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): August 9, 2018 (August 6, 2018)

PRA Health Sciences, Inc.

(Exact Name of Registrant as Specified in Charter)

Delaware (State or Other Jurisdiction of Incorporation) **001-36732** (Commission File Number)

46-3640387 (I.R.S. Employer Identification No.)

4130 ParkLake Avenue, Suite 400, Raleigh, NC 27612 (Address of Principal Executive Offices) (Zip Code)

(919) 786-8200

(Registrant's telephone number, including area code)

Not Applicable

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

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

provisions (see General Instruction A.2. below):				
	Written communications pursuant to Rule 425 under the Securities Act (17 CFR 230.425)			
	Soliciting material pursuant to Rule 14a-12 under the Exchange Act (17 CFR 240.14a-12)			
	Pre-commencement communications pursuant to Rule 14d-2(b) under the Exchange Act (17 CFR 240.14d-2(b))			
	Pre-commencement communications pursuant to Rule 13e-4(c) under the Exchange Act (17 CFR 240.13e-4(c))			
Indicate by check mark whether the registrant is an emerging growth company as defined in as defined in Rule 405 of the Securities Act of 1933 (§230.405 of this chapter) or Rule 12b-2 of the Securities Exchange Act of 1934 (§240.12b-2 of this chapter).				
Emerging growth Company				
If an 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 accounting standards provided pursuant to Section 13(a) of the Exchange Act. \Box				

Item 1.01. Entry into a Material Definitive Agreement.

On August 6, 2018, PRA Health Sciences, Inc. (the "Company") entered into an Underwriting Agreement (the "Underwriting Agreement") by and among the Company, the selling stockholder named therein (the "Selling Stockholder"), and Morgan Stanley & Co. LLC and Goldman Sachs & Co. LLC (the "Underwriters"), relating to an underwritten offering (the "Offering") of 6,500,000 shares (the "Shares") of the Company's common stock, par value \$0.01 per share, pursuant to the Company's Registration Statement on Form S-3 (File No. 333-209883), filed on March 2, 2016, as supplemented by the prospectus supplement dated August 6, 2018. All of the Shares are being sold by the Selling Stockholder. Pursuant to the Underwriting Agreement, the Underwriters purchased the Shares at a price of \$101.01 per share in a transaction that was completed on August 9, 2018.

The description of the Underwriting Agreement is qualified in its entirety by the terms of such agreement, which is incorporated herein by reference and attached to this report as Exhibit 1.1.

Item 9.01 Financial Statements and Exhibits.

(d) Exhibits.

Exhibit	Description
1.1	Underwriting Agreement, dated as of August 6, 2018, among PRA Health Sciences, Inc., the Selling Stockholder named therein and Morgan Stanley & Co. LLC and Goldman Sachs & Co. LLC, as Underwriters
5.1	Opinion of Simpson Thacher & Bartlett LLP
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SIGNATURES

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

PRA Health Sciences, Inc.

Date: August 9, 2018

By: Name:

/s/ Timothy McClain Timothy McClain Senior Vice President of Legal Affairs and Assistant Secretary Title:

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Execution Version

6,500,000 Shares of Common Stock

PRA Health Sciences, Inc.

UNDERWRITING AGREEMENT

August 6, 2018

Morgan Stanley & Co. LLC 1585 Broadway New York, New York 10036

And

Goldman Sachs & Co. LLC 200 West Street New York, New York 10282-2198

Ladies and Gentlemen:

Introductory. KKR PRA Investors L.P. (the "Selling Stockholder"), as a stockholder of PRA Health Sciences, Inc., a Delaware corporation (the "Company"), proposes to sell to Morgan Stanley & Co. LLC and Goldman Sachs & Co. LLC (together, the "Underwriters") the number of shares of the Company's common stock, par value \$0.01 per share (the "Shares") set forth next to the Selling Stockholder's name on <u>Schedule B</u> hereto. The aggregate 6,500,000 Shares to be sold by the Selling Stockholder are called the "Offered Shares."

The Company has prepared and filed with the Securities and Exchange Commission (the "Commission") an "automatic shelf registration statement" as defined under Rule 405 of the Securities Act of 1933, as amended, and the rules and regulations promulgated thereunder (collectively, the "Securities Act") on Form S-3, File No. 333-209883, including a base prospectus (the "Base Prospectus"), to be used in connection with the public offering and sale of the Offered Shares. Such registration statement, as amended, including the financial statements, exhibits and schedules thereto, in the form in which it became effective under the Securities Act, including all documents incorporated or deemed to be incorporated by reference therein and any information deemed to be a part thereof at the time of effectiveness pursuant to Rule 430A or Rule 430B under the Securities Act, is called the "Registration Statement." The preliminary prospectus supplement dated August 6, 2018 describing the Offered Shares and the offering thereof (the "Preliminary Prospectus Supplement"), together with the Base Prospectus, is called the "Preliminary Prospectus," and the Preliminary Prospectus and any other prospectus supplement to the Base Prospectus in preliminary form that describes the Offered Shares and the offering thereof and is used prior to the filing of the Prospectus (as defined below), together with the Base Prospectus, is called a "preliminary prospectus." As used herein, the term "Prospectus" shall mean the final prospectus supplement to the Base Prospectus that describes the Offered Shares and the offering thereof (the "Final Prospectus Supplement"), together with the Base Prospectus, in the form first used by the Underwriters to confirm sales of the Offered Shares or in the form first made available to the Underwriters by the Company to meet requests of purchasers pursuant to Rule 173 under the Securities Act. References herein to the Preliminary Prospectus, any preliminary prospectus and the Prospectus shall refer to both the prospectus supplement and the Base Prospectus components of such prospectus. As used herein, "Applicable Time" is 5:00 PM (New York City time) on August 6, 2018. As used herein, "free writing prospectus" has the meaning set forth in Rule 405 under the Securities Act, and "Time of Sale

Prospectus" means the Preliminary Prospectus, as amended or supplemented immediately prior to the Applicable Time, together with the free writing prospectuses, if any, identified in Schedule C hereto and the information included on Schedule D hereto. As used herein, "Road Show" means a "road show" (as defined in Rule 433 under the Securities Act) relating to the offering of the Offered Shares contemplated hereby, if any, that is a "written communication" (as defined in Rule 405 under the Securities Act). As used herein, "Marketing Materials" means any materials or information provided to investors by, or with the approval of, the Company in connection with the marketing of the Offered Shares, including any roadshow or investor presentations made to investors by the Company (whether in person or electronically).

All references in this Agreement to the Registration Statement, the Preliminary Prospectus, any preliminary prospectus, the Base Prospectus and the Prospectus shall include the documents incorporated or deemed to be incorporated by reference therein. All references in this Agreement to financial statements and schedules and other information which are "contained," "included" or "stated" in, or "part of" the Registration Statement, the Preliminary Prospectus, any preliminary prospectus, the Base Prospectus, the Time of Sale Prospectus or the Prospectus, and all other references of like import, shall be deemed to mean and include all such financial statements and schedules and other information which is or is deemed to be incorporated by reference in the Registration Statement, the Preliminary Prospectus, any preliminary prospectus, the Base Prospectus, the Time of Sale Prospectus or the Prospectus, as the case may be. All references in this Agreement to amendments or supplements to the Registration Statement, the Preliminary Prospectus, any preliminary prospectus, the Base Prospectus, the Time of Sale Prospectus or the Prospectus shall be deemed to mean and include the filling of any document under the Securities Exchange Act of 1934, as amended, and the rules and regulations promulgated thereunder (collectively, the "Exchange Act") that is or is deemed to be incorporated by reference in the Registration Statement, the Preliminary prospectus, the Base Prospectus, or the Prospectus, as the case may be. All references in this Agreement to (i) the Registration Statement, the Preliminary Prospectus, any preliminary prospectus, the Base Prospectus, any amendments or supplements to any of the foregoing, or any free writing prospectus, shall include any copy thereof filed with the Commission pursuant to its Electronic Data Gathering, Analysis and Retrieval System ("EDGAR") and (ii) the Prospectus shall be deemed to include any "electronic Prospectus" provided for use in connection with the offering of the Offered Share

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

The Company and the Selling Stockholder hereby confirm their respective agreements with the Underwriters as follows:

Section 1. Representations and Warranties of the Company and the Selling Stockholder.

- **A.** Representations and Warranties of the Company. The Company hereby represents, warrants and covenants to each Underwriter as of the date of this Agreement, as of the Closing Date (as hereinafter defined) as follows:
- (a) Compliance with Registration Requirements. The Registration Statement is an "automatic shelf registration statement," as defined in Rule 405 under the Securities Act, and became effective upon its filing with the Commission on March 2, 2016. The Company has not received from the Commission any notice pursuant to Rule 401(g)(2) under the Securities Act objecting to the Company's use of the automatic shelf registration form. The Company has complied, to the Commission's satisfaction with all requests of the Commission for additional or supplemental information, if any. No stop order

suspending the effectiveness of the Registration Statement is in effect and no proceedings for such purpose have been instituted or are pending or, to the best knowledge of the Company, are contemplated or threatened by the Commission. At the time the Company's Annual Report on Form 10-K for the year ended December 31, 2017 (the "Annual Report") was filed with the Commission, or, if later, at the time the Registration Statement was originally filed with the Commission, as well as at the time the Company or any person acting on its behalf (within the meaning, for this clause only, of Rule 163(c) under the Securities Act) made any offer relating to the Offered Shares in reliance on the exemption of Rule 163 under the Securities Act, the Company was a "well known seasoned issuer" as defined in Rule 405 under the Securities Act. The Company meets the requirements for use of Form S-3 under the Securities Act specified in FINRA Conduct Rule 5110(B)(7)(C)(i). The documents incorporated or deemed to be incorporated by reference in the Registration Statement, the Time of Sale Prospectus and the Prospectus, at the time they were or hereafter are filed with the Commission, or became effective under the Exchange Act, as the case may be, complied and will comply in all material respects with the requirements of the Exchange Act.

- by electronic transmission pursuant to EDGAR, was identical (except as may be permitted by Regulation S-T under the Securities Act) to the copy thereof delivered to the Underwriters for use in connection with the offer and sale of the Offered Shares. Each of the Registration Statement and any post-effective amendment thereto, at the time it became or becomes effective, complied and will comply in all material respects with the Securities Act and did not and will not contain any untrue statement of a material fact or omit to state a material fact required to be stated therein or necessary to make the statements therein not misleading. As of the Applicable Time, the Time of Sale Prospectus did not, and at the Closing Date (as defined in Section 2), will not, contain any untrue statement of a material fact or omit to state a material fact necessary to make the statements therein, in the light of the circumstances under which they were made, not misleading. The Prospectus, as of its date, did not, and at the Closing Date, will not, contain any untrue statement of a material fact or omit to state a material fact necessary in order to make the statements therein, in the light of the circumstances under which they were made, not misleading. The representations and warranties set forth in the three immediately preceding sentences do not apply to statements in or omissions from the Registration Statement or any post-effective amendment thereto, or the Prospectus or the Time of Sale Prospectus, or any amendments or supplements thereto, made in reliance upon and in conformity with written information relating to any Underwriter furnished to the Company in writing by the Underwriters or their counsel expressly for use therein, it being understood and agreed that the only such information consists of the information described in Section 9(c) below. There are no contracts or other documents required to be described in the Time of Sale Prospectus or the Prospectus or to be filed as an exhibit to the Registration Statement whi
- (c) Free Writing Prospectuses; Road Show. As of the determination date referenced in Rule 164(h) under the Securities Act, the Company was not, is not or will not be (as applicable) an "ineligible issuer" in connection with the offering of the Offered Shares pursuant to Rules 164, 405 and 433 under the Securities Act. Each free writing prospectus that the Company is required to file pursuant to Rule 433(d) under the Securities Act has been, or will be, filed with the Commission in accordance with the requirements of the Securities Act. Each free writing prospectus that the Company has filed, or is required to file, pursuant to Rule 433(d) under the Securities Act or that was prepared by or on behalf of or used or referred to by the Company complies or will comply in all material respects with the requirements of Rule 433 under the Securities Act, including timely filing with the Commission or retention where required and legending, and each such free writing prospectus, as of its issue date and at all subsequent times through the completion of the public offer and sale of the Offered Shares did not, does not and will not include any information that conflicted, conflicts or will conflict with the information contained in the Registration Statement, the Prospectus or any preliminary prospectus and not superseded or modified. Except for the

free writing prospectuses, if any, identified in Schedule C, and electronic road shows, if any, furnished to you before first use, the Company has not prepared, used or referred to, and will not, without your prior written consent, prepare, use or refer to, any free writing prospectus. Each Road Show, if any, when considered together with the Time of Sale Prospectus, did not, as of the Applicable Time, 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.

- (d) [Reserved]
- (e) Distribution of Offering Material By the Company. Prior to the completion of the Underwriters' distribution of the Offered Shares, the Company has not distributed and will not distribute any offering material in connection with the offering and sale of the Offered Shares other than the Registration Statement, the Time of Sale Prospectus, the Prospectus or any free writing prospectus reviewed and consented to by the Underwriters (which consent shall not be unreasonably withheld) and the free writing prospectuses, if any, identified on Schedule C.
 - **(f)** The Underwriting Agreement. This Agreement has been duly authorized, executed and delivered by the Company.
- (g) Authorization of the Offered Shares. The Offered Shares have been duly authorized for issuance and sale pursuant to this Agreement and, when such Offered Shares are delivered against payment therefor pursuant to this Agreement, will be validly issued, fully paid and non-assessable, and the issuance and sale of the Offered Shares is not subject to any preemptive rights, rights of first refusal or other similar rights to subscribe for or purchase the Offered Shares.
- (h) No Applicable Registration or Other Similar Rights. There are no persons with registration or other similar rights to have any equity or debt securities registered for sale under the Registration Statement or included in the offering contemplated by this Agreement, other than the Selling Stockholder with respect to the Offered Shares included in the Registration Statement, except for such rights as have been duly waived.
- (i) No Material Adverse Change. Except as otherwise disclosed in the Registration Statement, the Time of Sale Prospectus and the Prospectus, subsequent to the respective dates as of which information is given in the Registration Statement, the Time of Sale Prospectus and the Prospectus: (i) there has been no change, or any development or event involving a prospective change, in the condition (financial or otherwise), results of operations, business or properties of the Company and its subsidiaries taken as a whole which is material and adverse (any such change being referred to herein as a "Material Adverse Change"); and (ii) there has not been any material decrease in the capital stock or any material increase in any short-term or long-term indebtedness of the Company or its subsidiaries and there has been no dividend or distribution of any kind declared, paid or made by the Company or, except for dividends paid to the Company or other subsidiaries, by any of the Company's subsidiaries on any class of capital stock.
- (j) Independent Auditors. Deloitte & Touche LLP, which expressed its opinion with respect to the financial statements (which term as used in this Agreement includes the related notes thereto) of the Company filed with the Commission as a part of the Registration Statement, the Time of Sale Prospectus and the Prospectus, is (A) an independent registered public accounting firm as required by the Securities Act, the Exchange Act, and the rules of the Public Company Accounting Oversight Board ("PCAOB") and (B) in compliance with the applicable requirements relating to the qualification of accountants under Rule 2-01 of Regulation S-X under the Securities Act.

- Financial Statements. The financial statements filed with the Commission as a part of the Registration Statement, the Time of Sale Prospectus and the Prospectus present fairly in all material respects the financial position of the Company and its consolidated subsidiaries as of the dates shown and their results of their operations, changes in stockholders' equity and cash flows for the periods shown, and such financial statements have been prepared in conformity with the generally accepted accounting principles in the United States ("U.S. GAAP") applied on a consistent basis. The interactive data in eXtensible Business Reporting Language included or incorporated by reference in the Registration Statement fairly presents the information called for in all material respects and has been prepared in accordance with the Commission's rules and guidelines applicable thereto. No other financial statements or supporting schedules are required to be included in the Registration Statement, the Time of Sale Prospectus or the Prospectus. The financial data set forth or incorporated by reference in each of the Registration Statement, the Time of Sale Prospectus and the Prospectus under the captions "Prospectus Supplement Summary—Summary Historical Consolidated Financial and Other Data" and "Selected Financial Data" fairly present the information set forth therein on a basis consistent with that of the related audited financial statements contained in the Registration Statement, the Time of Sale Prospectus and the Prospectus. All disclosures contained in the Registration Statement, any preliminary prospectus or the Prospectus and any free writing prospectus, that constitute non-GAAP financial measures (as defined by the rules and regulations under the Securities Act and the Exchange Act) comply with Regulation G under the Exchange Act and Item 10 of Regulation S-K under the Securities Act, as applicable. To the Company's knowledge, no person who has been suspended or barred from being associated with a registered public accounting firm, or who has failed to comply with any sanction pursuant to Rule 5300 promulgated by the PCAOB, has participated in or otherwise aided the preparation of, or audited, the financial statements, supporting schedules or other financial data filed with the Commission as a part of the Registration Statement, the Time of Sale Prospectus and the Prospectus.
- (I) Company's Accounting System. The Company and its subsidiaries make and keep accurate books and records and maintain a system of internal controls ("Internal Controls"), that is sufficient to provide reasonable assurances that (i) transactions are executed in accordance with management's general or specific authorizations, (ii) transactions are recorded as necessary to permit preparation of financial statements in conformity with U.S. GAAP and to maintain accountability for assets, (iii) access to assets is permitted only in accordance with management's general or specific authorization, (iv) the recorded accountability for assets is compared with the existing assets at reasonable intervals and appropriate action is taken with respect to any differences and (v) the interactive data in eXtensible Business Reporting Language included or incorporated by reference in the Registration Statement, the Time of Sale Prospectus and the Prospectus fairly presents the information called for in all material respects and is prepared in accordance with the Commission's rules and guidelines applicable thereto.
- (m) Disclosure Controls and Procedures; Deficiencies in or Changes to Internal Control Over Financial Reporting. The Company has established and maintains disclosure controls and procedures (as defined in Rules 13a-15 and 15d-15 under the Exchange Act), which (i) are designed to ensure that material information relating to the Company, including its consolidated subsidiaries, is made known to the Company's principal executive officer and its principal financial officer by others within those entities, particularly during the periods in which the periodic reports required under the Exchange Act are being prepared; (ii) have been evaluated by management of the Company for effectiveness as of the end of the Company's most recent fiscal quarter; and (iii) are effective in all material respects to perform the functions for which they were established. Since the end of the Company's most recent audited fiscal year, there have been no significant deficiencies or material weakness in the Company's internal control over financial reporting, in each case, that has materially affected, or is reasonably likely to materially affect, the Company's internal control over financial reporting. The Company is not aware of

any change in its internal control over financial reporting that has occurred during its most recent fiscal quarter that has materially affected, or is reasonably likely to materially affect, the Company's internal control over financial reporting.

- (n) Incorporation and Good Standing of the Company. The Company has been duly organized and is existing and in good standing under the laws of the State of Delaware with corporate power and authority to own, lease and operate its properties and conduct its business as described in the Registration Statement, the Time of Sale Prospectus and the Prospectus; and the Company is duly qualified to do business as a foreign organization in good standing in all other jurisdictions in which its ownership or lease of property or the conduct of its business requires such qualification, except where the failure to be so qualified or be in good standing would not, individually or in the aggregate, reasonably be expected to result in a material adverse effect on the condition (financial or otherwise), results of operations, business or properties of the Company and its subsidiaries taken as a whole ("Material Adverse Effect").
- Subsidiaries. Each of the Company's "subsidiaries" (for purposes of this Agreement, as defined in Rule 405 under the Securities Act) has been duly organized and is existing and in good standing under the laws of the jurisdiction of its organization, with power and authority (corporate and other) to own, lease and operate its properties and conduct its business as described in the Registration Statement, the Time of Sale Prospectus and the Prospectus; and each subsidiary of the Company is duly qualified to do business as a foreign organization in good standing in all other jurisdictions in which its ownership or lease of property or the conduct of its business requires such qualification, except where the failure to be so qualified or be in good standing would not, individually or in the aggregate, reasonably be expected to have a Material Adverse Effect; all of the issued and outstanding capital stock or other equity or ownership interests of each subsidiary of the Company has been duly authorized and validly issued and is fully paid and non-assessable; and the capital stock or other equity or ownership interests of each subsidiary owned by the Company, directly or through subsidiaries, is owned free from liens, encumbrances and defects, except as would not, individually or in the aggregate, reasonably be expected to have a Material Adverse Effect and other than liens securing the Credit Agreement, dated as of December 6, 2016, by and among Pharmaceutical Research Associates, Inc. ("PRA"), as Borrower, the Company, Wells Fargo Bank, National Association, as Administrative Agent, and the other agents and lenders party thereto, the Joinder Agreement, dated as of September 6, 2017, by and among PRA, the Company, each of the subsidiaries from time to time party thereto, Wells Fargo Bank, National Association, as administrative agent and collateral agent, and other agents and lenders party thereto., the First Amendment and Second Joinder Agreement, dated as of December 28, 2017, by and among PRA, the Company, each of the subsidiaries of PRA from time to time party thereto, Wells Fargo Bank, National Association, as administrative agent and collateral agent, and other agents and lenders party thereto, the Receivables Financing Agreement, dated as of March 22, 2016, by and among PRA Receivables LLC, as borrower, the persons party thereto, as lenders, PNC Bank, National Association, as administrative agent, PRA Holdings, Inc. as initial servicer and PNC Capital Markets LLC, as structuring agent, or the Joinder and First Amendment to the Receivables Financing Agreement, dated as of May 31, 2018, by and among PRA Receivables LLC, as borrower, PRA Holdings, Inc., as initial servicer, The Toronto-Dominion Bank, as lender, and PNC Bank, National Association, as administrative agent. As of the time of the filing of the Company's Annual Report on Form 10-K for the fiscal year ended December 31, 2017, the Company did not own or control, directly or indirectly, any corporation, association or other entity other than the subsidiaries listed in Exhibit 21 to the such Annual Report on Form 10-K.
- (p) Capitalization and Other Capital Stock Matters. The Company has an authorized capitalization as set forth in the Registration Statement, Time of Sale Prospectus and the Prospectus. The Shares (including the Offered Shares) conform in all material respects to the description thereof contained in the Time of Sale Prospectus. All of the issued and outstanding Shares (including the Offered Shares) have been duly authorized and validly issued, are fully paid and non-assessable and have been issued in

compliance with all applicable Federal and state securities laws. None of the outstanding Shares was issued in violation of any preemptive rights, rights of first refusal or other similar rights to subscribe for or purchase securities of the Company. There are no authorized or outstanding options, warrants, preemptive rights, rights of first refusal or other rights to purchase, or equity or debt securities convertible into or exchangeable or exercisable for, any capital stock of the Company or any of its subsidiaries other than those described in the Registration Statement, the Time of Sale Prospectus and the Prospectus. The descriptions of the Company's stock option, stock bonus and other stock plans or arrangements, and the options or other rights granted thereunder, set forth in the Registration Statement, the Time of Sale Prospectus and the Prospectus accurately and fairly presents the information required to be shown with respect to such plans, arrangements, options and rights.

- (q) Stock Exchange Listing. The Offered Shares have been approved for listing on The NASDAQ Global Select Market (the "NASDAQ").
- (r) Non-Contravention of Existing Instruments; No Further Authorizations or Approvals Required. Neither the Company nor any of its subsidiaries is (i) in violation of its respective charter or by-laws, partnership agreement or operating agreement or similar organizational documents, as applicable, or (ii) in default (or with the giving of notice or lapse of time would be in default) under any existing obligation agreement, covenant or condition contained in any indenture, loan agreement, mortgage, lease or other agreement or instrument to which any of them is a party or by which any of them is bound or to which any of the properties or assets of any of them is subject, except, in the case of the foregoing clause (ii) such defaults that would not, individually or in the aggregate, reasonably be expected to have a Material Adverse Effect.
- (s) Absence of Defaults and Conflicts Resulting from the Transactions. The execution, delivery and performance of this Agreement, consummation of the transactions contemplated hereby and sale of the Offered Shares have been duly authorized by all necessary corporate action and compliance with the terms and provisions thereof will not result in a breach or violation of any of the terms and provisions of, or constitute a default under, or result in the imposition of any lien, charge or encumbrance upon any property or assets of the Company or any of its subsidiaries pursuant to (i) the charter or by-laws, partnership agreement or operating agreement or similar organizational documents, as applicable, of the Company or any of its subsidiaries, (ii) any statute, any rule, regulation or order of any governmental agency or body or any court, domestic or foreign, having jurisdiction over the Company or any of its subsidiaries or any of their properties or (iii) any agreement or instrument to which the Company or its subsidiaries is a party or by which the Company or any of its subsidiaries is bound or to which any of the properties of the Company or any of its subsidiaries is subject, except in the cases of clauses (ii) and (iii) as would not, individually or in the aggregate, reasonably be expected to have a Material Adverse Effect.
- (t) Absence of Further Requirements. No consent, approval, authorization or order of, or registration or filing with, any court or other governmental or regulatory authority or agency, is required for the Company's execution, delivery and performance of this Agreement and consummation of the transactions contemplated hereby, except such as have been obtained or made by the Company and are in full force and effect under the Securities Act, such as shall have been obtained or made prior to the Closing Date and such as may be required under applicable state securities or blue sky laws or FINRA.
- (u) No Material Actions or Proceedings. Except as disclosed in the Registration Statement, the Time of Sale Prospectus and the Prospectus, there are no pending actions, suits or proceedings (including any inquiries or investigations by any court or governmental agency or body, domestic or foreign) against or affecting the Company or its subsidiaries or any of their respective properties or assets that, if determined adversely to the Company or its subsidiaries, would, individually or in the aggregate, reasonably be expected to have a Material Adverse Effect, or would materially and adversely affect the

Company's execution, delivery and ability to perform its obligations under this Agreement, consummation of the transactions contemplated hereby and the sale of the Offered Shares; and no such actions, suits or proceedings (including any inquiries or investigations by any court or governmental agency or body, domestic or foreign) are, to the Company's knowledge, threatened or contemplated. No labor dispute with the employees of the Company or any of its subsidiaries exists or, to the knowledge of the Company, is threatened or imminent that would, individually or in the aggregate, reasonably be expected to have a Material Adverse Effect.

- (v) Intellectual Property Rights. Except as otherwise disclosed in the Registration Statement, the Time of Sale Prospectus and the Prospectus, (i) the Company and its subsidiaries own, have the right to use or can acquire on reasonable terms, adequate trademarks, trade names and other rights to inventions, know how, patents, copyrights, confidential information and other intellectual property (collectively, "intellectual property rights") necessary to conduct the business now operated by them, or presently used by them, and (ii) have not received any notice of infringement of or conflict with asserted intellectual property rights of others that, in each case of clauses (i) and (ii), the failure of which or if determined adversely to the Company or any of its subsidiaries, would, individually or in the aggregate, reasonably be expected to have a Material Adverse Effect.
- (w) All Necessary Permits, etc. The Company and its subsidiaries possess, and are in compliance with the terms of, all certificates, authorizations, franchises, licenses and permits ("Licenses") necessary or material to the conduct of the business now conducted or proposed in the Registration Statement, the Time of Sale Prospectus or the Prospectus to be conducted by them, except where the failure to possess or be in compliance with such Licenses would not, individually or in the aggregate, reasonably be expected to have a Material Adverse Effect and have not received any notice of proceedings relating to the revocation or modification of any Licenses that, if determined adversely to the Company or its subsidiaries, would, individually or in the aggregate, reasonably be expected to have a Material Adverse Effect.
- (x) Title to Properties. Except as disclosed in the Registration Statement, the Time of Sale Prospectus or the Prospectus, (i) the Company and its subsidiaries have good and marketable title to all real properties and all other properties and assets owned by them, except as would not, individually or in the aggregate, reasonably be expected to have a Material Adverse Effect, in each case free from liens, charges, encumbrances and defects and (ii) the Company and its subsidiaries hold any leased real or personal property under valid and enforceable leases with no terms or provisions that would interfere with the use made or to be made thereof by them, except where such imperfections of title, liens and encumbrances would not, individually or in the aggregate, reasonably be expected to have a Material Adverse Effect.
- (y) Tax Returns. Except as set forth in the Registration Statement, the Time of Sale Prospectus or the Prospectus, the Company and its subsidiaries have filed all federal, state, local and non-U.S. tax returns that are required to be filed or have requested extensions thereof (except in any case in which the failure so to file would not reasonably be expected to have a Material Adverse Effect); and, except as set forth in the Registration Statement, the Time of Sale Prospectus or the Prospectus, the Company and its subsidiaries have paid all taxes (including any assessments, fines or penalties) required to be paid by them, except for any such taxes, assessments, fines or penalties currently being contested in good faith or as would not, individually or in the aggregate, reasonably be expected to have a Material Adverse Effect. The Company has adequately reserved, in accordance with U.S. GAAP, for income and other business related taxes in its consolidated financial statements for all tax periods for which the statute of limitations has not expired or for which the Company has waived the applicable statute of limitations.

- (z) Insurance. The Company and its subsidiaries, taken as a whole, are insured against such losses and risks and in such amounts as are prudent and customary for the businesses in which they are engaged.
- Compliance with Environmental Matters. Except as disclosed in the Registration Statement, the Time of Sale Prospectus or the (aa) Prospectus, (i) neither the Company nor any of its subsidiaries is in violation of, or to the knowledge of the Company has any liability under, any federal, state, local or non-U.S. statute, law, rule, regulation, ordinance, code, other requirement or rule of law (including common law), or decision or order of any domestic or foreign governmental agency, governmental body or court, relating to pollution, to the use, handling, transportation, treatment, storage, discharge, disposal or release of Hazardous Substances, to the protection or restoration of the environment or natural resources (including biota), to health and safety as such relates to exposure to Hazardous Substances, and to natural resource damages (collectively, "Environmental Laws"), (ii) neither the Company nor any of its subsidiaries owns, occupies, operates or uses any real property that, to the knowledge of the Company, is contaminated with Hazardous Substances, (iii) neither the Company nor any of its subsidiaries is conducting or funding any investigation, remediation, remedial action or monitoring of actual or suspected Hazardous Substances in the environment, (iv) neither the Company nor any of its subsidiaries is alleged to be liable or, to the knowledge of the Company, liable for any release or threatened release of Hazardous Substances, including at any off-site treatment, storage or disposal site, (v) neither the Company nor any of its subsidiaries is subject to or has received any claim against it by any governmental agency or governmental body or person relating to Environmental Laws or Hazardous Substances, and (vi) the Company and its subsidiaries have received and are in compliance with all, and have no liability under any, permits, licenses, authorizations, identification numbers or other approvals required under applicable Environmental Laws to conduct their respective businesses, except in each case covered by clauses (i) through (vi) such as would not, individually or in the aggregate, reasonably be expected to have a Material Adverse Effect. For purposes of this subsection "Hazardous Substances" means (A) petroleum and petroleum products, byproducts or breakdown products, radioactive materials, asbestos-containing materials, polychlorinated biphenyls and mold, and (B) any other chemical, material or substance defined or regulated as toxic or hazardous or as a pollutant, contaminant or waste under applicable Environmental Laws.
- (bb) ERISA Compliance. Except as would not reasonably be expected to, individually or in the aggregate, have a Material Adverse Effect, with respect to any pension, profit sharing or other "employee benefit plan" as defined in Section 3(3) of the Employee Retirement Income Security Act of 1974, as amended ("ERISA"), as to which the Company or any of its subsidiaries has any liability (a "Plan"), none of the Company nor any of its subsidiaries has any liability for (A) any non-exempt prohibited transaction within the meaning of Section 406 of ERISA, (B) failure to satisfy minimum funding standards (within the meaning of Section 302 of ERISA) or (C) any complete or partial "withdrawal liability" within the meaning given such term under Part I of Subtitle E of Title IV of ERISA. All Plans have been maintained in compliance with their terms and all applicable laws, including ERISA and the Internal Revenue Code of 1986, as amended (the "Code"), except as would not reasonably be expected, individually or in the aggregate, to have a Material Adverse Effect
- (cc) Company Not an "Investment Company". The Company is not an open-end investment company, unit investment trust or face-amount certificate company that is or is required to be registered under Section 8 of the United States Investment Company Act of 1940, as amended (the "Investment Company Act"); and the Company will not, after giving effect to the offering and sale of the Offered Shares and the application of the proceeds thereof as described in the Registration Statement, the Time of Sale Prospectus or the Prospectus, be required to register as an "investment company" as defined in the Investment Company Act.

- (dd) No Price Stabilization or Manipulation; Compliance with Regulation M. Neither the Company nor any of its subsidiaries has taken, directly or indirectly, any action designed to or that might reasonably be expected to cause or result in stabilization or manipulation of the price of the Shares or of any "reference security" (as defined in Rule 100 of Regulation M under the Exchange Act) ("Regulation M") with respect to the Shares, whether to facilitate the sale or resale of the Offered Shares or otherwise, and has taken no action which would directly or indirectly violate Regulation M.
- (ee) FINRA Matters. All of the information provided to the Underwriters or to counsel for the Underwriters by the Company, its counsel, its officers and directors and the holders of any securities (debt or equity) or options to acquire any securities of the Company in connection with the offering of the Offered Shares is true, complete, correct and compliant with FINRA's rules and any letters, filings or other supplemental information provided to FINRA pursuant to FINRA Rules or NASD Conduct Rules is true, complete and correct.
- (ff) Parties to Lock-Up Agreements. The Company has furnished to the Underwriters a letter agreement in the form attached hereto as Exhibit D (the "Lock-up Agreement") from the Selling Stockholder and each of the persons listed on Exhibit E. Such Exhibit E lists the directors and certain officers of the Company. If any additional persons shall become directors or executive officers of the Company prior to the end of the Company Lock-up Period (as defined below), the Company shall cause each such person, prior to or contemporaneously with their appointment or election as a director or executive officer of the Company, to execute and deliver to the Underwriters a Lock-up Agreement.
- (gg) Statistical and Market-Related Data. Any third-party statistical and market-related data included in the Registration Statement, the Time of Sale Prospectus or the Prospectus, or any Free Writing Prospectus are based on or derived from sources that the Company believes to be reliable and accurate in all material respects.
- (hh) No Unlawful Contributions or Other Payments. Neither the Company nor any of its subsidiaries nor, to the best of the Company's knowledge, any employee or agent (each while acting in his, her or its capacity as such) of the Company or any subsidiary, has made any contribution or other payment to any official of, or candidate for, any federal, state or foreign office in violation of any law.
- (ii) Compliance with Anti-Bribery Laws. The Company and its subsidiaries and, to the best of the Company's knowledge, their respective officers, directors, supervisors, managers, agents and employees (each while acting in his, her or its capacity as such) and affiliates (each while acting at the direction of or on behalf of the Company) have not violated, and their participation in this offering will not violate, and the Company maintains practices and procedures reasonably designed to ensure compliance with applicable anti-bribery laws, including but not limited to, any applicable law, rule or regulation of any locality, including but not limited to any applicable law, rule, or regulation promulgated to implement the OECD Convention on Combating Bribery of Foreign Public Officials in International Business Transactions, signed December 17, 1997, including the U.S. Foreign Corrupt Practices Act of 1977 or any other applicable anti-bribery law, rule or regulation of similar purpose and scope.
- (jj) Compliance with Anti-Money Laundering. The Company and its subsidiaries and, to the best of the Company's knowledge, their respective officers, directors, supervisors, managers, agents and employees (each while acting in his, her or its capacity as such) and affiliates (each while acting at the direction of or on behalf of the Company) have not violated, and their participation in this offering will not violate applicable anti-money laundering laws, including but not limited to, applicable federal, state, international, foreign or other laws, regulations or government guidance regarding anti-money laundering, including, without limitation, the anti-money laundering provisions of Title 18 U.S. Code sections 1956 and 1957, the Patriot Act, the Bank Secrecy Act, and international anti-money laundering principals or

procedures by an intergovernmental group or organization, such as the Financial Action Task Force on Money Laundering, of which the United States is a member and with which designation the United States representative to the group or organization continues to concur, all as amended, and any Executive order, directive, or regulation pursuant to the authority of any of the foregoing, or any orders or licenses issued thereunder (collectively, the "Money Laundering Laws") and no action, suit or proceeding by or before any court or governmental agency, authority or body or any arbitrator involving the Company or any of its subsidiaries with respect to the Money Laundering Laws is pending or, to the knowledge of the Company, is threatened.

- (kk) OFAC and Economic Sanctions Laws. Neither the Company nor any of its subsidiaries nor, to the best knowledge of the Company, their respective officers, directors, supervisors, managers, agents, employees and officers, are currently the target of any sanctions administered by the Office of Foreign Assets Control of the U.S. Treasury Department, the United Nations Security Council, the European Union, Her Majesty's Treasury or other applicable sanctions authority (collectively, "Sanctions"); and the Company will not directly or indirectly use the proceeds of this offering, or lend, contribute or otherwise make available such proceeds to any subsidiary, or any joint venture partner or other person or entity, for the purpose of financing the activities of or business with any person, or in any country or territory, that currently is the target of comprehensive 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 any Sanctions.
- (II) Sarbanes-Oxley Act. There is and has been no failure on the part of the Company and any of the Company's directors or officers, in their capacities as such, to comply with any provision of the Sarbanes-Oxley Act of 2002 and the rules and regulations promulgated in connection therewith (the "Sarbanes-Oxley Act"), including Section 402 relating to loans.
- (mm) *Brokers*. Except pursuant to this Agreement, there are no contracts, agreements or understandings between the Company and any person that would give rise to a valid claim against the Company or the Selling Stockholder for a brokerage commission, finder's fee or other like payment in connection with the offer and sale of the Shares contemplated by this Agreement.
- (nn) Forward-Looking Statements. Each financial or operational projection or other "forward-looking statement" (as defined by Section 27A of the Securities Act or Section 21E of the Exchange Act) contained in the Registration Statement, the Time of Sale Prospectus or the Prospectus (i) was so included by the Company in good faith and with reasonable basis after due consideration by the Company of the underlying assumptions, estimates and other applicable facts and circumstances and (ii) is accompanied by meaningful cautionary statements identifying those factors that could cause actual results to differ materially from those in such forward-looking statement. No such statement was made with the knowledge of an executive officer or director of the Company that was false or misleading.
 - (oo) [Reserved]
- **(pp)** *Communications*. The Company has not authorized anyone other than the Underwriters to engage in communications with potential investors in relation to the offering contemplated by this Agreement and the Company reconfirms that the Underwriters have been authorized to act on its behalf in undertaking Marketing Materials.
- (qq) Clinical Data and Regulatory Compliance. To the knowledge of the Company, the preclinical tests and clinical trials, and other studies (collectively, "studies") that are conducted by the Company's business as described in the Registration Statement, the Time of Sale Prospectus or the Prospectus are being, and since January 1, 2010 have been, conducted in all material respects in

accordance with the protocols, procedures and controls designed and approved for such studies. The Company and its subsidiaries have made all filings and obtained all approvals as may be required by the Food and Drug Administration of the U.S. Department of Health and Human Services or any committee thereof or from any other U.S. or foreign government or drug or medical device regulatory agency, or health care facility Institutional Review Board (collectively, the "Regulatory Agencies"), except where the failure to so file or obtain such approval would not, individually or in the aggregate, reasonably be expected to have a Material Adverse Effect. To the knowledge of the Company, since January 1, 2010 the Company has not received written notice of any claim, action, suit, proceeding, hearing, enforcement, investigation, arbitration or other similar action from any Regulatory Agency alleging that any studies are in material violation of any applicable law or approval and the Company has no knowledge that any such Regulatory Agency is considering any such claim, litigation, arbitration, action, suit, investigation or proceeding. The Company has not received written or oral notice that any Regulatory Agency has taken, is taking or intends to take action to limit, suspend, materially modify or revoke any material approvals and the Company has no knowledge that any such Regulatory Agency is considering such action.

(rr) Compliance with Health Care Laws. Neither the Company nor any of its subsidiaries is in violation of any Health Care Laws, except where the failure to be in compliance would not, individually or in the aggregate, reasonably be expected have a Material Adverse Effect. For purposes of this Agreement, "Health Care Laws" means: (i) the Federal Food, Drug, and Cosmetic Act and the regulations promulgated thereunder; (ii) all applicable federal, state, local and all applicable foreign health care related fraud and abuse laws, including, without limitation, the U.S. Anti-Kickback Statute (42 U.S.C. Section 1320a-7b(b)) and the regulations promulgated pursuant to such statutes; (iii) the Standards for Privacy of Individually Identifiable Health Information (the "Privacy Rule"), the Security Standards, and the Standards for Electronic Transactions and Code Sets promulgated under the U.S. Health Insurance Portability and Accountability Act of 1996 ("HIPAA") (42 U.S.C. Section 1320d et seq.), the Health Information Technology for Economic and Clinical Health Act (42 U.S.C. Section 17921 et seq.), and the regulations promulgated thereunder and any state or non-U.S. counterpart thereof or other law or regulation the purpose of which is to protect the privacy of individuals or prescribers; (iv) the U.S. Controlled Substances Act (21 U.S.C. Section 801 et seq.); and (v) quality, safety and accreditation requirements under applicable federal, state, local or foreign laws or regulatory bodies. Additionally, neither the Company nor any of its subsidiaries, nor, to the knowledge of the Company, any of their respective employees, officers or directors has been excluded, suspended or debarred from participation in any U.S. federal health care program or human clinical research or, to the knowledge of the Company and its subsidiaries, is subject to a governmental inquiry, investigation, proceeding, or other similar action that would reasonably be expected to result in debarment, suspension, or exclusion.

Any certificate signed by any officer of the Company or any of its subsidiaries and delivered to any Underwriter or to counsel for the Underwriters in connection with the offering, or the purchase and sale, of the Offered Shares shall be deemed a representation and warranty by the Company to each Underwriter as to the matters covered thereby.

The Company has a reasonable basis for making each of the representations set forth in this Section 1A. The Company acknowledges that the Underwriters and, for purposes of the opinions to be delivered pursuant to Section 6 hereof, counsel to the Company and counsel to the Underwriters, will rely upon the accuracy and truthfulness of the foregoing representations and hereby consents to such reliance.

- **B.** Representations and Warranties of the Selling Stockholder. The Selling Stockholder represents, warrants and covenants to each Underwriter, severally and not jointly, as follows:
- (a) The Underwriting Agreement. This Agreement has been duly authorized, executed and delivered by or on behalf of the Selling Stockholder.

- (b) [Reserved.]
- (c) Title to Offered Shares to be Sold. Upon payment for the Offered Shares to be sold by the Selling Stockholder pursuant to this Agreement, delivery of such Offered Shares, as directed by the Underwriters, to Cede & Co. ("Cede") or such other nominee as may be designated by the Depository Trust Company ("DTC"), registration of such Offered Shares in the name of Cede or such other nominee and the crediting of such Shares on the books of DTC to the securities accounts of the Underwriters (assuming that neither DTC nor any such Underwriter has notice of any adverse claim (within the meaning of Section 8-105 of the New York Uniform Commercial Code (the "UCC")) to such Shares), (A) DTC shall be a "protected purchaser" of such Offered Shares within the meaning of Section 8-303 of the UCC, (B) under Section 8-501 of the UCC, the Underwriters will acquire a valid security entitlement in respect of such Offered Shares and (C) no action based on any "adverse claim", within the meaning of Section 8-102 of the UCC, to such Offered Shares may be asserted against the Underwriters with respect to such security entitlement; for purposes of this representation, the Selling Stockholder may assume that when such payment, delivery and crediting occur, (x) such Offered Shares will have been registered in the name of Cede or another nominee designated by DTC, in each case on the Company's share registry in accordance with its certificate of incorporation, bylaws and applicable law, (y) DTC will be registered as a "clearing corporation" within the meaning of Section 8-102 of the UCC and (z) appropriate entries to the accounts of the several Underwriters on the records of DTC will have been made pursuant to the UCC.
- (d) Non-Contravention; No Further Authorizations or Approvals Required. The execution and delivery by the Selling Stockholder of, and the performance by the Selling Stockholder of its obligations under, this Agreement will not contravene or conflict with, result in a breach of, or constitute a default (or, with the giving of notice or lapse of time, would be in default) under, or require the consent of any other party to, (i) the limited partnership agreement of the Selling Stockholder, (ii) any other agreement or instrument to which the Selling Stockholder is a party or by which it is bound or under which it is entitled to any right or benefit including any pledge of Offered Shares or (iii) any provision of applicable law or any judgment, order, decree or regulation applicable to the Selling Stockholder of any court, regulatory body, administrative agency, governmental body or arbitrator having jurisdiction over the Selling Stockholder, except, in the case of the foregoing clauses (ii) and (iii) as would not, individually or in the aggregate, reasonably be expected to materially impact the Selling Stockholder's ability to perform its obligations under this Agreement. No consent, approval, authorization or other order of, or registration or filing with, any court or other governmental authority or agency, is required for the consummation by the Selling Stockholder of the transactions contemplated in this Agreement, except such as may be required under the Securities Act, applicable state securities or blue sky laws and from the FINRA and such other approvals as have been obtained on or prior to the date of this Agreement.
- (e) Disclosure Made by the Selling Stockholder in the Prospectus. All information furnished to the Company or any Underwriter by or on behalf of the Selling Stockholder in writing expressly for use in the Registration Statement, the Time of Sale Prospectus or the Prospectus is, and on the Closing Date will be, true, correct and complete in all material respects, and did not, as of the Applicable Time, and on the Closing Date will not, contain any untrue statement of a material fact or omit to state any material fact necessary to make such information not misleading, it being understood and agreed that the only such information consists of the information with respect to the Selling Stockholder under the caption "Selling Stockholder" in the Registration Statement, the Time of Sale Prospectus and the Prospectus (such information, the "Selling Stockholder Information").
- (f) Distribution of Offering Materials by the Selling Stockholder. Prior to the completion of the Underwriters' distribution of the Offered Shares, the Selling Stockholder has not distributed and will not distribute any offering material in connection with the offering and sale of the Offered Shares other

than the Registration Statement, the Preliminary Prospectus, the free writing prospectus listed on Schedule C and the Prospectus.

(g) No Price Stabilization or Manipulation. The Selling Stockholder has not taken and will not take, directly or indirectly, any action that is designed to or that has constituted or that might reasonably be expected to cause or result in stabilization or manipulation of the price of any security of the Company to facilitate the sale or resale of the Shares.

Any certificate signed by or on behalf of the Selling Stockholder and delivered to any Underwriter or to counsel for the Underwriters shall be deemed a representation and warranty by the Selling Stockholder to each Underwriter as to the matters covered thereby.

The Selling Stockholder has a reasonable basis for making each of the representations set forth in this Section 1(B). The Selling Stockholder acknowledges that the Underwriters and, for purposes of the opinion to be delivered pursuant to Section 6 hereof, counsel to the Selling Stockholder and counsel to the Underwriters, will rely upon the accuracy and truthfulness of the foregoing representations and hereby consents to such reliance.

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

- (a) The Offered Shares. Upon the terms herein set forth, the Selling Stockholder agrees to sell to the several Underwriters, severally and not jointly, an aggregate of 6,500,000 Shares. On the basis of the representations, warranties and agreements herein contained, and upon the terms but subject to the conditions herein set forth, the Underwriters agree, severally and not jointly, to purchase from the Selling Stockholder the respective number of Shares set forth opposite its name on Schedule A. The purchase price per Share to be paid by the several Underwriters to the Selling Stockholder shall be \$101.01 per share.
- (b) The Closing Date. Delivery of certificates for the Shares to be purchased by the Underwriters and payment therefor shall be made at the offices of Latham & Watkins LLP (or such other place as may be agreed to by the Company and the Underwriters) at 9:00 a.m. New York City time, on August 9, 2018, or such other time and date not later than 1:30 p.m. New York City time, on August 9, 2018 as the Underwriters shall designate by notice to the Company (the time and date of such closing are called the "Closing Date"). The Selling Stockholder hereby acknowledges that circumstances under which the Underwriters may provide notice to postpone the Closing Date as originally scheduled include, but are not limited to, any determination by the Company, the Selling Stockholder or the Underwriters to recirculate to the public copies of an amended or supplemented Prospectus or a delay as contemplated by the provisions of Section 20.
 - (c) [Reserved.]
- (d) Public Offering of the Offered Shares. The Underwriters hereby advise the Selling Stockholder of their intent to offer for sale to the public, initially on the terms set forth in the Registration Statement, the Time of Sale Prospectus and the Prospectus, their respective portions of the Offered Shares as soon after this Agreement has been executed and the Registration Statement has been declared effective as the Underwriters, in their sole judgment, have determined is advisable and practicable.
- (e) Payment for the Offered Shares. Payment for the Offered Shares to be sold by the Selling Stockholder shall be made at the Closing Date by wire transfer of immediately available funds to the order of the Selling Stockholder.

(f) Delivery of the Offered Shares. The Selling Stockholder shall deliver, or cause to be delivered, through the book-entry facilities of DTC for the accounts of the several Underwriters the Shares to be sold by them at the Closing Date, against release of a wire transfer of immediately available funds for the amount of the purchase price therefor. The Offered Shares shall be delivered to such accounts and in such denominations as the Underwriters shall have requested at least two full business days prior to the Closing Date.

Section 3. Additional Covenants of the Company.

- **A.** Covenants of the Company. The Company further covenants and agrees with each Underwriter as follows:
- (a) Commission Filing Fees. The Company agrees to pay the required Commission filing fees relating to the Offered Shares within the time required by Rule 456(b)(1) under the Securities Act without regard to the proviso therein and otherwise in accordance with the Rules 456(b) and 457(r) under the Securities Act.
- (b) Delivery of Registration Statement, Time of Sale Prospectus and Prospectus. The Company shall furnish to you in New York City, without charge, prior to 10:00 a.m. New York City time on the business day next succeeding the date of this Agreement and during the period when a prospectus relating to the Offered Shares is required by the Securities Act to be delivered (whether physically or through compliance with Rule 172 under the Securities Act or any similar rule) in connection with sales of the Offered Shares, as many copies of the Time of Sale Prospectus, the Prospectus and any supplements and amendments thereto or to the Registration Statement as you may reasonably request.
- (c) Underwriters' Review of Proposed Amendments and Supplements. During the period when a prospectus relating to the Offered Shares is required by the Securities Act to be delivered (whether physically or through compliance with Rule 172 under the Securities Act or any similar rule), the Company (i) will furnish to the Underwriters for review, a reasonable period of time prior to the proposed time of filing of any proposed amendment or supplement to the Registration Statement, a copy of each such amendment or supplement and (ii) will not amend or supplement the Registration Statement (including any amendment or supplement through incorporation of any report filed under the Exchange Act) without the Underwriters' prior written consent (which consent shall not be unreasonably withheld). Prior to amending or supplementing any preliminary prospectus, the Time of Sale Prospectus or the Prospectus (in each case, including any amendment or supplement through incorporation of any report filed under the Exchange Act), the Company shall furnish to the Underwriters for review, a reasonable amount of time prior to the time of filing or use of the proposed amendment or supplement, a copy of each such proposed amendment or supplement. The Company shall not file or use any such proposed amendment or supplement without the Underwriters' prior written consent (which consent shall not be unreasonably withheld). The Company shall file with the Commission within the applicable period specified in Rule 424(b) under the Securities Act any prospectus required to be filed pursuant to such Rule.
- (d) Free Writing Prospectuses. The Company shall furnish to the Underwriters for review, a reasonable amount of time prior to the proposed time of filing or use thereof, a copy of each proposed free writing prospectus or any amendment or supplement thereto prepared by or on behalf of, used by, or referred to by the Company, and the Company shall not file, use or refer to any proposed free writing prospectus or any amendment or supplement thereto without the Underwriters' prior written consent (which consent shall not be unreasonably withheld). The Company shall furnish to each Underwriter, without charge, as many copies of any free writing prospectus prepared by or on behalf of, used by or referred to by the Company as such Underwriter may reasonably request. If at any time when a prospectus is required by the Securities Act to be delivered (whether physically or through compliance with Rule 172

under the Securities Act or any similar rule) in connection with sales of the Offered Shares (but in any event if at any time through and including the Closing Date) there occurred or occurs an event or development as a result of which any free writing prospectus prepared by or on behalf of, used by, or referred to by the Company conflicted or would conflict with the information contained in the Registration Statement or included or would include an untrue statement of a material fact or omitted or would omit to state a material fact necessary in order to make the statements therein, in the light of the circumstances prevailing at such time, not misleading, the Company shall promptly amend or supplement such free writing prospectus to eliminate or correct such conflict so that the statements in such free writing prospectus as so amended or supplemented will not include an untrue statement of a material fact or omit to state a material fact necessary in order to make the statements therein, in the light of the circumstances prevailing at such time, not misleading, as the case may be; provided, however, that prior to amending or supplementing any such free writing prospectus, the Company shall furnish to the Underwriters for review, a reasonable amount of time prior to the proposed time of filing or use thereof, a copy of such proposed amended or supplemented free writing prospectus, and the Company shall not file, use or refer to any such amended or supplemented free writing prospectus without the Underwriters' prior written consent (which consent shall not be unreasonably withheld).

- **(e)** Filing of Underwriter Free Writing Prospectuses. The Company shall not take any action that would result in an Underwriter or the Company being required to file with the Commission pursuant to Rule 433(d) under the Securities Act a free writing prospectus prepared by or on behalf of such Underwriter that such Underwriter otherwise would not have been required to file thereunder.
- Shares at a time when the Prospectus is not yet available to prospective purchasers, and any event shall occur or condition exist as a result of which it is necessary to amend or supplement the Time of Sale Prospectus so that the Time of Sale Prospectus does not include an untrue statement of a material fact or omit to state a material fact necessary in order to make the statements therein, in the light of the circumstances when delivered to a prospective purchaser, not misleading, or if any event shall occur or condition exist as a result of which the Time of Sale Prospectus conflicts with the information contained in the Registration Statement, or if, in the opinion of counsel for the Underwriters, it is necessary to amend or supplement the Time of Sale Prospectus to comply with applicable law, the Company shall (subject to Section 3A(b) and Section 3A(c) hereof) promptly prepare, file with the Commission and furnish, at its own expense, to the Underwriters and to any dealer upon request, either amendments or supplements to the Time of Sale Prospectus so that the statements in the Time of Sale Prospectus as so amended or supplemented will not include an untrue statement of a material fact or omit to state a material fact necessary in order to make the statements therein, in the light of the circumstances when delivered to a prospective purchaser, not misleading or so that the Time of Sale Prospectus, as amended or supplemented, will no longer conflict with the information contained in the Registration Statement, or so that the Time of Sale Prospectus, as amended or supplemented, will comply with applicable law.
- (g) Certain Notifications and Required Actions. After the date of this Agreement, the Company shall promptly advise the Underwriters in writing of: (i) the receipt of any comments of, or requests for additional or supplemental information from, the Commission; (ii) the time and date of any filing of any post-effective amendment to the Registration Statement or any amendment or supplement to any preliminary prospectus, the Time of Sale Prospectus, any free writing prospectus or the Prospectus; (iii) the time and date that any post-effective amendment to the Registration Statement becomes effective; and (iv) the issuance by the Commission of any stop order suspending the effectiveness of the Registration Statement or any post-effective amendment thereto or any amendment or supplement to any preliminary prospectus, the Time of Sale Prospectus or the Prospectus or of any order preventing or suspending the use of any preliminary prospectus, the Time of Sale Prospectus or the Prospectus,

or of any proceedings to remove, suspend or terminate from listing or quotation the Shares from any securities exchange upon which they are listed for trading or included or designated for quotation, or of the threatening or initiation of any proceedings for any of such purposes. If the Commission shall enter any such stop order at any time, the Company will use its best efforts to obtain the lifting of such order at the earliest possible moment. Additionally, the Company agrees that it shall comply with all applicable provisions of Rule 424(b), Rule 433 and Rule 430B 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. If, after the date of this Agreement and during any time when a prospectus is required by the Securities Act to be delivered (whether physically or through compliance with Rule 172 under the Securities Act or any similar rule), the Company receives notice pursuant to Rule 401(g)(2) under the Securities Act from the Commission or otherwise ceases to be eligible to use the automatic shelf registration form, the Company shall promptly advise the Underwriters in writing of such notice or ineligibility and will (i) promptly filed a new registration statement or post-effective amendment on the proper form relating to the Offered Shares, (ii) use its best efforts to cause such registration statement or post-effective amendment to be declared effective by the Commission as soon as practicable and (iii) promptly notify the Underwriters in writing of such effectiveness.

- (h) Amendments and Supplements to the Prospectus and Other Securities Act Matters. If any event shall occur or condition exist as a result of which it is necessary to amend or supplement the Prospectus so that the Prospectus does not include an untrue statement of a material fact or omit to state a material fact necessary in order to make the statements therein, in the light of the circumstances when the Prospectus is delivered (whether physically or through compliance with Rule 172 under the Securities Act or any similar rule) to a purchaser, not misleading, or if in the opinion of the Underwriters or counsel for the Underwriters it is otherwise necessary to amend or supplement the Prospectus to comply with applicable law, the Company agrees (subject to Section 3A(b) and Section 3A(c)) hereof to promptly prepare, file with the Commission and furnish, at its own expense, to the Underwriters and to any dealer upon request, amendments or supplements to the Prospectus so that the statements in the Prospectus as so amended or supplemented will not include an untrue statement of a material fact or omit to state a material fact necessary in order to make the statements therein, in the light of the circumstances when the Prospectus is delivered (whether physically or through compliance with Rule 172 under the Securities Act or any similar rule) to a purchaser, not misleading or so that the Prospectus, as amended or supplemented, will comply with applicable law. Neither the Underwriters' consent to, nor delivery of, any such amendment or supplement shall constitute a waiver of any of the Company's obligations under Section 3A(b) or Section 3A(c).
- (i) Blue Sky Compliance. The Company shall cooperate with the Underwriters and counsel for the Underwriters to qualify or register the Offered Shares for sale under (or obtain exemptions from the application of) the state securities or blue sky laws or Canadian provincial securities laws (or other foreign laws) of those jurisdictions designated by the Underwriters, shall comply with such laws and shall continue such qualifications, registrations and exemptions in effect so long as required for the distribution of the Offered Shares. The Company shall not be required to qualify as a foreign corporation or to take any action that would subject it to general service of process in any such jurisdiction where it is not presently qualified or where it would be subject to taxation as a foreign corporation. The Company will advise the Underwriters promptly of the suspension of the qualification or registration of (or any such exemption relating to) the Offered Shares for offering, sale or trading in any jurisdiction or any initiation or threat of any proceeding for any such purpose, and in the event of the issuance of any order suspending such qualification, registration or exemption, the Company shall use its best efforts to obtain the withdrawal thereof at the earliest possible moment.
 - (j) [Reserved.]

- (k) Transfer Agent. The Company shall maintain, at its expense, a registrar and transfer agent for the Shares.
- (I) Earnings Statement. The Company will make generally available to its security holders and to the Underwriters as soon as practicable an earnings statement (which need not be audited) covering a period of at least twelve months beginning with the first fiscal quarter of the Company commencing after the date of this Agreement that will satisfy the provisions of Section 11(a) of the Securities Act and the rules and regulations of the Commission thereunder.
- (m) Continued Compliance with Securities Laws. The Company will comply with the Securities Act and the Exchange Act so as to permit the completion of the distribution of the Offered Shares as contemplated by this Agreement, the Registration Statement, the Time of Sale Prospectus and the Prospectus. Without limiting the generality of the foregoing, the Company will, during the period when a prospectus relating to the Offered Shares is required by the Securities Act to be delivered (whether physically or through compliance with Rule 172 under the Securities Act or any similar rule), file on a timely basis with the Commission and the NASDAQ all reports and documents required to be filed under the Exchange Act. Additionally, the Company shall report the use of proceeds from the issuance of the Offered Shares as may be required under Rule 463 under the Securities Act.
 - (n) Listing. The Company will use its best efforts to list the Offered Shares on the NASDAQ.
- Company to Provide Copy of the Prospectus in Form That May be Downloaded from the Internet. If requested by the Underwriters, the Company shall cause to be prepared and delivered, at its expense, within one business day from the effective date of this Agreement, to the Underwriters an "electronic Prospectus" to be used by the Underwriters in connection with the offering and sale of the Offered Shares. As used herein, the term "electronic Prospectus" means a form of Time of Sale Prospectus, and any amendment or supplement thereto, that meets each of the following conditions: (i) it shall be encoded in an electronic format, satisfactory to the Underwriters, that may be transmitted electronically by the Underwriters to offerees and purchasers of the Offered Shares; (ii) it shall disclose the same information as the paper Time of Sale Prospectus, except to the extent that graphic and image material cannot be disseminated electronically, in which case such graphic and image material shall be replaced in the electronic Prospectus with a fair and accurate narrative description or tabular representation of such material, as appropriate; and (iii) it shall be in or convertible into a paper format or an electronic format, satisfactory to the Underwriters, that will allow investors to store and have continuously ready access to the Time of Sale Prospectus at any future time, without charge to investors (other than any fee charged for subscription to the Internet as a whole and for on-line time). The Company hereby confirms that it has included or will include in the Prospectus filed pursuant to EDGAR or otherwise with the Commission and in the Registration Statement at the time it was declared effective an undertaking that, upon receipt of a request by an investor or his or her representative, the Company shall transmit or cause to be transmitted promptly, without charge, a paper copy of the Time of Sale Prospectus.
- B. Agreement Not to Offer or Sell Additional Shares. During the period commencing on and including the date hereof and continuing through and including the 30th day following the date of the Prospectus (such period, as extended as described below, being referred to herein as the "Lock-up Period"), the Company will not, without the prior joint written consent of the Underwriters (which consent may be withheld in their sole discretion), directly or indirectly: (i) sell, offer to sell, contract to sell or lend any Shares or Related Securities (as defined below); (ii) effect any short sale, or establish or increase any "put equivalent position" (as defined in Rule 16a-1(h) under the Exchange Act) or liquidate or decrease any "call equivalent position" (as defined in Rule 16a-1(b) under the Exchange Act) of any Shares or Related Securities; (iii) pledge, hypothecate or grant any security interest in any Shares or Related Securities; (iv) in any other way transfer or dispose of any Shares or Related Securities; (v) enter into any

swap, hedge or similar arrangement or agreement that transfers, in whole or in part, the economic risk of ownership of any Shares or Related Securities, regardless of whether any such transaction is to be settled in securities, in cash or otherwise; (vi) announce the offering of any Shares or Related Securities; (vii) file any registration statement under the Securities Act in respect of any Shares or Related Securities (other than as contemplated by this Agreement with respect to the Offered Shares); or (viii) publicly announce the intention to do any of the foregoing. The foregoing sentence shall not apply to (A) the Securities to be sold hereunder, (B) any shares of Common Stock issued by the Company upon the exercise of options to purchase shares of Common Stock or upon the vesting of restricted stock awards, in each case disclosed in the Registration Statement, the Time of Sale Prospectus and the Prospectus, (C) the grant of awards pursuant to employee benefit plans or arrangements described in the Registration Statement, the Time of Sale Prospectus and the Prospectus, (D) the issuance of shares of Common Stock, of restricted stock awards or of options to purchase shares of Common Stock, in each case, to be registered pursuant to any registration statement on Form S-8 pursuant to employee benefit plans or arrangements described in the Registration Statement, the Time of Sale Prospectus and the Prospectus, (E) the establishment of a trading plan pursuant to Rule 10b5-1 under the Exchange Act for the transfer of shares of Common Stock; provided that such plan does not provide for the transfer of shares of Common Stock during the Lock-up Period, and the establishment of such plan does not require or otherwise result in any public filing or other public announcement of such plan during such Lock-up Period (as extended), (F) the issuance of shares of Common Stock in connection with the acquisition by the Company or any of its subsidiaries of the securities, business, property or other assets of another person or business entity or pursuant to any employee benefit plan assumed by the Company in connection with any such acquisition or (G) the issuance of shares of Common Stock, of restricted stock awards or of options to purchase shares of Common Stock, in each case, in connection with joint ventures, commercial relationships or other strategic transactions; provided that, in the case of immediately preceding clauses (F) and (G), the aggregate number of restricted stock awards and shares of Common Stock issued in connection with, or issuable pursuant to the exercise of any options issued in connection with, all such acquisitions and other transactions does not exceed 5% of the aggregate number of shares of Common Stock outstanding immediately following the offering of the Offered Shares pursuant to this Agreement and the recipient of the shares of Common Stock agrees in writing to be bound by the same terms described in the agreement attached hereto as Exhibit D. For purposes of the foregoing, "Related Securities" shall mean any options or warrants or other rights to acquire Shares or any securities exchangeable or exercisable for or convertible into Shares, or to acquire other securities or rights ultimately exchangeable or exercisable for, or convertible into, Shares.

- (a) No Stabilization or Manipulation; Compliance with Regulation M. The Company will not take, and will ensure that no affiliate of the Company will take, directly or indirectly, any action designed to or that might reasonably be expected to cause or result in stabilization or manipulation of the price of the Shares or any reference security with respect to the Shares, whether to facilitate the sale or resale of the Offered Shares or otherwise, and the Company will, and shall cause each of its affiliates to, comply with all applicable provisions of Regulation M.
 - C. Covenants of the Selling Stockholder. The Selling Stockholder further covenants and agrees with each Underwriter:
- (a) *Notification.* The Selling Stockholder will advise you promptly, and if requested by you, will confirm such advice in writing, during the period when a prospectus relating to the Offered Shares is required by the Securities Act to be delivered (whether physically or through compliance with Rule 172 under the Securities Act or any similar rule), of any change in the Selling Stockholder Information in the Registration Statement, any preliminary prospectus, any free writing prospectus, the Prospectus or any amendment or supplement thereto relating to the Selling Stockholder.

- **(b) Delivery of Form W-9.** To deliver to the Underwriters prior to the Closing Date a properly completed and executed United States Treasury Department Form W-9, together with all required attachments, if any.
- (c) Application of Proceeds by the Selling Stockholder. The Selling Stockholder will apply a portion of the net proceeds from the shares sold by it to repay that portion of the margin loan that is required to be paid pursuant to the terms of the Margin Loan Agreement, dated of March 3, 2015, as amended through the date hereof, between KKR PRA Investors L.P. and Citibank N.A., as lender and administrative agent, as a result of the sale of such Shares.

The Underwriters, may, in their sole discretion, waive in writing the performance by the Company or the Selling Stockholder of any one or more of the foregoing covenants or extend the time for their performance.

Payment of Expenses. The Company agrees to pay all costs, fees and expenses incurred in connection with the performance of its obligations hereunder and in connection with the transactions contemplated hereby, including without limitation (i) all expenses incident to the delivery of the Offered Shares, (ii) all fees and expenses of the registrar and transfer agent of the Shares, (iii) all fees and expenses of the Company's counsel, independent public or certified public accountants and other advisors, (iv) all costs and expenses incurred in connection with the preparation, printing, filing, shipping and distribution of the Registration Statement (including financial statements, exhibits, schedules, consents and certificates of experts), the Time of Sale Prospectus, the Prospectus, each free writing prospectus prepared by or on behalf of, used by, or referred to by the Company, and each preliminary prospectus, and all amendments and supplements thereto, and this Agreement, (v) all filing fees, reasonable attorneys' fees and expenses incurred by the Company or the Underwriters in connection with qualifying or registering (or obtaining exemptions from the qualification or registration of) all or any part of the Offered Shares for offer and sale under the state securities or blue sky laws or the provincial securities laws of Canada, and, if requested by the Underwriters, preparing and printing a "Blue Sky Survey" or memorandum and a "Canadian wrapper", and any supplements thereto, advising the Underwriters of such qualifications, registrations and exemptions, (vi) the costs, fees and expenses incurred by the Underwriters not to exceed \$25,000 in connection with determining their compliance with the rules and regulations of FINRA related to the Underwriters' participation in the offering and distribution of the Offered Shares, including any related filing fees and the reasonable legal fees of, and disbursements by, counsel to the Underwriters, (vii) the costs and expenses of the Company relating to investor presentations on any "road show", without limitation, expenses associated with the preparation or dissemination of any electronic road show, expenses associated with the production of road show slides and graphics, fees and expenses of any consultants engaged in connection with the road show presentations with the prior approval of the Company, travel and lodging expenses of the representatives, employees and officers of the Company and any such consultants, and one-half of the cost of any aircraft chartered in connection with the road show, (viii) the fees and expenses associated with listing the Offered Shares on the NASDAQ, (ix) fees and expenses of counsel and other advisors for the Selling Stockholder and (x) all other fees, costs and expenses of the nature referred to in Item 14 of Part II of the Registration Statement. Except as provided in this Section 4 or in Section 7, Section 9 or Section 10 hereof, the Underwriters shall pay their own expenses, including the fees and disbursements of their counsel and travel and lodging expenses (including one half of the cost of any aircraft chartered in connection with the roadshow and stock transfer taxes on any resale of any of the Offered Shares by them).

The Selling Stockholder further agrees with each Underwriter to pay (directly or by reimbursement) all fees and expenses incident to the performance of the Selling Stockholder's obligations under this Agreement that are not otherwise specifically provided for herein, including but not limited to fees and expenses incident to the sale and delivery of the Offered Shares to be sold by the Selling

Stockholder to the Underwriters hereunder and the initial resale of such Offered Shares by the Underwriters. The Selling Stockholder will pay all applicable stock transfer taxes, if any, involved in the transfer to the Underwriters of the applicable Offered Shares to be purchased by it from the Selling Stockholder and the Underwriters will pay any additional stock transfer taxes involved in the initial resale by the Underwriters.

This Section 4 shall not affect or modify any separate, valid agreement relating to the allocation of payment of expenses between the Company, on the one hand, and the Selling Stockholder, on the other hand.

- Section 5. Covenant of the Underwriters. Each Underwriter severally and not jointly covenants with the Company not to take any action that would result in the Company being required to file with the Commission pursuant to Rule 433(d) under the Securities Act a free writing prospectus prepared by or on behalf of such Underwriter that otherwise would not, but for such actions, be required to be filed by the Company under Rule 433(d).
- Section 6. Conditions of the Obligations of the Underwriters. The respective obligations of the several Underwriters hereunder to purchase and pay for the Offered Shares as provided herein on the Closing Date shall be subject to the accuracy of the representations and warranties on the part of the Company and the Selling Stockholder set forth in Section 1 hereof as of the date hereof and as of the Closing Date as though then made, to the timely performance by the Company and the Selling Stockholder in all material respects (except to the extent qualified by materiality, in which case such covenants and obligations shall be subject to performance in all respects) of their respective covenants and other obligations hereunder, and to each of the following additional conditions:
- (a) Comfort Letter. On the date hereof, the Underwriters shall have received from Deloitte & Touche LLP, independent registered public accountants for the Company, a letter dated the date hereof addressed to the Underwriters, in form and substance satisfactory to the Underwriters, containing statements and information of the type ordinarily included in accountant's "comfort letters" to underwriters, delivered according to Statement of Auditing Standards No. 72 (or any successor bulletin), with respect to the audited and unaudited financial statements and certain financial information contained in the Registration Statement, the Time of Sale Prospectus, and each free writing prospectus, if any.

(b) Compliance with Registration Requirements; No Stop Order; No Objection from FINRA.

- (i) The Company shall have filed the Prospectus with the Commission (including the information previously omitted from the Registration Statement pursuant to Rule 430B under the Securities Act) in the manner and within the time period required by Rule 424(b) under the Securities Act; or the Company shall have filed a post-effective amendment to the Registration Statement containing the information previously omitted from the Registration Statement pursuant to Rule 430B under the Securities Act, and such post-effective amendment shall have become effective.
- (ii) No stop order suspending the effectiveness of the Registration Statement or any post-effective amendment to the Registration Statement shall be in effect, and no proceedings for such purpose shall have been instituted or threatened by the Commission.
- (iii) If a filing has been made with FINRA, FINRA shall have raised no objection to the fairness and reasonableness of the underwriting terms and arrangements.

(c)	No Material Adverse Change or Ratings Agency Change	. For the period from and after the date of this Agreement and through	n and
including the Clo	osing Date:		

- (i) in the judgment of the Underwriters there shall not have occurred any Material Adverse Change, as in the judgment of the Underwriters is material and adverse and makes it impracticable or inadvisable to proceed with the completion of the offering contemplated hereby on the terms and in the manner contemplated in the Time of Sale Prospectus or the Prospectus or to enforce contracts for the sale of securities.
- (ii) there shall not have occurred any downgrading, nor shall any notice have been given of any intended or potential downgrading or of any review for a possible change that does not indicate the direction of the possible change, in the rating accorded any securities of the Company or any of its subsidiaries by any "nationally recognized statistical rating organization" as that term is used in Rule 15c3-1(c)(2)(vi)(F) under the Exchange Act.
- (d) Opinion of Counsel for the Company and the Selling Stockholder. On the Closing Date the Underwriters shall have received the opinion and 10b-5 statement of Simpson Thacher & Bartlett LLP, counsel for the Company and the Selling Stockholder, dated as of such date, in the forms attached hereto as Exhibit A-II, respectively, and to such further effect as the Underwriters shall reasonably request.
- (e) Opinion of Senior Vice President of Legal Affairs for the Company. On the Closing Date the Underwriters shall have received the opinion of Timothy McClain, Senior Vice President of Legal Affairs for the Company, dated as of such date, in the form attached hereto as Exhibit B and to such further effect as the Underwriters shall reasonably request.
- (f) Opinion of Counsel for the Underwriters. On the Closing Date the Underwriters shall have received an executed copy of the opinion and 10b-5 statement of Latham & Watkins LLP, counsel for the Underwriters in connection with the offer and sale of the Offered Shares, in form and substance reasonably satisfactory to the Underwriters, dated as of such date.
- (g) Officers' Certificate. On the Closing Date, the Underwriters shall have received a certificate executed by the Chief Executive Officer or President of the Company and the Chief Financial Officer of the Company, dated as of such date, to the effect set forth in Section 6(b)(ii) and further to the effect that:
- (i) for the period from and including the date of this Agreement through and including such date, there has not occurred any Material Adverse Change;
- (ii) the representations and warranties of the Company set forth in Section 1A of this Agreement are true and correct in all material respects (except to the extent already qualified by materiality, in which case such representations and warranties shall be subject to accuracy in all respects) with the same force and effect as though expressly made on and as of such date; and
- (iii) the Company has complied with all the agreements hereunder and satisfied all the conditions on its part to be performed or satisfied hereunder at or prior to such date in all material respects (except to the extent already qualified by materiality, in which case such agreements and conditions have been complied with or satisfied, as applicable, in all respects).
- (h) CFO's Certificate. On the date hereof and on the Closing Date, the Underwriters shall receive from the Company's Chief Financial Officer a certificate with respect to certain financial

information contained in the Registration Statement, the Preliminary Prospectus, Time of Sale Prospectus, and each free writing prospectus, if any, and the Prospectus, substantially in the form attached hereto as Exhibit C.

- (i) Bring-down Comfort Letter. On the Closing Date the Underwriters shall have received from Deloitte & Touche LLP, independent registered public accountants for the Company, a letter dated such date, in form and substance satisfactory to the Underwriters, which letter shall: (i) reaffirm the statements made in the letter furnished by them pursuant to Section 6(a), except that the specified date referred to therein for the carrying out of procedures shall be no more than three business days prior to the Closing Date, as the case may be; and (ii) cover certain financial information contained in the Prospectus.
- (j) Selling Stockholder's Certificate. On the Closing Date, the Underwriters shall receive a written certificate executed by the Selling Stockholder to the effect that:
- (i) the representations and warranties of the Selling Stockholder set forth in Section 1B of this Agreement are true and correct in all material respects (except to the extent already qualified by materiality, in which case such representations and warranties shall be subject to accuracy in all respects) with the same force and effect as though expressly made by the Selling Stockholder on and as of such date; and
- (ii) the Selling Stockholder has complied with all the agreements and satisfied all the conditions on its part to be performed or satisfied at or prior to such date in all material respects (except to the extent already qualified by materiality, in which case such agreements and conditions have been complied with or satisfied, as applicable, in all respects).
- (k) Selling Stockholder's Documents. On or before the Closing Date, the Selling Stockholder shall have furnished for review by the Underwriters copies of such information, certificates and documents as the Underwriters may reasonably request.
- (I) Lock-Up Agreements. On or prior to the date hereof, the Company shall have furnished to the Underwriters an agreement in the form of Exhibit D hereto from each of the persons and entities listed on Exhibit E hereto, and each such agreement shall be in full force and effect on the Closing Date.
 - (m) [Reserved.]
 - (n) Approval of Listing. At the Closing Date, the Offered Shares shall have been approved for listing on the NASDAQ.
- (o) Additional Documents. On or before the Closing Date, the Underwriters and counsel for the Underwriters shall have received such information, documents and opinions as they may reasonably request for the purposes of enabling them to pass upon the issuance and sale of the Offered Shares as contemplated herein, or in order to evidence the accuracy of any of the representations and warranties, or the satisfaction of any of the conditions or agreements, herein contained; and all proceedings taken by the Company in connection with the transactions contemplated by this Agreement shall be satisfactory in form and substance to the Underwriters and counsel for the Underwriters.

If any condition specified in this Section 6 is not satisfied when and as required to be satisfied, this Agreement may be terminated by the Underwriters by notice from the Underwriters to the Company and the Selling Stockholder at any time on or prior to the Closing Date, which termination shall be without liability on the part of any party to any other party, except that Section 4, Section 7, Section 9 and Section 10 shall at all times be effective and shall survive such termination.

Section 7. Reimbursement of Underwriters' Expenses. If this Agreement is terminated by the Underwriters pursuant to Section 6, Section 12(i)(a) or (iv) or Section 20, or if the sale to the Underwriters of the Offered Shares on the Closing Date is not consummated because of any refusal, inability or failure on the part of the Company or the Selling Stockholder to perform any agreement herein or to comply with any provision hereof, the Company agrees to reimburse the Underwriters (or such Underwriters as have terminated this Agreement with respect to themselves), severally, upon demand for all out-of-pocket expenses that shall have been reasonably incurred by the Underwriters in connection with the proposed purchase and the offering and sale of the Offered Shares, including, but not limited to, fees and disbursements of counsel, printing expenses, travel expenses, postage, facsimile and telephone charges.

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

Section 9. Indemnification.

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

the Exchange Act against any loss, claim, damage, liability or expense, as incurred, to which such Underwriter or such affiliate, director, officer, employee, agent or controlling person may become subject, under the Securities Act, the Exchange Act, other federal or state statutory law or regulation, or the laws or regulations of foreign jurisdictions where Offered Shares have been offered or sold or at common law or otherwise (including in settlement of any litigation, if such settlement is effected with the written consent of the Company and the Selling Stockholder), insofar as such loss, claim, damage, liability or expense (or actions in respect thereof as contemplated below) arises to the extent and in the manner set forth in Section 9(a)(i) and (ii) above; provided that the Selling Stockholder shall be liable only to the extent that such untrue statement or alleged untrue statement or omission or alleged omission has been made in the Registration Statement, any preliminary prospectus, the Time of Sale Prospectus, any free writing prospectus that the Company has used, referred to or filed, or is required to file pursuant to Rule 433(d) of the Securities Act, any Marketing Material or the Prospectus (or any amendment or supplement thereto) in reliance upon and in conformity with the Selling Stockholder Information provided by the Selling Stockholder; provided, further, that the liability under this subsection of the Selling Stockholder shall be limited to an amount equal to the aggregate gross proceeds after underwriting commissions and discounts, but before expenses, to the Selling Stockholder from the sale of Offered Shares sold by the Selling Stockholder hereunder (the "Selling Stockholder Net Proceeds").

Indemnification of the Company, its Directors and Officers and the Selling Stockholder. Each Underwriter agrees, severally and not jointly, to indemnify and hold harmless the Company, each of its directors, each of its officers who signed the Registration Statement, the Selling Stockholder and each person, if any, who controls the Company or the Selling Stockholder within the meaning of the Securities Act or the Exchange Act, against any loss, claim, damage, liability or expense, as incurred, to which the Company, or any such director, officer, Selling Stockholder or controlling person may become subject, under the Securities Act, the Exchange Act, or other federal or state statutory law or regulation, or at common law or otherwise (including in settlement of any litigation, if such settlement is effected with the written consent of such Underwriter), insofar as such loss, claim, damage, liability or expense (or actions in respect thereof as contemplated below) arises out of or is based upon (i) any untrue statement or alleged untrue statement of a material fact contained in the Registration Statement, or any amendment thereto, or any omission or alleged omission to state therein a material fact required to be stated therein or necessary to make the statements therein not misleading or (ii) any untrue statement or alleged untrue statement of a material fact included in any preliminary prospectus, the Time of Sale Prospectus, any free writing prospectus that the Company has filed, or is required to file, pursuant to Rule 433 of the Securities Act, any Marketing Material or the Prospectus (or any such amendment or supplement) or the omission or alleged omission to state therein a material fact necessary in order to make the statements therein, in the light of the circumstances under which they were made, 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 reliance upon and in conformity with information relating to such Underwriter furnished to the Company by the Underwriters in writing expressly for use therein; and to reimburse the Company, or any such director, officer, Selling Stockholder or controlling person for any and all expenses (including the reasonable fees and disbursements of counsel) reasonably incurred in connection with investigating or defending any such loss, claim, damage, liability, expense or action. The Company and the Selling Stockholder, hereby acknowledge that the only information that the Underwriters have furnished to the Company expressly for use in the Registration Statement, any preliminary prospectus, the Time of Sale Prospectus, any free writing prospectus that the Company has filed, or is required to file, pursuant to Rule 433(d) of the Securities Act or the Prospectus (or any amendment or supplement to the foregoing) are the statements set forth in (i) the second sentence of the fourth paragraph under the caption "Underwriting," (ii) the first paragraph under the caption "Underwriting—Commission and Discounts," (iii) the statements concerning stabilizing transactions and syndicate covering transactions under the caption "Underwriting—Short Positions" and (iv) the first sentence of the first paragraph under the caption "Underwriting—Electronic Distribution" in the Preliminary Prospectus Supplement and the Prospectus Supplement. The

indemnity agreement set forth in this Section 9(c) shall be in addition to any liabilities that each Underwriter may otherwise have.

- Notifications and Other Indemnification Procedures. Promptly after receipt by an indemnified party under this Section 9 of notice of the commencement of any action, such indemnified party will, if a claim in respect thereof is to be made against an indemnifying party under this Section 9, notify the indemnifying party in writing of the commencement thereof, but the omission so to notify the indemnifying party will not relieve the indemnifying party from any liability which it may have to any indemnified party to the extent the indemnifying party is not materially prejudiced as a result of such failure and shall not in any event relieve the indemnifying party from any liability that it may have otherwise than on account of this agreement. In case any such action is brought against any indemnified party and such indemnified party seeks or intends to seek indemnity from an indemnifying party, the indemnifying party will be entitled to participate in, and, to the extent that it shall elect, jointly with all other indemnifying parties similarly notified, by written notice delivered to the indemnified party promptly after receiving the aforesaid notice from such indemnified party, to assume the defense thereof with counsel reasonably satisfactory to such indemnified party; provided, however, that if the defendants in any such action include both the indemnified party and the indemnifying party and the indemnified party shall have reasonably concluded that a conflict may arise between the positions of the indemnifying party and the indemnified party in conducting the defense of any such action or that there may be legal defenses available to it and/or other indemnified parties which are different from or additional to those available to the indemnifying party, the indemnified party or parties shall have the right to select separate counsel to assume such legal defenses and to otherwise participate in the defense of such action on behalf of such indemnified party or parties. Upon receipt of notice from the indemnifying party to such indemnified party of such indemnifying party's election so to assume the defense of such action and approval by the indemnified party of counsel, the indemnifying party will not be liable to such indemnified party under this Section 9 for any legal or other expenses subsequently incurred by such indemnified party in connection with the defense thereof unless (i) the indemnified party shall have employed separate counsel in accordance with the proviso to the preceding sentence (it being understood, however, that the indemnifying party shall not be liable for the fees and expenses of more than one separate counsel (together with one local counsel in each relevant jurisdiction), representing the indemnified parties who are parties to such action), which counsel (together with one local counsel in each relevant jurisdiction) for the indemnified parties shall be selected by the Underwriters (in the case of counsel for the indemnified parties referred to in Sections 9(a) and 9(b) above) or by the Company (in the case of counsel for the indemnified parties referred to in Section 9(c) above); (ii) the indemnifying party shall not have employed counsel satisfactory to the indemnified party to represent the indemnified party within a reasonable time after notice of commencement of the action; or (iii) the indemnifying party has authorized in writing the employment of counsel for the indemnified party at the expense of the indemnifying party, in each of which cases the fees and expenses of counsel shall be at the expense of the indemnifying party and shall be paid as they are incurred.
- (e) Settlements. The indemnifying party under this Section 9 shall not be liable for any settlement of any proceeding effected without its written consent, but if settled with such consent or if there be a final judgment for the plaintiff, the indemnifying party agrees to indemnify the indemnified party against any loss, claim, damage, liability or expense by reason of such settlement or judgment. No indemnifying party shall, without the prior written consent of the indemnified party, effect any settlement, compromise or consent to the entry of judgment in any pending or threatened action, suit or proceeding in respect of which any indemnified party is or could have been a party and indemnity was or could have been sought hereunder by such indemnified party, unless such settlement, compromise or consent includes an unconditional release of such indemnified party from all liability on claims that are the subject matter of such action, suit or proceeding and does not include an admission of fault or culpability or a failure to act by or on behalf of such indemnified party.

Section 10. Contribution. If the indemnification provided for in Section 9 is for any reason held to be unavailable to or otherwise insufficient to hold harmless an indemnified party in respect of any losses, claims, damages, liabilities or expenses referred to therein (other than by virtue of the failure of such indemnified party to notify the indemnifying party of its right to indemnification pursuant to Section 9(d) to the extent that it has been materially prejudiced by such failure), then each indemnifying party shall contribute to the aggregate amount paid or payable by such indemnified party, as incurred, as a result of any losses, claims, damages, liabilities or expenses referred to therein (i) in such proportion as is appropriate to reflect the relative benefits received by the Company and/or the Selling Stockholder, as applicable, on the one hand, and the Underwriters, on the other hand, from the offering of the Offered Shares pursuant to this Agreement or (ii) if the allocation provided by clause (i) above is not permitted by applicable law, in such proportion as is appropriate to reflect not only the relative benefits referred to in clause (i) above but also the relative fault of the Company and/or the Selling Stockholder, as applicable, on the one hand, and the Underwriters, on the other hand, in connection with the statements or omissions which resulted in such losses, claims, damages, liabilities or expenses, as well as any other relevant equitable considerations. The relative benefits received by the Company and/or the Selling Stockholder, as applicable, on the one hand, and the Underwriters, on the other hand, in connection with the offering of the Offered Shares pursuant to this Agreement shall be deemed to be in the same respective proportions as the total net proceeds from the offering of the Offered Shares pursuant to this Agreement (before deducting expenses) received by the Company and/or the Selling Stockholder, as applicable, and the total underwriting discounts and commissions received by the Underwriters, in each case as set forth on the front cover page of the Prospectus, bear to the aggregate initial public offering price of the Offered Shares as set forth on such cover. The relative fault of the Company and/or the Selling Stockholder, as applicable, on the one hand, and the Underwriters, on the other hand, shall be determined by reference to, among other things, whether any such untrue or alleged untrue statement of a material fact or omission or alleged omission to state a material fact relates to information supplied by the Company or the Selling Stockholder, on the one hand, or the Underwriters, on the other hand, and the parties' relative intent, knowledge, access to information and opportunity to correct or prevent such statement or omission.

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

The Company, the Selling Stockholder and the Underwriters agree that it would not be just and equitable if contribution pursuant to this Section 10 were determined by pro rata allocation or by any other method of allocation (even if the Underwriters were treated as one entity for such purpose) which does not take account of the equitable considerations referred to in this Section 10.

Notwithstanding the provisions of this Section 10, (i) no Underwriter shall be required to contribute any amount in excess of the underwriting discounts and commissions received by such Underwriter in connection with the Offered Shares underwritten by it and distributed to the public and (ii) the Selling Stockholder's obligation to contribute any amount under this Section 10 is limited in the manner and to the extent set forth in Section 9(b) and the Selling Stockholder shall not be required to contribute any amount in excess of the Selling Stockholder Net Proceeds. No person guilty of fraudulent misrepresentation (within the meaning of Section 11(f) of the Securities Act) shall be entitled to contribution from any person who was not guilty of such fraudulent misrepresentation. The Underwriters' obligations to contribute pursuant to this Section 10 are several, and not joint, in proportion to their respective underwriting commitments as set forth opposite their respective names on Schedule A. For

purposes of this Section 10, each affiliate, director, officer, employee and agent of an Underwriter and each person, if any, who controls an Underwriter within the meaning of the Securities Act or the Exchange Act shall have the same rights to contribution as such Underwriter, and each director of the Company, each officer of the Company who signed the Registration Statement, and each person, if any, who controls the Company within the meaning of the Securities Act and the Exchange Act shall have the same rights to contribution as the Company.

Section 11. Default of One or More of the Several Underwriters. If, on the Closing Date any one or more of the several Underwriters shall fail or refuse to purchase Offered Shares that it or they have agreed to purchase hereunder on such date, and the aggregate number of Offered Shares which such defaulting Underwriter or Underwriters agreed but failed or refused to purchase does not exceed 10% of the aggregate number of the Offered Shares to be purchased on such date, the Underwriters may make arrangements satisfactory to the Company and the Selling Stockholder for the purchase of such Offered Shares by other persons, including any of the Underwriters, but if no such arrangements are made by such date, the other Underwriters shall be obligated, severally and not jointly, in the proportions that the number of Shares set forth opposite their respective names on Schedule A bears to the aggregate number of Shares set forth opposite the names of all such non-defaulting Underwriters, or in such other proportions as may be specified by the Underwriters with the consent of the non-defaulting Underwriters, to purchase the Offered Shares which such defaulting Underwriter or Underwriters agreed but failed or refused to purchase on such date. If, on the Closing Date any one or more of the Underwriters shall fail or refuse to purchase Offered Shares and the aggregate number of Offered Shares with respect to which such default occurs exceeds 10% of the aggregate number of Offered Shares to be purchased on such date, and arrangements satisfactory to the Underwriters, the Company and the Selling Stockholder for the purchase of such Offered Shares are not made within 48 hours after such default, this Agreement shall terminate without liability of any party to any other party except that the provisions of Section 4, Section 7, Section 9 and Section 10 shall at all times be effective and shall survive such termination. In any such case either the Underwriters, the Company or the Selling Stockholder shall have the right to postpone the Closing Date, as the case may be, but in no event for longer than seven days in order that the required changes, if any, to the Registration Statement and the Prospectus or any other documents or arrangements may be effected.

As used in this Agreement, the term "Underwriter" shall be deemed to include any person substituted for a defaulting Underwriter under this Section 11. Any action taken under this Section 11 shall not relieve any defaulting Underwriter from liability in respect of any default of such Underwriter under this Agreement.

Section 12. Termination of this Agreement. Prior to the purchase of the Offered Shares by the Underwriters on the Closing Date, this Agreement may be terminated by the Underwriters by notice given to the Company and the Selling Stockholder if at any time: (i) (a) trading or quotation in any of the Company's securities shall have been suspended or limited by the Commission or by the NASDAQ, or (b) trading in securities generally on either the NASDAQ or the NYSE shall have been suspended or limited, or minimum or maximum prices shall have been generally established on any of such stock exchanges; (ii) a general banking moratorium shall have been declared by any of federal or New York authorities; (iii) there shall have occurred any outbreak or escalation of national or international hostilities or any crisis or calamity, or any change in the United States or international financial markets, or any substantial change or development involving a prospective substantial change in United States' or international political, financial or economic conditions, as in the judgment of the Underwriters is material and adverse and makes it impracticable or inadvisable to proceed with the completion of the offering contemplated hereby on the terms and in the manner contemplated in the Time of Sale Prospectus or the Prospectus or to enforce contracts for the sale of securities; (iv) in the judgment of the Underwriters there shall have occurred any Material Adverse Change; (v) there shall have occurred a material disruption in

commercial banking or securities settlement or clearance services in the United States; or (vi) the Company shall have sustained a loss by strike, fire, flood, earthquake, accident or other calamity of such character as in the judgment of the Underwriters may interfere materially with the conduct of the business and operations of the Company regardless of whether or not such loss shall have been insured. Any termination pursuant to this Section 12 shall be without liability on the part of (a) the Company or the Selling Stockholder to any Underwriter, except that the Company and the Selling Stockholder shall be obligated to reimburse the expenses of the Underwriters pursuant to Section 4 or Section 7 hereof or (b) any Underwriter to the Company or the Selling Stockholder; *provided, however*, that the provisions of Section 9 and Section 10 shall at all times be effective and shall survive such termination.

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

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

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

If to the Underwriters: Morgan Stanley & Co. LLC

1585 Broadway

New York, New York 10036

Attention: Equity Syndicate Desk, with a copy to Legal Department

And

Goldman Sachs & Co. LLC

200 West Street

New York, New York 10282-2198

Attention: Registration Department

with a copy to: Latham & Watkins LLP

555 11th Street NW, Suite 1000 Washington, DC 20004 Facsimile: (202) 637-2201 Attention: Rachel Sheridan

If to the Company: PRA Health Sciences, Inc.

4130 ParkLake Avenue

Suite 400

Raleigh, NC 27612 Facsimile: (919) 786-8201 Attention: Timothy McClain

with a copy to: Simpson Thacher & Bartlett LLP

425 Lexington Avenue New York, New York 10017 Facsimile: (212) 455-2502 Attention: Richard Fenyes

If to the Selling Stockholder: KKR PRA Investors L.P.

c/o Kohlberg Kravis Roberts & Co. L.P.

2800 Sand Hill Road

Menlo Park, California 94025 Facsimile: (650) 403-1944 Attention: Ali J. Satvat

with a copy to: Simpson Thacher & Bartlett LLP

425 Lexington Avenue New York, New York 10017 Facsimile: (212) 455-2502 Attention: Richard Fenyes

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

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

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

Section 18. Governing Law Provisions. This Agreement shall be governed by and construed in accordance with the internal laws of the State of New York applicable to agreements made and to be performed in such state. Any legal suit, action or proceeding arising out of or based upon this Agreement or the transactions contemplated hereby ("Related Proceedings") may be instituted in the federal courts of the United States of America located in the Borough of Manhattan in the City of New York or the courts of the State of New York in each case located in the Borough of Manhattan in the City of New York (collectively, the "Specified Courts"), and each party irrevocably submits to the exclusive jurisdiction (except for proceedings instituted in regard to the enforcement of a judgment of any such court (a "Related Judgment"), as to which such jurisdiction is non-exclusive) of such courts in any such suit, action or other proceeding brought in any such court. The parties irrevocably and unconditionally waive any objection to the laying of venue of any suit, action or other proceeding in the Specified Courts and irrevocably and unconditionally waive any objection to plead or claim in any such court that any such suit, action or other proceeding brought in any such court has been brought in an inconvenient forum.

Section 19. Waiver of Jury Trial. Each of the Company and the Selling Stockholder hereby irrevocably waives, to the fullest extent permitted by applicable law, any and all right to trial by jury in any legal proceeding arising out of or relating to this Agreement or the transactions contemplated hereby.

Section 20. Failure of the Selling Stockholder to Sell and Deliver Offered Shares. If the Selling Stockholder shall fail to sell and deliver to the Underwriters the Offered Shares to be sold and delivered by the Selling Stockholder at the Closing Date pursuant to this Agreement, then the Underwriters may at their option, by delivering written notice to the Company and the Selling Stockholder, terminate this Agreement without any liability on the part of any Underwriter or, except as provided in Section 4, Section 9 and Section 10 hereof, the Company. If the Selling Stockholder shall fail to sell and deliver to the Underwriters the Offered Shares to be sold and delivered by the Selling Stockholder pursuant to this Agreement at the Closing Date, then the Underwriters shall have the right, exercised by written notice to the Company and the Selling Stockholder, to postpone the Closing Date, as the case may be, but in no event for longer than seven days in order that the required changes, if any, to the Registration Statement and the Prospectus or any other documents or arrangements may be effected.

Section 21. General Provisions. This Agreement constitutes the entire agreement of the parties to this Agreement and supersedes all prior written or oral and all contemporaneous oral agreements, understandings and negotiations with respect to the subject matter hereof. This Agreement may be executed in two or more counterparts, each one of which shall be an original, with the same effect as if the signatures thereto and hereto were upon the same instrument. This Agreement may not be amended or modified unless in writing by all of the parties hereto, and no condition herein (express or implied) may be waived unless waived in writing by each party whom the condition is meant to benefit. The section headings herein are for the convenience of the parties only and shall not affect the construction or interpretation of this Agreement.

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

writing prospectus and the Prospectus (and any amendments and supplements to the foregoing), as contemplated by the Securities Act and the Exchange Act.			
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If the foregoing is in accordance with your understanding of our agreement, kindly sign and return to the Company the enclosed copies hereof, whereupon this instrument, along with all counterparts hereof, shall become a binding agreement in accordance with its terms.

Very truly yours,

PRA HEALTH SCIENCES, INC.

By: /s/ Timothy McClain

Name: Timothy McClain

Title: Senior Vice President of Legal Affairs

[Signature Page to Underwriting Agreement]

KKR PRA INVESTORS L.P.

By: KKR PRA Investors GP II LLC, its general partner

By: /s/ James C. Momtazee
Name: James C. Momtazee
Title: President

[Signature Page to Underwriting Agreement]

	$The foregoing\ Underwriting\ Agreement\ is\ hereby\ confirmed\ and\ accepted\ by\ the\ Underwriters\ in\ New\ York,\ New\ York\ as\ of\ the\ date\ first\ above$
written.	
MORG	AN STANLEY & CO. LLC

By: /s/ Kalli Dircks
Name: Kalli Dircks
Title: Executive Director

GOLDMAN SACHS & CO. LLC

By: Raffael Fiumara

Name: Raffael Fiumara Title: Vice President

[Signature Page to Underwriting Agreement]

$Schedule \ A$

	Shares
Underwriters	to be Purchased
Morgan Stanley & Co. LLC	3,250,000
Goldman Sachs & Co. LLC	3,250,000
Total	6,500,000

Selling Stockholder	Number of Shares to be Sold
KKR PRA Investors L.P.	
c/o Kohlberg Kravis Roberts & Co.	
2800 Sand Hill Road	
Menlo Park, California 94025	
Attention: Ali J. Satvat	6,500,000
Total:	6,500,000

Free Writing Prospectuses Included in the Time of Sale Prospectus

None.

- 1. Number of Offered Shares: 6,500,000
- 2. Public offering price per Share: \$101.50.

Form of Lock-up Agreement

August [•], 2018	
[•]	
And	
[•]	

RE: PRA Health Sciences, Inc. (the "Company")

Ladies & Gentlemen:

The undersigned is an owner of shares of common stock, par value \$0.01 per share, of the Company ("Shares") or of securities convertible into or exchangeable or exercisable for Shares. KKR PRA Investors L.P., a Delaware limited partnership (the "Selling Stockholder") proposes to conduct a public offering of Shares (the "Offering") for which [•] ("[•]") and [•] ("[•]") will act as the underwriters (together, the "Underwriter"). The undersigned recognizes that the Offering will benefit each of the Company, the Selling Stockholder and the undersigned. The undersigned acknowledges that the Underwriters are relying on the representations and agreements of the undersigned contained in this letter agreement in conducting the Offering and, at a subsequent date, in entering into an underwriting agreement (the "Underwriting Agreement") and other underwriting arrangements with the Company and the Selling Stockholder with respect to the Offering.

Annex A sets forth definitions for capitalized terms used in this letter agreement that are not defined in the body of this agreement. Those definitions are a part of this agreement.

In consideration of the foregoing, and for other good and valuable consideration, the receipt and sufficiency of which are hereby acknowledged, the undersigned hereby agrees that, during the Lock-up Period, the undersigned will not, without the prior joint written consent of the Underwriters, which consent each Underwriter may withhold in its sole discretion:

- Sell or Offer to Sell any Shares or Related Securities currently or hereafter owned either of record or beneficially (as defined in Rule 13d-3 under the Exchange Act) by the undersigned,
- enter into any Swap,
- make any demand for, or exercise any right with respect to, the registration under the Securities Act of the offer and sale of any Shares or Related Securities, or cause to be filed a registration statement, prospectus or prospectus supplement (or an amendment or supplement thereto) with respect to any such registration, or
- publicly announce any intention to do any of the foregoing.

The foregoing restrictions shall not apply:

- (i) to the transfer of Shares or Related Securities by gift, or by will or intestate succession to a Family Member or to a trust, partnership, limited liability company or other entity for the direct or indirect benefit of the undersigned and/or a Family Member;
- (ii) if the undersigned is a corporation, partnership, limited liability company, trust or other business entity, to (1) transfers of Shares or Related Securities to another corporation, partnership, limited liability company, trust or other business entity that is a direct or indirect affiliate (as defined under Rule 12b-2 of the Exchange Act) of the undersigned or (2) distributions of Shares or Related Securities to limited partners, limited liability company members or stockholders of the undersigned or holders of similar equity interests in the undersigned;
- (iii) if the undersigned is a trust, to transfers to the beneficiary of such trust;
- (iv) to transfers to any investment fund or other entity controlled or managed by the undersigned;
- (v) to transfers to a nominee or custodian of a person or entity to whom a disposition or transfer would be permissible under clauses (i) through (iv);
- to transfers to the Company (1) pursuant to the exercise, in each case on a "cashless" or "net exercise" basis, of any option to purchase Shares granted by the Company pursuant to any employee benefit plans or arrangements described in or filed as an exhibit to the registration statement with respect to the Offering, where any Shares received by the undersigned upon any such exercise will be subject to the terms of this lock-up agreement, or (2) for the purpose of satisfying any withholding taxes (including estimated taxes) due as a result of the exercise of any option to purchase Shares or the vesting of any restricted stock awards granted by the Company pursuant to employee benefit plans or arrangements described in or filed as an exhibit to the registration statement with respect to the Offering, in each case on a "cashless" or "net exercise" basis, where any Shares received by the undersigned upon any such exercise or vesting will be subject to the terms of this lock-up agreement;
- (vii) to transfers pursuant to an order of a court or regulatory agency;
- (viii) to transfers of Shares to the Company pursuant to the call provisions of existing employment agreements and equity grant documents;
- (ix) from an executive officer to the Company or its parent entities upon death, disability or termination of employment, in each case, of such executive officer;
- (x) to transfers of Shares acquired in open market transactions after the completion of the Offering;
- (xi) in response to a bona fide third-party takeover bid made to all holders of Shares or any other acquisition transaction whereby all or substantially all of the Shares are acquired by a third party; and
- (xii) to entry into a written plan meeting the requirements of Rule 10b5-1 under the Exchange Act for the transfer of Shares that does not in any case provide for the transfer of Shares

during the Lock-up Period; or to the transfer Shares or Related Securities pursuant to a written plan in effect on the date hereof meeting the requirements of Rule 10b5-1 under the Exchange Act;

provided, however, that in the case of (A) any transfer or distribution pursuant to clauses (i) - (v) above, it shall be a condition to such transfer that both clauses (I) and (II) below are satisfied and (B) any transfer or distribution pursuant to clause (xii) above, it shall be a condition to such transfer that clause (II) below is satisfied:

- (I) each transferee executes and delivers to the Underwriters an agreement in form and substance satisfactory to the Underwriters stating that such transferee is receiving and holding such Shares and/or Related Securities subject to the provisions of this letter agreement and agrees not to Sell or Offer to Sell such Shares and/or Related Securities, engage in any Swap or engage in any other activities restricted under this letter agreement except in accordance with this letter agreement (as if such transferee had been an original signatory hereto), and
- (II) prior to the expiration of the Lock-up Period, no public disclosure or filing under the Exchange Act by any party to the transfer (donor, donee, transferor or transferee) shall be required, or made voluntarily, reporting a reduction in beneficial ownership of Shares in connection with such transfer.

If the undersigned is an officer or director of the Company, the undersigned further agrees that the foregoing provisions shall be equally applicable to any Company-directed Shares the undersigned may purchase or otherwise receive in the Offering (including pursuant to a directed share program).

The undersigned also agrees and consents to the entry of stop transfer instructions with the Company's transfer agent and registrar (or, in the case of the Selling Stockholder, Deutsche Bank Trust Company Americas) against the transfer of Shares or Related Securities held by the undersigned, if any, except in compliance with the foregoing restrictions.

With respect to the Offering only, the undersigned waives any registration rights relating to registration under the Securities Act of the offer and sale of any Shares and/or any Related Securities owned either of record or beneficially by the undersigned, including any rights to receive notice of the Offering.

Whether or not the Offering occurs as currently contemplated or at all depends on market conditions and other factors. The Offering will only be made pursuant to the Underwriting Agreement, the terms of which are subject to negotiation between the Company, the Selling Stockholder and the Underwriters.

The undersigned hereby represents and warrants that the undersigned has full power, capacity and authority to enter into this letter agreement. This letter agreement is irrevocable and will be binding on the undersigned and the successors, heirs, personal representatives and assigns of the undersigned.

This letter agreement shall be governed by, and construed in accordance with, the laws of the State of New York.

Signature		
Printed Name of Person Signing		
Timed Tame of Post Signing		
(Indicate capacity of person signing if		
signing as custodian or trustee, or on behalf		
of an entity)		

Certain Defined Terms Used in Lock-up Agreement

For purposes of the letter agreement to which this Annex A is attached and of which it is made a part:

- "Call Equivalent Position" shall have the meaning set forth in Rule 16a-1(b) under the Exchange Act.
- "Exchange Act" shall mean the Securities Exchange Act of 1934, as amended.
- "Family Member" shall mean the spouse of the undersigned, an immediate family member of the undersigned or an immediate family member of the undersigned's spouse, in each case living in the undersigned's household or whose principal residence is the undersigned's household (regardless of whether such spouse or family member may at the time be living elsewhere due to educational activities, health care treatment, military service, temporary internship or employment or otherwise). "Immediate family member" as used above shall have the meaning set forth in Rule 16a-1(e) under the Exchange Act.
- "Lock-up Period" shall mean the period beginning on the date hereof and continuing through the close of trading on the date that is 30 days after the date of the Prospectus (as defined in the Underwriting Agreement).
- "Put Equivalent Position" shall have the meaning set forth in Rule 16a-1(h) under the Exchange Act.
- "Related Securities" shall mean any options or warrants or other rights to acquire Shares or any securities exchangeable or exercisable for or convertible into Shares, or to acquire other securities or rights ultimately exchangeable or exercisable for or convertible into Shares.
- "Securities Act" shall mean the Securities Act of 1933, as amended.
- "Sell or Offer to Sell" shall mean to:
 - sell, offer to sell, contract to sell or lend,
 - effect any short sale or establish or increase a Put Equivalent Position or liquidate or decrease any Call Equivalent Position
 - · pledge, hypothecate or grant any security interest in, or
 - in any other way transfer or dispose of,

in each case whether effected directly or indirectly.

"Swap" shall mean any swap, hedge or similar arrangement or agreement that transfers, in whole or in part, the economic risk of ownership of Shares or Related Securities, regardless of whether any such transaction is to be settled in securities, in cash or otherwise.

Capitalized terms not defined in this Annex A shall have the meanings given to them in the body of this lock-up agreement.

Directors, Officers and Others Signing Lock-up Agreement

Directors:

- 1. Jeffrey T. Barber
- 2. James C. Momtazee
- 3. Max C. Lin
- 4. Matthew P. Young
- 5. Linda S. Grais
- 6. Colin Shannon
- 7. Alexander G. Dickinson

Others:

- 1. KKR PRA Investors L.P.
- 2. Michael Bonello

Simpson Thacher & Bartlett LLP

425 LEXINGTON AVENUE NEW YORK, NY 10017-3954

TELEPHONE: +1-212-455-2000 FACSIMILE: +1-212-455-2502

Direct Dial Number E-mail Address

August 9, 2018

PRA Health Sciences, Inc. 4130 ParkLake Avenue, Suite 400 Raleigh, North Carolina 27612

Ladies and Gentlemen:

We have acted as counsel to PRA Health Sciences, Inc., a Delaware corporation (the "Company"), and to KKR PRA Investors L.P. (the "Selling Stockholder") in connection with the Registration Statement on Form S-3 (File No. 333-209883) (the "Registration Statement") filed by the Company with the Securities and Exchange Commission (the "Commission") under the Securities Act of 1933, as amended (the "Securities Act"), relating to the sale of Common Stock, par value \$0.01 per share ("Common Stock") of the Company. This opinion relates to the sale by the Selling Stockholder of an aggregate of 6,500,000 shares of Common Stock, par value \$0.01 per share (the "Shares") pursuant to an Underwriting Agreement, dated August 6, 2018 (the "Underwriting Agreement"), among the Company, the Selling Stockholder and the Underwriters named therein.

Prospectus"), as supplemented by the prospectus supplement dated August 6, 2018 relating to the Shares (the "Final Prospectus

BEIJING HONG KONG HOUSTON LONDON LOS ANGELES PALO ALTO SÃO PAULO SEOUL TOKYO WASHINGTON, D.C.

We have examined the Registration Statement as it became effective under the Securities Act; the prospectus dated March 2, 2016 (the "Base

Supplement" and, together with the Base Prospectus, the "Prospectus"), filed by the Company pursuant to Rule 424(b) of the rules and regulations of the Commission under the Securities Act; the form of share certificate representing Common Stock of the Company, which has been filed with the Commission as an exhibit to the Registration Statement; and the Underwriting Agreement. We also have examined the originals, or duplicates or certified or conformed copies, of such records, agreements, documents and other instruments and have made such other investigations as we have deemed relevant and necessary in connection with the opinion hereinafter set forth. As to questions of fact material to this opinion, we have relied upon certificates or comparable documents of public officials and of officers and representatives of the Company and the Selling Stockholder.

In rendering the opinion set forth below, we have assumed the genuineness of all signatures, the legal capacity of natural persons, the authenticity of all documents submitted to us as originals, the conformity to original documents of all documents submitted to us as duplicates or certified or conformed copies and the authenticity of the originals of such latter documents.

Based upon the foregoing, and subject to the qualifications, assumptions and limitations stated herein, we are of the opinion that the Shares have been validly issued and are fully paid and nonassessable.

We do not express any opinion herein concerning any law other than the Delaware General Corporation Law.

We hereby consent to the filing of this opinion letter as Exhibit 5.1 to the Current Report on Form 8-K filed by the Company with the Commission on August 9, 2018 for incorporation

into the Registration Statement and to the use of our name under the caption "Legal Matters" in the Prospectus.

Very truly yours,

/s/ Simpson Thacher & Bartlett LLP

SIMPSON THACHER & BARTLETT LLP