors in connection with the offer and sale of the Securities hereunder, (G) expenses incurred in preparing, printing and distributing the Preliminary Prospectus and the Prospectus (including any amendments and supplements thereto) to the Representative and the other Underwriters, and for expenses incurred for preparing, printing and distributing any Issuer Free Writing Prospectuses to investors or prospective investors, (H) reasonable fees, disbursements and expenses of the Representative's counsel, (I) the costs and expenses of a public relations firm selected by the Company in its sole discretion, if any, (J) the costs of preparing, printing and delivering certificates representing the Securities, (K) fees and expenses of the transfer agent or depositary for the Securities, (L) stock transfer and/or stamp taxes, if any, payable upon the transfer of Securities from the Company to the Underwriters, (M) to the extent approved by the Company in writing, the costs associated with post-closing advertising of the offer and sale of the Securities hereunder in the national editions of the Wall Street Journal and New York Times and (N) fees, expenses and disbursements relating to background checks of the Company's officers and directors in connection with the offer and sale of the Securities hereunder; provided, however, that the maximum amount of fees, costs and expenses incurred by the Representative with respect to subparagraphs (A) through (N) above, on its own behalf and on behalf of any other Underwriters in the offering, including, without limitation, the fees, disbursements and expenses of counsel to the Underwriters, that the Company shall be required to pay under this Section 4(a)(vii) shall be \$75,000, which shall be payable at the closing of the sale of the Firm Shares (or, in the event this Agreement is terminated, within five (5) business days following the presentment to the Company of a written accounting related to the such fees and disbursements).

- (viii) The Company will apply the net proceeds from the sale of the Securities to be sold by it hereunder for the purposes set forth in the Time of Sale Disclosure Package and in the Prospectus.
- (ix) The Company has not taken or will take and, to the Company's knowledge, none of its employees, officers or directors has taken or will take, directly or indirectly, any action designed to or which might reasonably be expected to cause or result in, or which has constituted, the stabilization or manipulation of the price of any security of the Company to facilitate the sale or resale of the Securities.
- (x) Except as contemplated herein, the Company will not incur any liability for any finder's or broker's fee or agent's commission in connection with the execution and delivery of this Agreement or the consummation of the transactions contemplated hereby.
- (xi) During the Prospectus Delivery Period, the Company will file on a timely basis with the Commission such periodic and current reports as are required by the Exchange Act and the rules and regulations promulgated thereunder.
- (xii) Except as described in the Registration Statement, the Time of Sale Disclosure Package and the Prospectus, the Company will maintain such controls and other procedures, including without limitation those applicable to the Company and required by Sections 302 and 906 of the Sarbanes-Oxley Act and the applicable regulations thereunder, that are designed to ensure that information required to be disclosed by the Company in the reports that it files or submits under the Exchange Act is recorded, processed, summarized and reported within the time periods specified in the Commission's rules and forms, including without limitation, controls and procedures designed to ensure that information required to be disclosed by the Company in the reports that it files or submits under the Exchange Act is accumulated and communicated to the Company's management, including its principal executive officer and its principal financial officer, or persons performing similar functions, as appropriate to allow timely decisions regarding required disclosure, to ensure that material information relating to Company, is made known to them by others within those entities.
 - (xiii) The Company will substantially comply with all effective applicable provisions of the Sarbanes-Oxley Act.

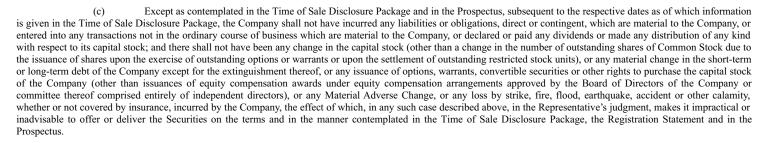
(xiv) The Company represents and agrees that, unless it obtains the prior written consent of the Representative, and the Underwriters represent and agree that, unless they obtain the prior written consent of the Company, they have not made and will not make any offer relating to the Securities that would constitute an "issuer free writing prospectus," as defined in Rule 433 under the Securities Act, or that would otherwise constitute a "free writing prospectus," as defined in Rule 405 under the Securities Act, required to be filed with the Commission; provided that the prior written consent of the parties hereto shall be deemed to have been given in respect of the free writing prospectuses included in <u>Schedule II</u>. Any such free writing prospectus consented to by the Company and the Underwriters is hereinafter referred to as a "<u>Permitted Free Writing Prospectus</u>." The Company represents that it has treated or agrees that it will treat each Permitted Free Writing Prospectus as an "issuer free writing prospectus," as defined in Rule 433, and has complied and will comply with the requirements of Rule 433 applicable to any Permitted Free Writing Prospectus, including timely Commission filing where required, legending and record keeping.

The Company will not, for the ninety (90)-day period beginning on the date of the Prospectus (the Lock-Up Period"), without the prior written consent of the Representative, (A) directly or indirectly offer, pledge, sell, contract to sell, sell any option or contract to purchase, purchase any option or contract to sell, grant any option, right or warrant to purchase, lend, or otherwise transfer or dispose of, directly or indirectly, any shares of Common Stock (or other capital stock) or any securities convertible into or exercisable or exchangeable for shares of Common Stock (or other capital stock); (B) file any registration statement, preliminary prospectus or prospectus, or any amendment or supplement thereto, under the Securities Act for any such transaction or which registers, or offers for sale, Common Stock (or other capital stock) or any securities convertible into or exercisable or exchangeable for Common Stock (or other capital stock), except for registration statements on Form S-8 relating to employee benefit plans or registration statements on Form S-4; or (C) enter into any swap or other arrangement that transfers to another, in whole or in part, any of the economic consequences of ownership of Common Stock, whether any such transaction described in clause (A), (B) or (C) above is to be settled by delivery of shares of Common Stock or such other securities, in cash or otherwise. The restrictions contained in this Section 4(a)(xv) shall not apply to: (I) sales of shares by the Company under any trading plan pursuant to Rule 10b5-1 under the Exchange Act existing as of the date of this Underwriting Agreement; (II) the issuance by the Company of shares upon the exercise of a stock option or warrant or the conversion of a security outstanding on the date hereof; (III) the issuance by the Company of stock options, restricted stock units, shares of capital stock of the Company under any equity compensation plan or agreement of the Company duly adopted for such purpose by a majority of the Company's non-employee directors or a committee comprised of non-employee directors; and (IV) the issuance by the Company of securities pursuant to acquisitions or strategic transactions approved by a majority of the Company's disinterested directors, provided that such issuances are not primarily for the purpose of raising capital; provided, in the case of clauses (II) and (III), that if such shares of Common Stock are issued to a director or officer of the Company such issued shares will be covered by the lock-up agreements executed by such person. The Company will cause each person or entity listed on Schedule IV to furnish to the Representative, prior to the Closing Date, a letter, substantially in the form of Schedule III hereto, pursuant to which each such person or entity shall agree, among other things, subject to the terms and conditions set forth in each such letter, not to directly or indirectly offer, sell, assign, transfer, pledge, contract to sell, or otherwise dispose of, any shares of Common Stock or any securities convertible into or exercisable or exchangeable for Common Stock, not to engage in any swap or other agreement or arrangement that transfers, in whole or in part, directly or indirectly, the economic risk of ownership of Common Stock or any such securities, during the period of ninety (90) days from the date of the Prospectus, without the prior written consent of the Representative.

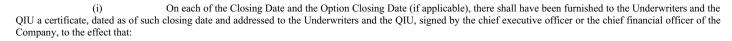
(xvi) The Company shall use its reasonable best efforts to maintain the listing of the Common Stock on NASDAQ for a period of at least three (3) years.

(xvii) From the date hereof until the earlier of (i) a date thirty (30) days after the Closing Date and (ii) the Option Closing Date, the Company will not issue press releases proposed communications with shareholders or other interested constituencies or other public announcements or engage in any

- (xvii) From the date hereof until the earlier of (i) a date thirty (30) days after the Closing Date and (ii) the Option Closing Date, the Company will not issue press releases, proposed communications with shareholders or other interested constituencies, or other public announcements or engage in any other publicity, without (i) providing the Representative and its counsel with copies of same and (ii) permitting the Representative and its counsel to comment thereon; provided, however, that ordinary and routine communications not related to the transactions contemplated hereunder or the financial position of the Company may be provided concurrently with their release.
- 5. CONDITIONS OF THE UNDERWRITERS' OBLIGATIONS. The obligations of the Underwriters hereunder are subject to the accuracy, as of the date hereof and at each of the Closing Date and the Option Closing Date (as if made on the Closing Date or Option Closing Date, as applicable), of and compliance with all representations, warranties and agreements of the Company contained herein (except to the extent any such representations or warranties expressly relate to a specified earlier date, in which case, such representations and warranties shall be true and correct as of such specified earlier date), to the performance by the Company of its obligations hereunder and to the following additional conditions (except for any obligations or conditions that have been waived by the Representative in writing):
- (a) If filing of the Prospectus, or any amendment or supplement thereto, or any Issuer Free Writing Prospectus, is required under the Securities Act or the Rules and Regulations, the Company shall have filed the Prospectus (or such amendment or supplement) or such Issuer Free Writing Prospectus with the Commission in the manner and within the time period so required; the Registration Statement shall remain effective; no stop order suspending the effectiveness of the Registration Statement or any part thereof, or any amendment thereof, nor suspending or preventing the use of the Time of Sale Disclosure Package, the Prospectus or any Issuer Free Writing Prospectus shall have been instituted or, to the Commission for additional information (to be included in the Registration Statement, the Time of Sale Disclosure Package, the Prospectus, any Issuer Free Writing Prospectus or otherwise) shall have been complied with to the Underwriters' reasonable satisfaction; and FINRA shall have raised no objection to the fairness and reasonableness of the underwriting terms and arrangements.
- (b) The Underwriters shall not have advised the Company that the Registration Statement, the Time of Sale Disclosure Package or the Prospectus, or any amendment thereof or supplement thereto, or any Issuer Free Writing Prospectus, contains an untrue statement of fact which, in the Underwriters' reasonable opinion, is material, or omits to state a fact which, in the Underwriters' reasonable opinion, is material and is required to be stated therein or necessary to make the statements therein not misleading.



- (d) On the Closing Date and the Option Closing Date, there shall have been furnished to the Underwriters and the QIU the opinion and negative assurance letter of Alston & Bird LLP, counsel for the Company, dated the Closing Date and Option Closing Date, respectively, and addressed to the Underwriters, in form and substance reasonably satisfactory to the Underwriters.
- (e) On the Closing Date and the Option Closing Date, there shall have been furnished to the Underwriters and the QIU the opinion of Foley & Lardner LLP, intellectual property counsel for the Company, dated the Closing Date and the Option Closing Date, respectively, and addressed to the Underwriters, in form and substance reasonably satisfactory to the Underwriters.
- (f) On the Closing Date and the Option Closing Date, there shall have been furnished to the Underwriters and the QIU the negative assurance letter of McGuireWoods LLP, counsel for the Underwriters and special due diligence counsel to the QIU, dated the Closing Date and the Option Closing Date, respectively, and addressed to the Underwriters, in form and substance reasonably satisfactory to the Underwriters.
- (g) On the date of the Prospectus and on the effective date of any post-effective amendment to the Registration Statement filed subsequent to the date of this Agreement, the Underwriters and the QIU shall have received a letter from the Auditor (the "<u>Comfort Letter</u>"), dated the respective dates of delivery thereof, and addressed to the Underwriters, in form and substance satisfactory to the Underwriters and the QIU.
- (h) On the Closing Date and the Option Closing Date, the Underwriters and the QIU shall have received from the Auditor a letter, dated as of such date, to the effect that they reaffirm the statements made in the Comfort Letter, except that the specified date referred to shall be a date not more than three business days prior to the Closing Date or Option Closing Date, as the case may be.



- (ii) The representations and warranties of the Company in this Agreement are true and correct, in all material respects, as if made at and as of the Closing Date or the Option Closing Date (as applicable) (except to the extent any such representations or warranties expressly relate to a specified earlier date, in which case, such representations and warranties shall be true and correct as of such specified earlier date), and the Company has complied with all the agreements and satisfied all the conditions on its part to be performed or satisfied at or prior to the Closing Date or the Option Closing Date (as applicable) (except for any such agreements or conditions that have been waived by the Representative in writing);
- (iii) No stop order or other order suspending the effectiveness of the Registration Statement or any part thereof or any amendment thereof or the qualification of the Securities for offering or sale nor suspending or preventing the use of the Time of Sale Disclosure Package, the Prospectus or any Issuer Free Writing Prospectus, has been issued, and no proceeding for that purpose has been instituted or, to the Company's knowledge, is contemplated or threatened by the Commission or any state or regulatory body; and
- (iv) The signers of said certificate have carefully examined the Registration Statement, the Time of Sale Disclosure Package and the Prospectus, and any amendments thereof or supplements thereto (including any documents filed under the Exchange Act and deemed to be incorporated by reference into the Time of Sale Disclosure Package, the Registration Statement or the Prospectus), and
- each part of the Registration Statement and the Prospectus, and any amendments thereof or supplements thereto (including any documents filed under the Exchange Act and deemed to be incorporated by reference into the Prospectus) contain, and contained, when such part of the Registration Statement (or such amendment) became effective, all statements and information required to be included therein, each part of the Registration Statement, or any amendment thereof, does not contain, and did not contain, when such part of the Registration Statement (or such amendment) became effective, any untrue statement of a material fact or omit to state, and did not omit to state when such part of the Registration Statement (or such amendment) became effective, any material fact required to be stated therein or necessary to make the statements therein not misleading, and the Prospectus, as amended or supplemented, does not include and did not include as of its date, or the time of first use within the meaning of the Rules and Regulations, any untrue statement of a material fact or omit to state and did not omit to state as of its date, or the time of first use within the meaning of the Rules and Regulations, a material fact necessary to make the statements therein, in light of the circumstances under which they were made, not misleading,

- (B) neither (1) the Time of Sale Disclosure Package nor (2) any individual Issuer Limited-Use Free Writing Prospectus, when considered together with the Time of Sale Disclosure Package, include, nor included as of the Time of Sale, any untrue statement of a material fact or omits, or omitted as of the Time of Sale, to state any material fact necessary in order to make the statements therein, in the light of the circumstances under which they were made, not misleading,
- (C) since the Time of Sale, there has occurred no event required to be set forth in an amended or supplemented prospectus which has not been so set forth, and there has been no document required to be filed under the Exchange Act that upon such filing would be deemed to be incorporated by reference into the Time of Sale Disclosure Package, the Registration Statement or into the Prospectus that has not been so filed,
- (D) subsequent to the respective dates as of which information is given in the Time of Sale Disclosure Package, the Company has not incurred any liabilities or obligations, direct or contingent, which are material to the Company, or entered into any transactions not in the ordinary course of business which are material to the Company, or declared or paid any dividends or made any distribution of any kind with respect to its capital stock, and except as disclosed in the Time of Sale Disclosure Package and in the Prospectus, there has not been any change in the capital stock (other than a change in the number of outstanding shares of Common Stock due to the issuance of shares upon the exercise of outstanding options or warrants or upon the settlement of outstanding restricted stock units), or any material change in the short-term or long-term debt of the Company except for the extinguishment thereof, or any issuance of options, warrants, convertible securities or other rights to purchase the capital stock of the Company (other than issuances of equity compensation awards under equity compensation arrangements approved by the Board of Directors of the Company or committee thereof comprised entirely of independent directors), or any Material Adverse Change, and
- (E) except as stated in the Time of Sale Disclosure Package and in the Prospectus, there is not pending, or, to the knowledge of the Company, threatened or contemplated, any action, suit or proceeding to which the Company is a party before or by any court or governmental agency, authority or body, or any arbitrator, which would be reasonably expected to result in any Material Adverse Change.
- (i) The Underwriters shall have received a letter from FINRA confirming that FINRA has determined to raise no objections with respect to the fairness and reasonableness of the underwriting terms and arrangements of the offering contemplated hereby.
- (j) The Company shall have furnished to the Underwriters, the QIU and counsel for the Underwriters such additional documents, certificates and evidence as the Underwriters, the QIU or counsel for the Underwriters may have reasonably requested.

- (k) The Underwriters shall have received the written agreements, substantially in the form of <u>Schedule III</u> hereto, of the directors and executive officers of the Company listed on <u>Schedule IV</u> to this Agreement.
- (I) The Securities to be delivered on the Closing Date or Option Closing Date, as the case may be, shall have been approved for listing on NASDAQ, subject to official notice of issuance.
- (m) The Representative shall have received on and as of the Closing Date and Option Closing Date, as the case may be, satisfactory evidence of the good standing of the Company in its jurisdiction of incorporation.
- (n) No action shall have been taken and no statute, rule, regulation or order shall have been enacted, adopted or issued by any federal, state or foreign governmental or regulatory authority that would, as of the Closing Date or the Option Closing Date, as the case may be, prevent the issuance or sale of the Securities by the Company; and no injunction or order of any federal, state or foreign court shall have been issued that would, as of the Closing Date or the Option Closing Date, as the case may be, prevent the issuance or sale of the Securities by the Company.

All such opinions, certificates, letters and other documents will be in compliance with the provisions hereof only if they are reasonably satisfactory in form and substance to the Underwriters, the QIU and counsel for the Underwriters. The Company will furnish the Underwriters and the QIU with such conformed copies of such opinions, certificates, letters and other documents as the Underwriters shall reasonably request.

6. INDEMNIFICATION AND CONTRIBUTION.

The Company agrees to indemnify and hold harmless each Underwriter (as well as the QIU), its affiliates, their respective officers, directors, employees and agents, and each person, if any, who controls such Underwriter within the meaning of Section 15 of the Securities Act, against any losses, claims, damages or liabilities to which such Underwriter may become subject, under the Securities Act or otherwise (including in settlement of any litigation if such settlement is effected with the written consent of the Company), insofar as such losses, claims, damages or liabilities (or actions in respect thereof) arise out of or are based upon (i) an untrue statement or alleged untrue statement of a material fact contained in the Registration Statement, any Preliminary Prospectus, the Time of Sale Disclosure Package, the Prospectus, or any amendment or supplement thereto (including any documents filed under the Exchange Act and deemed to be incorporated by reference into the Prospectus), or the omission or alleged omission to state therein a material fact required to be stated therein or necessary to make the statements therein not misleading, and will reimburse the Underwriters (as well as the QIU) for any legal or other expenses reasonably incurred by such Underwriter in connection with investigating or defending against such loss, claim, damage, liability or action as such expenses are incurred (provided that any payment as expenses are incurred shall be reimbursed to the extent it is determined that the recipient was not entitled to payment of such expenses under this Agreement); or (ii) in whole or in part, upon any inaccuracy in or breach of the representations and warranties of the Company contained herein; or (iii) in whole or in part, upon any failure of the Company to perform its obligations hereunder or under applicable law; provided, however, that the Company shall not be liable in any such case to the extent that any such loss, claim, damage, liability or action arises out of or is based upon an untrue st

In addition to its other obligations under this Section 6(a), the Company agrees that, as an interim measure during the pendency of any claim, action, investigation, inquiry or other proceeding arising out of or based upon any statement or omission, or any alleged statement or omission, described in this Section 6(a), it will reimburse the Underwriters and the QIU on a monthly basis for all reasonable legal fees or other expenses incurred in connection with investigating or defending any such claim, action, investigation, inquiry or other proceeding upon presentation of a written accounting in reasonable detail (but without the need to include the underlying statements or evidence of payment), notwithstanding the absence of a judicial determination as to the propriety and enforceability of the Company's obligation to reimburse the Underwriters and the QIU for such expenses and the possibility that such payments might later be held to have been improper by a court of competent jurisdiction. To the extent that any such interim reimbursement payment is so held to have been improper, the Underwriters and the QIU shall promptly return it to the Company, together with interest, compounded daily, determined on the basis of the prime rate (or other commercial lending rate for borrowers of the highest credit standing) announced from time to time by Wells Fargo Bank, N.A. (the "Prime Rate"). Any such interim reimbursement payments which are not made to the Underwriters and the QIU within 30 days of a request for reimbursement shall bear interest at the Prime Rate from the date of such request. This indemnity agreement shall be in addition to any liabilities which they may otherwise have.

(b) Each Underwriter will severally and not jointly 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 Securities Act or Section 20 of the Exchange Act against any losses, claims, damages or liabilities to which the Company may become subject, under the Securities Act or otherwise (including in settlement of any litigation, if such settlement is effected with the written consent of such Underwriter), insofar as such losses, claims, damages or liabilities (or actions in respect thereof) arise out of or are based upon an untrue statement or alleged untrue statement of a material fact contained in the Registration Statement, any Preliminary Prospectus, the Time of Sale Disclosure Package, the Prospectus, or any amendment or supplement thereto or any Issuer Free Writing Prospectus, or arise out of or are based upon the omission or alleged omission to state therein a material fact required to be stated therein or necessary to make the statements therein not misleading, in each case to the extent, but only to the extent, that such untrue statement or alleged untrue statement or omission or alleged omission was made in the Registration Statement, any Preliminary Prospectus, the Time of Sale Disclosure Package, the Prospectus, or any amendment or supplement thereto, or any Issuer Free Writing Prospectus in reliance upon and in conformity with written information furnished to the Company by an Underwriter with respect to such Underwriter specifically for use in the preparation thereof, and will reimburse the Company or any such director, officer or controlling person in connection with investigating or defending against any such loss, claim, damage, liability or action.

Promptly after receipt by an indemnified party under subsection (a) or (b) above of notice of the commencement of any action, such indemnified (c) party shall, if a claim in respect thereof is to be made against the indemnifying party under such subsection, notify the indemnifying party in writing of the commencement thereof; but the omission so to notify the indemnifying party shall not relieve the indemnifying party from any liability that it may have to any indemnified party except to the extent such indemnifying party has been materially prejudiced by such failure. In case any such action shall be brought against any indemnified party, and it shall notify the indemnifying party of the commencement thereof, the indemnifying party shall be entitled to participate in, and, to the extent that it shall wish, jointly with any other indemnifying party similarly notified, to assume the defense thereof, with counsel reasonably satisfactory to such indemnified party, and after notice from the indemnifying party to such indemnified party of the indemnifying party's election so to assume the defense thereof, the indemnifying party shall not be liable to such indemnified party under such subsection for any legal or other expenses subsequently incurred by such indemnified party in connection with the defense thereof other than reasonable costs of investigation; provided, however, that if, in the sole judgment of the Underwriters, it is advisable for the Underwriters to be represented by separate counsel, the Underwriters shall have the right to employ a single counsel to represent the Underwriters in any claim in respect of which indemnity may be sought by the Underwriters under subsection (a) of this Section 6, in which event the reasonable fees and expenses of such separate counsel shall be borne by the indemnifying party or parties and reimbursed to the Underwriters as incurred (in accordance with the provisions of the second paragraph in subsection (a) above). The Company shall not be liable for the fees and expenses of more than one separate counsel (together with local counsel), representing all indemnified parties who are parties to such action), provided, that, if indemnity is sought pursuant to Section 6(g), then, in addition to the fees and expenses of such counsel for the indemnified parties, the Company shall be liable for the reasonable fees and expenses of not more than one counsel (in addition to any local counsel) separate from its own counsel and that of the other indemnified parties for the QIU in its capacity as a "qualified independent underwriter" and all persons, if any, who control the QIU within the meaning of Section 15 of the Securities Act or Section 20 of Exchange Act 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 if, in the reasonable judgment of the QIU, there may exist a conflict of interest between the QIU and the other indemnified parties. Any such separate counsel for the QIU and such control persons of the QIU shall be designated in writing by the QIU.

The indemnifying party under this Section 6 shall not be liable for any settlement of any proceeding effected without its written consent, but if settled with such consent or if there be a final judgment for the plaintiff, the indemnifying party agrees to indemnify the indemnified party against any loss, claim, damage, liability or expense by reason of such settlement or judgment. Notwithstanding the foregoing sentence, if at any time an indemnified party shall have requested an indemnifying party to reimburse the indemnified party for fees and expenses of counsel as contemplated by this Section 6, the indemnifying party agrees that it shall be liable for any settlement of any proceeding effected without its written consent if (i) such settlement is entered into more than 30 days after receipt by such indemnifying party of the aforesaid request and (ii) such indemnifying party shall not have reimbursed the indemnified party in accordance with such request prior to the date of such settlement. No indemnifying party shall, without the prior written consent of the indemnified party, effect any settlement, compromise or consent to the entry of judgment in any pending or threatened action, suit or proceeding in respect of which any indemnified party is or could have been a party and indemnified party from all liability on claims that are the subject matter of such action, suit or proceeding and (b) 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.

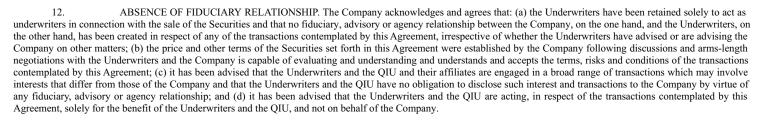
- If the indemnification provided for in this Section 6 is unavailable or insufficient to hold harmless an indemnified party under subsection (a) or (b) above, then each indemnifying party shall contribute to the amount paid or payable by such indemnified party as a result of the losses, claims, damages or liabilities referred to in subsection (a) or (b) above, (i) in such proportion as is appropriate to reflect the relative benefits received by the Company on the one hand and the respective Underwriter on the other from the offering of the Securities or (ii) if the allocation provided by clause (i) above is not permitted by applicable law, in such proportion as is appropriate to reflect not only the relative benefits referred to in clause (i) above but also the relative fault of the Company on the one hand and the respective Underwriter on the other in connection with the statements or omissions that resulted in such losses, claims, damages or liabilities, as well as any other relevant equitable considerations. The relative benefits received by the Company on the one hand and the respective Underwriter on the other shall be deemed to be in the same proportion as the total net proceeds from the offering (net of underwriting discounts and commissions but before deducting expenses) received by the Company bear to the total underwriting discounts and commissions received by the respective Underwriter, in each case as set forth in the table on the cover page of the Prospectus. The relative fault shall be determined by reference to, among other things, whether the untrue or alleged untrue statement of a material fact or the omission or alleged omission to state a material fact relates to information supplied by the Company or the respective Underwriter and the parties' relevant intent, knowledge, access to information and opportunity to correct or prevent such untrue statement or omission. The Company and the respective Underwriter agree that it would not be just and equitable if contributions pursuant to this subsection (d) were to be determined by pro rata allocation or by any other method of allocation which does not take account of the equitable considerations referred to in the first sentence of this subsection (d). The amount paid by an indemnified party as a result of the losses, claims, damages or liabilities referred to in the first sentence of this subsection (d) shall be deemed to include any legal or other expenses reasonably incurred by such indemnified party in connection with investigating or defending against any action or claim which is the subject of this subsection (d). Notwithstanding the provisions of this subsection (d), the respective Underwriter shall not be required to contribute any amount in excess of the amount by which the total price at which the Securities were offered to the public exceeds the amount of any damages that the respective Underwriter has otherwise been required to pay by reason of such untrue or alleged untrue statement or omission or alleged omission. No person guilty of fraudulent misrepresentation (within the meaning of Section 11(f) of the Securities Act) shall be entitled to contribution from any person who was not guilty of such fraudulent misrepresentation.
- (e) The obligations of the Company under this Section 6 shall be in addition to any liability which the Company may otherwise have and the benefits of such obligations shall extend, upon the same terms and conditions, to each person, if any, who controls the respective Underwriter within the meaning of the Securities Act; and the obligations of the respective Underwriter under this Section 6 shall be in addition to any liability that the respective Underwriter may otherwise have and the benefits of such obligations shall extend, upon the same terms and conditions, to each director of the Company (including any person who, with his consent, is named in the Registration Statement as about to become a director of the Company), to each officer of the Company who has signed the Registration Statement and to each person, if any, who controls the Company within the meaning of the Securities Act.

- (f) Each Underwriter confirms severally and not jointly and the Company acknowledges that there is no information concerning the Underwriters and the QIU furnished in writing to the Company by the Underwriters specifically for inclusion in the Registration Statement, any Preliminary Prospectus, the Time of Sale Disclosure Package, the Prospectus or any Issuer Free Writing Prospectus, except for the Underwriter Information.
- (g) The Company also agrees to indemnify and hold harmless the QIU, and each person, if any, who controls the QIU within the meaning of Section 15 of the Act or Section 20 of the Exchange Act and its officers, directors, employees, affiliates and agents, from and against any losses, claims, damages or liabilities (or action in respect thereof), as incurred, arising out of or as a result of the QIU's participation as a "qualified independent underwriter" within the meaning of FINRA Rule 5121 in connection with the offering contemplated by this Agreement and agrees to reimburse the QIU for any legal or other expenses reasonably incurred by it in connection with investigating or defending any such loss, claim, damage, liability or action as such expenses are incurred; <u>provided, however</u>, that the Company shall not be liable in any such case to the extent that any such loss, claim, damage or liability is finally judicially determined to have resulted solely from the gross negligence or willful misconduct of the QIU.
- 7. REPRESENTATIONS AND AGREEMENTS TO SURVIVE DELIVERY. All representations, warranties, and agreements of the Company herein or in certificates delivered pursuant hereto, including but not limited to the agreements of the Underwriters and the Company contained in <u>Section 6</u> hereof, shall remain operative and in full force and effect regardless of any investigation made by or on behalf of the Underwriters or any controlling person thereof, or the Company or any of its officers, directors, or controlling persons, and shall survive delivery of, and payment for, the Securities to and by the Underwriters hereunder.

8. TERMINATION OF THIS AGREEMENT.

The Underwriters shall have the right to terminate this Agreement by giving notice to the Company as hereinafter specified at any time at or prior (a) to the Closing Date, if (i) the Company shall have failed, refused or been unable, at or prior to the Closing Date, to perform any material agreement on its part to be performed hereunder, (ii) any condition of the Underwriters' obligations hereunder is not fulfilled or waived by the Representative in writing, (iii) trading in the Company's Common Stock shall have been suspended by the Commission or NASDAQ or trading in securities generally on NASDAQ shall have been suspended, (iv) minimum or maximum prices for trading shall have been fixed, or maximum ranges for prices for securities (which includes the Company's Common Stock) shall have been required, on NASDAQ, by such exchange or by order of the Commission or any other governmental authority having jurisdiction, (v) a banking moratorium shall have been declared by federal or state authorities which prevents payment by an Underwriter pursuant to Section 3, (vi) the Company is in material breach of any of its representations, warranties or covenants hereunder, (vii) the Underwriters shall have become aware after the date hereof, of events that are reasonably expected to result in (A) a Material Adverse Change, or (B) a material adverse change in general market conditions, in each case, as would make it impracticable, in the Underwriters' reasonable judgement, to proceed with the offering, sale and/or delivery of the Securities or to enforce contracts made by the Underwriters for the sale of the Securities, or (viii) a director or executive officer of the Company: (A) is charged with a felony offense relating to any financial or corporate matter arising from conduct relating to the Company; (B) becomes the subject of a public action or investigation by a governmental body arising from conduct relating to the Company (or such governmental body announces that it intends to take any such action or undertake any such investigation); or (C) is enjoined, suspended or otherwise limited from serving as a director or executive officer under the federal securities laws. Any such termination shall be without liability of any party to any other party except that the provisions of Section 4(a)(vii) and Section 6 hereof shall at all times be effective and shall survive such termination.

- (b) If the Representative elects to terminate this Agreement as provided in this Section, the Company shall be notified promptly by the Representative by telephone, confirmed by letter.
- 9. DEFAULT OF THE COMPANY. If the Company shall fail at the Closing Date or at the Option Closing Date to sell and deliver the Securities which it is obligated to sell hereunder, then this Agreement shall terminate without any liability on the part of the Underwriters or the QIU or, except as provided in Section 4(a)(vii), any non-defaulting party. No action taken pursuant to this Section shall relieve the Company from liability, if any, in respect of such default.
 - NOTICES. Except as otherwise provided herein, all communications hereunder shall be in writing and, if to the Underwriters or the QIU, shall be mailed, delivered or telecopied to National Securities Corporation, 200 Vesey St, 25th Floor, New York, NY 10281, fax: (212) 380-2828 Attention: Jonathan Rich; if to the Company, shall be mailed, delivered or telecopied to Checkpoint Therapeutics, Inc., 2 Gansvoort Street, 9th Floor, New York, New York 10014, attention of Chief Financial Officer, with a copy to Alston & Bird LLP, 90 Park Avenue, New York, New York 10016, attention: Mark McElreath; or in each case to such other address as the person to be notified may have requested in writing. Any party to this Agreement may change such address for notices by sending to the parties to this Agreement written notice of a new address for such purpose.
- 11. PERSONS ENTITLED TO BENEFIT OF AGREEMENT. This Agreement shall inure to the benefit of and be binding upon the parties hereto and their respective successors and assigns and the controlling persons, officers and directors referred to in <u>Section 6</u>. Nothing in this Agreement is intended or shall be construed to give to any other person, firm or corporation any legal or equitable remedy or claim under or in respect of this Agreement or any provision herein contained. The term "successors and assigns" as herein used shall not include any purchaser, as such purchaser, of any of the Securities from the Underwriters.



- 13. GOVERNING LAW. This Agreement shall be governed by and construed in accordance with the laws of the State of New York without reference to its conflict of laws provisions. The parties hereby irrevocably and unconditionally: submit to the jurisdiction of the federal and state courts located in the State of New York, for any dispute related to this Agreement or any of the matters contemplated hereby; consent to service of process by registered or certified mail return receipt requested or by any other manner provided by applicable law; and waive any right to claim that any action, proceeding or litigation so commenced has been commenced in an inconvenient forum.
- 14. INTEGRATION, AMENDMENT. This Agreement supersedes all prior agreements and understandings (whether written or oral) among the Company, the Representative, the QIU, or any of the other Underwriters, with respect to the subject matter hereof. No provision hereof may be modified or amended except in a written instrument signed by the Company, the Representative and the QIU.
- 15. COUNTERPARTS. This Agreement may be executed in one or more counterparts and, if executed in more than one counterpart, the executed counterparts shall each be deemed to be an original and all such counterparts shall together constitute one and the same instrument.

[Signature Page Follows]

Please sign and return to the Company the enclosed duplicates of this letter whereupon this letter will become a binding agreement among the Company, the Underwriters and the QIU in accordance with its terms.

Very truly yours,

CHECKPOINT THERAPEUTICS, INC.

By: /s/ James F. Oliviero, III

Name: James F. Oliviero, III

Title: President and Chief Executive Officer

Confirmed as of the date first above mentioned by the Underwriters.

NATIONAL SECURITIES CORPORATION

By: /s/ Jonathan C. Rich

Name: Jonathan C. Rich Title: Executive Vice President

On behalf of itself in its capacity as the QIU

LAKE STREET CAPITAL MARKETS, LLC, as qualified independent Underwriter

By: /s/ Michael Townley

Name: Michael Townley

Title: Head of Investment Banking

Schedule I

Time of Sale Disclosure Package

Schedule II

Issuer General Free Writing Prospectuses

Schedule III

Form of Lockup Agreement

				2018

National Securities Corporation as Representative of the several Underwriters

c/o National Securities Corporation 200 Vesey Street, 25th Floor New York, NY 10281

Re: Proposed Public Offering by Checkpoint Therapeutics, Inc.

Dear Sirs:

The undersigned, a stockholder and an officer and/or director of Checkpoint Therapeutics Holdings, Inc., a Delaware corporation (the 'Company'), understands that National Securities Corporation (the "Representative") proposes to enter into an Underwriting Agreement (the 'Underwriting Agreement') with the Company providing for the public offering of shares (the "Offering") of the Company's common stock, par value \$0.0001 per share (the 'Common Stock'). In recognition of the benefit the Offering will confer upon the undersigned as a stockholder and, if applicable, an officer and/or director, of the Company, and for other good and valuable consideration, the receipt and sufficiency of which are hereby acknowledged, the undersigned agrees with each underwriter to be named in the Underwriting Agreement that, during the period beginning on the date hereof and ending on the date that is 90 days from the date of the final prospectus supplement filed by the Company with the Securities and Exchange Commission (the "Lock-Up Period"), the undersigned will not, without the prior written consent of the Representative, (i) directly or indirectly, offer, pledge, sell, assign, transfer, lend, contract to sell, sell any option or contract to purchase any option or contract to sell, grant any option, right or warrant to purchase or otherwise transfer or dispose of any shares of the Company's Common Stock or any securities convertible into or exercisable or exchangeable for Common Stock, whether now owned or hereafter acquired by the undersigned or with respect to which the undersigned has or hereafter acquires the power of disposition (collectively, the "Lock-Up Securities"), or exercise any right with respect to the registration of any of the Lock-up Securities, or file or cause to be filed any registration statement in connection therewith, under the Securities Act of 1933, as amended; (ii) enter into any swap, hedge or any other agreement or any transaction is to be settled by delivery of Common Stock or other securities, in c

Notwithstanding the foregoing, and subject to the conditions below, the undersigned may transfer the Lock-Up Securities without the prior written consent of the Representative:

- (a) provided that (1) the Representative receives a signed lock-up agreement for the balance of the Lock-up Period from each donee, trustee, distributee or transferee, as the case may be, (2) any such transfer shall not involve a disposition for value, (3) with respect to clauses (i) through (v) below, such transfers are not required to be reported with the Securities and Exchange Commission on Form 4 in accordance with Section 16 of the Securities Exchange Act of 1934, as amended (the "Exchange Act"), and (4) the undersigned does not otherwise voluntarily effect any public filing or report regarding such transfers:
 - (i) as a bona fide gift or gifts or for bona fide estate planning purposes; or
 - (ii) by will or intestate succession upon the death of the undersigned; or
 - (iii) to any trust or other entity for the direct or indirect benefit of the undersigned or the immediate family of the undersigned (for purposes of this lock-up agreement, "immediate family" shall mean any relationship by blood, marriage or adoption, not more remote than first cousin), or if the undersigned is a trust, to any beneficiary (including such beneficiary's estate) of the undersigned; or
 - (iv) as a distribution to limited partners, general partners, limited liability company members or stockholders of the undersigned; or
 - (v) to the undersigned's affiliates or to any investment fund or other entity controlled or managed by the undersigned; or
 - (vi) by operation of law, including pursuant to a domestic order, a negotiated divorce settlement or other court order; provided that to the extent a filing under the Exchange Act, if any, is required by or on behalf of the undersigned, such filing shall indicate that the filing relates to the circumstances described in this clause (vi); or
- (b) by exercise of any option or warrant for cash or transfer of Lock-Up Securities to the Company upon a vesting event of the Company's securities, pursuant to arrangements under which the Company has the option to repurchase such shares or a right of first refusal with respect to transfers of such shares or upon the exercise or conversion of options or warrants to purchase the Company's securities, in each case, on a "cashless" or "net exercise" basis or to cover tax withholding obligations of the undersigned in connection with such vesting or exercise, provided that (1) any filing under Section 16 of the Exchange Act made during the Lock-Up Period shall clearly indicate in the footnotes thereto that (A) the filing relates to the circumstances described above and (B) no Lock-Up Securities were sold by the undersigned and (2) the undersigned does not otherwise voluntarily effect any other public filing or report regarding such transfers during the Lock-Up Period; or

(c) by any conversion of shares of preferred stock of the Company into shares of Common Stock of the Company, provided that any shares of Common Stock received upon such conversion remain subject to the terms of this lock-up agreement; or

(d) by transfer of Lock-Up Securities pursuant to a bona fide third party tender offer, merger, consolidation or other similar transaction made to all holders of Lock-Up Securities involving a change of control of the Company approved by the Company's board of directors, provided that in the event that the tender offer, merger, consolidation or other such transaction is not completed, the Lock-Up Securities owned by the undersigned shall remain subject to the restrictions contained in this lock-up agreement. For purposes of this lock-up agreement, "change of control" means the transfer (whether by tender offer, merger, consolidation or other similar transaction), in one transaction or a series of related transactions, to a person or group of affiliated persons (other than an underwriter pursuant to the Offering), of the Company's voting securities if, after such transfer, such person or group of affiliated persons would hold more than 50% of the outstanding voting securities of the Company (or the surviving entity).

In addition, the restrictions on transfer and disposition of the Lock-Up Securities during the Lock-Up Period shall not apply to the repurchase of Lock-Up Securities by the Company in connection with the termination of the undersigned's employment or other service with the Company, provided that to the extent a filing under the Exchange Act, if any, is required by or on behalf of the undersigned, such filing shall indicate that the disposition of Lock-Up Securities was made back to the Company in connection with the undersigned's employment termination.

Nothing in this lock-up agreement shall preclude the establishment of a new trading plan meeting the requirements of Rule 10b5-1 under the Exchange Act; provided, that (i) no public report or filing under Section 16 of the Exchange Act shall be required during the Lock-Up Period, (ii) the undersigned does not otherwise voluntarily effect any public filing or report regarding the establishment of such plan during the Lock-Up Period and (iii) no sales are made during the Lock-Up Period pursuant to such plan.

The undersigned also agrees and consents to the entry of stop transfer instructions with the Company's transfer agent and registrar against the transfer of the Lock-Up Securities except in compliance with the foregoing restrictions. This lock-up agreement shall automatically terminate, and the undersigned shall be released from its obligations hereunder upon the earliest to occur, if any, of (a) March 31, 2018, in the event that the Underwriting Agreement has not been executed by such date (provided, that the Company may by written notice to the undersigned prior to March 31, 2018 extend such date for a period of up to an additional three months), (b) the date the Company notifies the Representative in writing prior to the date of execution of the Underwriting Agreement that it does not intend to proceed with the Offering or (c) the date the Underwriting Agreement (other than the provisions thereof that survive termination) shall terminate or be terminated prior to payment for and delivery of the shares of Common Stock to be sold thereunder.

The undersigned understands that the Company and the Representative are relying upon this lock-up agreement in proceeding toward consummation of the Offering. The undersigned further understands that this lock-up agreement is irrevocable and shall be binding upon the undersigned's heirs, legal representatives, successors and assigns.

[Signature Page Follows]

In witness whereof	the	narties hereto	have enter	ed into	this loc	ck-un agre	ement as	of the	date	first set fo	orth above.

Very truly yours,

Schedule IV Persons subject to Lock-Up

James F. Oliviero, III William Garrett Gray Michael S. Weiss Scott Boilen Neil Herkowitz Lindsay A. Rosenwald, M.D. Barry Salzman Fortress Biotech, Inc.

Schedule V

Underwriters

UnderwriterFirm SharesAdditional SharesNational Securities Corporation4,554,000683,100H.C. Wainwright & Co, LLC46,0006,900

ALSTON & BIRD

90 Park Avenue New York, NY 10016 212-210-9400 | Fax: 212-210-9444

Mark F. McElreath Direct Dial: 212-210-9595 Email: mark.mcelreath@alston.com

March 8, 2018

Checkpoint Therapeutics, Inc. 2 Gansevoort Street, 9th Floor New York, NY 10014

Re: Securities Registered under Registration Statement on Form S-3

Ladies and Gentlemen:

We have acted as counsel to Checkpoint Therapeutics, Inc., a Delaware corporation (the "Company"), in connection with the registration statement (the "Registration Statement") on Form S-3 filed November 9, 2017 by the Company with the Securities and Exchange Commission (the "Commission") under the Securities Act of 1933, as amended (the "Securities Act"). The Registration Statement relates to the issuance and sale by the Company from time to time, pursuant to Rule 415 of the General Rules and Regulations of the Commission promulgated under the Securities Act, of any combination of securities of the types specified therein (the "Securities"). Reference is made to our opinion letter dated November 9, 2017 and included as Exhibit 5.1 to the Registration Statement. We are delivering this supplemental opinion in connection with the prospectus supplement (the "Prospectus Supplement") filed on March 8, 2018 by the Company pursuant to Rule 424 under the Securities Act. The Prospectus Supplement relates to an underwritten public offering of 4,600,000 shares (the "Firm Shares") of the Company's common stock, par value \$0.0001 per share (the "Common Stock") covered by the Registration Statement, at a price of \$4.35 per share, less underwriting discounts and commissions. In addition, the Company has granted the underwriters an option, exercisable for 45 days, to purchase up to an additional 690,000 shares of Common Stock (the "Additional Shares" and, together with the Firm Shares, the "Offered Shares"). The Offered Shares are being offered and sold to the underwriters named in, and pursuant to, the Underwriting Agreement among the Company and such underwriters (the "Underwriting Agreement") dated March 8, 2018.

We have examined the Amended and Restated Certificate of Incorporation of the Company, the Bylaws of the Company, records of proceedings of the Board of Directors, or committees thereof, and records of proceedings of the stockholders, deemed by us to be relevant to this opinion letter and the Registration Statement. We also have made such further legal and factual examinations and investigations as we deemed necessary for purposes of expressing the opinion set forth herein.

Alston & Bird LLP www.alston.com

Atlanta | Beijing | Brussels | Charlotte | Dallas | Los Angeles | New York | Research Triangle | San Francisco | Silicon Valley | Washington, D.C.

We have assumed that the terms of the Securities will have been established so as not to, and that the execution and delivery by the Company of the Securities, and the performance of its obligations under the Securities, will not, violate, conflict with or constitute a default under (i) any agreement or instrument to which the Company is subject (except that we do not make the assumption set forth in this clause (i) with respect to those agreements and instruments that are listed on the Exhibit Index in Part II of the Registration Statement), (ii) any law, rule or regulation to which the Company is subject (except that we do not make the assumption with respect to Opined on Law (as defined below)), (iii) any judicial or regulatory order or decree of any governmental authority or (iv) any consent, approval, license, authorization or validation of, or filing, recording or registration with any governmental authority.

As to certain factual matters relevant to this opinion letter, we have relied conclusively upon originals or copies, certified or otherwise identified to our satisfaction, of such records, agreements, documents and instruments, including certificates or comparable documents of officers of the Company and of public officials, as we have deemed appropriate as a basis for the opinion hereinafter set forth. Except to the extent expressly set forth herein, we have made no independent investigations with regard to matters of fact, and, accordingly, we do not express any opinion as to matters that might have been disclosed by independent verification.

Based on the foregoing, we are of the opinion that:

(1) With respect to any Offered Shares of Common Stock covered by the Registration Statement to be offered and sold by the Company pursuant to the Underwriting Agreement, (i) when the Board of Directors, including any appropriate committee appointed thereby, and appropriate officers of the Company have taken all necessary corporate action to approve the issuance of the Offered Shares, the consideration to be received therefor and related matters, and (ii) when certificates in the form required under the Delaware General Corporation Law (the "DGCL") representing the Offered Shares are duly executed, countersigned, registered and delivered upon payment of the agreed upon consideration therefor, the Offered Shares, when issued and sold in accordance with the Underwriting Agreement, will be duly authorized, validly issued, fully paid and nonassessable, provided that the consideration therefor is not less than \$0.0001 per share of Common Stock.

The opinion set forth herein is limited to the DGCL, applicable provisions of the Constitution of the State of Delaware and reported judicial decisions interpreting the foregoing, and federal laws of the United States of America to the extent referred to specifically herein (all of the foregoing being referred to as "Opined on Law"). We do not express any opinion herein concerning any other laws. We are not engaged in the practice in the State of Delaware; however, we are generally familiar with the DGCL as currently in effect and have made such inquiries as we consider necessary to render the opinion contained herein. We assume no obligation to revise or supplement this opinion in the event of future changes in such laws or the interpretations thereof or such facts.

The opinion set forth herein is subject to (i) the effect of any bankruptcy, insolvency, reorganization, moratorium, arrangement or similar laws affecting the rights and remedies of creditors generally, including the effect of statutory or other laws regarding fraudulent transfers or preferential transfers, and (ii) general principles of equity, including concepts of materiality, reasonableness, good faith and fair dealing and the possible unavailability of specific performance, injunctive relief or other equitable remedies regardless of whether enforceability is considered in a proceeding in equity or at law. We express no opinion regarding the effectiveness of (i) any waiver of stay, extension or usury laws or of unknown future rights; or (ii) provisions may be held unenforceable as contrary to federal or state securities laws.

No opinion may be implied or inferred beyond the opinion expressly stated herein. Our opinion expressed herein is as of the date hereof, and we undertake no obligation to advise you of any changes in applicable law or any other matters that may come to our attention after the date hereof that may affect our opinion expressed herein.

We consent to the filing of this opinion letter as an exhibit to the Prospectus Supplement and to the use of our name under the heading "Legal Matters" in the section constituting a part thereof. In giving such consent, we do not thereby admit that we are within the category of persons whose consent is required under Section 7 of the Securities Act or the rules and regulations of the Commission thereunder.

Sincerely,

ALSTON & BIRD LLP

/s/ Mark F. McElreath

Mark F. McElreath Partner