

INSMED INC

FORM 8-K (Current report filing)

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Address	10 FINDERNE AVENUE BUILDING 10 BRIDGEWATER, NJ, 08807
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**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): **September 5, 2017**

INSMED INCORPORATED

(Exact name of registrant as specified in its charter)

Virginia

(State or other jurisdiction of
incorporation)

000-30739

(Commission File Number)

54-1972729

(I.R.S. Employer Identification
No.)

10 Finderne Avenue, Building 10

Bridgewater, New Jersey

(Address of principal executive offices)

08807

(Zip Code)

Registrant's telephone number, including area code: (**908**) **977-9900**

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 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.

Item 8.01 — Other Events.

On September 6, 2017, Insmed Incorporated (the “Company”) entered into an underwriting agreement (the “Underwriting Agreement”) with Goldman Sachs & Co. LLC and Leerink Partners LLC, as managers of the underwriters named in Schedule I thereto (the “Underwriters”), relating to the offer and sale of 12,281,000 shares (the “Firm Shares”) of the Company’s common stock, par value \$0.01 per share at a price to the public of \$28.50 per share. In the Underwriting Agreement, the Company granted the Underwriters an option exercisable for 30 days from the date of the Prospectus Supplement (as defined below) to purchase up to an additional 1,842,150 shares (together with the Firm Shares, the “Shares”) of the Company’s common stock at the public offering price, less underwriting discounts and commissions, which the Underwriters exercised on September 7, 2017. The net proceeds to the Company from the sale of the Shares, after deducting the underwriting fees and discount and other estimated offering expenses payable by the Company, are expected to be approximately \$377.7 million.

The offering is being made pursuant to a base prospectus dated May 19, 2017, which was filed with the Securities and Exchange Commission (the “SEC”) as part of a shelf registration statement that became automatically effective upon filing, as supplemented by a preliminary prospectus supplement filed with the SEC on September 5, 2017, and a final prospectus supplement, dated September 6, 2017 (the “Prospectus Supplement”). The closing of the offering is expected to take place on or about September 11, 2017, subject to the satisfaction of customary closing conditions.

The Underwriting Agreement contains customary representations, warranties and agreements by the Company, customary conditions to closing, indemnification obligations of the Company and the Underwriters, including for liabilities under the Securities Act of 1933, as amended, and termination provisions. A copy of the Underwriting Agreement is filed as Exhibit 1.1 to this Current Report on Form 8-K and is incorporated by reference herein. The foregoing description of the terms of the Underwriting Agreement does not purport to be complete and is qualified in its entirety by reference to the Underwriting Agreement. The legal opinion of Hunton & Williams LLP relating to the shares being offered is filed herewith as Exhibit 5.1.

On September 5, 2017, the Company issued a press release announcing the commencement of the offering. On September 6, 2017, the Company issued a press release announcing the pricing of the offering. Copies of the press releases are attached hereto as Exhibits 99.1 and 99.2, respectively, and are each incorporated herein by reference.

Item 9.01 Financial Statements and Exhibits.

(d) Exhibits.

<u>Exhibit</u>	<u>Description</u>
1.1	Underwriting Agreement, dated September 6, 2017, by and among the Company and Goldman Sachs & Co. LLC and Leerink Partners LLC, as managers of the underwriters named in Schedule I thereto.
5.1	Opinion of Hunton & Williams LLP
23.1	Consent of Hunton & Williams LLP (included in Exhibit 5.1)
99.1	Press Release dated September 5, 2017.
99.2	Press Release dated September 6, 2017.

EXHIBIT INDEX

<u>Exhibit</u>	<u>Description</u>
1.1	<u>Underwriting Agreement, dated September 6, 2017, by and among the Company and Goldman Sachs & Co. LLC and Leerink Partners LLC, as managers of the underwriters named in Schedule I thereto.</u>
5.1	<u>Opinion of Hunton & Williams LLP</u>
23.1	<u>Consent of Hunton & Williams LLP (included in Exhibit 5.1)</u>
99.1	<u>Press Release dated September 5, 2017.</u>
99.2	<u>Press Release dated September 6, 2017.</u>

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.

Dated: September 11, 2017

INSMED INCORPORATED

By:

/s/ Christine Pellizzari

Name: Christine Pellizzari

Title: General Counsel and
Corporate Secretary

12,281,000 Shares

INSMED INCORPORATED

Common Stock, Par Value \$0.01 Per Share

UNDERWRITING AGREEMENT

September 6, 2017

Goldman Sachs & Co. LLC
Leerink Partners LLC

As Managers of the several Underwriters
listed in Schedule I hereto

c/o Goldman Sachs & Co. LLC
200 West Street
New York, NY 10282

c/o Leerink Partners LLC
One Federal Street, 37th Floor
Boston, MA 02110

Ladies and Gentlemen:

Insmmed Incorporated, a Virginia corporation (the “**Company**”), proposes to issue and sell to the several Underwriters named in Schedule I hereto (the “**Underwriters**”) for which you are acting as managers (the “**Managers**”) 12,281,000 shares of its common stock, par value \$0.01 per share (the “**Firm Shares**”), and, at the election of the Underwriters, up to 1,842,150 additional shares of its common stock, par value \$0.01 per share (the “**Additional Shares**”). The Firm Shares and the Additional Shares that the Underwriters elect to purchase pursuant to Section 2 hereof are hereinafter collectively referred to as the “**Shares**.” The shares of common stock, par value \$0.01 per share, of the Company to be outstanding after giving effect to the sales contemplated hereby are hereinafter referred to as the “**Common Stock**.”

The Company has filed with the Securities and Exchange Commission (the “**Commission**”) an automatic shelf registration statement, including a prospectus, on Form S-3 (file no. 333-218118) relating to securities (the “**Shelf Securities**”), including the Shares, to be issued from time to time by the Company, which automatic shelf registration statement became effective under Rule 462(e) under the Securities Act. Such registration statement as amended to the date of this underwriting agreement (this “**Agreement**”), including the information (if any) deemed to be part of the registration statement at the time of effectiveness pursuant to Rule 430A or Rule 430B under the Securities Act of 1933, as amended (the “**Securities Act**”), is hereinafter

referred to as the “ **Registration Statement** ”, and the related prospectus covering the Shelf Securities dated May 19, 2017 in the form first used to confirm sales of the 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) is hereinafter referred to as the “ **Basic Prospectus** .” The Basic Prospectus, as supplemented by the prospectus supplement specifically relating to the Shares in the form first used to confirm sales of the Shares (or in the form first made available to the Underwriters by the Company to meet requests of purchasers pursuant to Rule 173 of the Securities Act) is hereinafter referred to as the “ **Prospectus** ,” and the term “ **preliminary prospectus** ” means any preliminary form of the Prospectus.

For purposes of this Agreement, “ **free writing prospectus** ” has the meaning set forth in Rule 405 under the Securities Act, “ **Time of Sale Prospectus** ” means the Basic Prospectus and the preliminary prospectus together with the free writing prospectuses, if any, each identified in Schedule II hereto and the pricing information set forth in Schedule II hereto, and “ **broadly available road show** ” means a “bona fide electronic road show” as defined in Rule 433(h)(5) under the Securities Act that has been made available without restriction to any person. As used herein, the terms “Registration Statement,” “Basic Prospectus,” “preliminary prospectus,” “Time of Sale Prospectus” and “Prospectus” shall include the documents, if any, incorporated by reference therein. The terms “ **supplement** ,” “ **amendment** ,” and “ **amend** ” as used herein with respect to the Registration Statement, the Basic Prospectus, the Time of Sale Prospectus, any preliminary prospectus or free writing prospectus shall include all documents subsequently filed by the Company with the Commission pursuant to the Securities Exchange Act of 1934, as amended (the “ **Exchange Act** ”), that are deemed to be incorporated by reference therein.

1. *Representations and Warranties* . The Company represents and warrants to and agrees with each of the Underwriters that:

(a) The Registration Statement became effective upon filing; the filing date of the Registration Statement was not earlier than the date three years before the execution date of this Agreement; and no stop order suspending the effectiveness of the Registration Statement is in effect, and no proceedings for such purpose are pending before or, to the knowledge of the Company, threatened by, the Commission. (i) At the time of filing the Registration Statement, (ii) at the time of the most recent amendment thereto for the purposes of complying with Section 10(a)(3) of the Act (whether such amendment was by post-effective amendment, incorporated report filed pursuant to Sections 13 or 15(d) of the Exchange Act or form of prospectus), (iii) at the time the Company or any person acting on its behalf (within the meaning, for this clause only, of Rule 163(c)) made any offer relating to the Shares in reliance on the exemption in Rule 163, and (iv) as of the date hereof, the Company was or is, as applicable, a “well-known seasoned issuer” (as defined in Rule 405 under the Securities Act) eligible to use the Registration Statement as an automatic shelf registration statement and the Company has not received notice that the Commission objects to the use of the Registration Statement as an automatic shelf registration statement.

(b) (i) Each document, if any, filed or to be filed pursuant to the Exchange Act and incorporated by reference in the Time of Sale Prospectus or the Prospectus complied or will comply when so filed in all material respects with the Exchange Act and the applicable rules and regulations of the Commission thereunder, (ii) each part of the Registration Statement,

when such part became effective, did not contain, and each such part, as amended or supplemented, if applicable, as of the Closing Date (as defined in Section 4) and as of any Option Closing Date (as defined in Section 2) 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, (iii) the Registration Statement, as of the date hereof, does not and, as of the Closing Date and as of any Option Closing Date, 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, (iv) the Registration Statement and the Prospectus comply, and as amended or supplemented, if applicable, will comply in all material respects with the Securities Act and the applicable rules and regulations of the Commission thereunder, (v) the Time of Sale Prospectus does not, and at the time of each sale of the Shares in connection with the offering when the Prospectus is not yet available to prospective purchasers and at the Closing Date and as of any Option Closing Date, the Time of Sale Prospectus, as then amended or supplemented by the Company, if applicable, will not, contain any untrue statement of a material fact or omit to state a material fact necessary to make the statements therein, in the light of the circumstances under which they were made, not misleading, (vi) each broadly available road show, if any, when considered together with the Time of Sale Prospectus, does not and will not as of the Closing Date and as of any Option Closing Date 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 and (vii) the Prospectus as of the date hereof does not contain and, as amended or supplemented, if applicable, as of the Closing Date and as of any Option Closing Date 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, except that the representations and warranties set forth in this paragraph do not apply to statements or omissions in the Registration Statement, the Time of Sale Prospectus or the Prospectus based upon information relating to any Underwriter furnished to the Company in writing by such Underwriter through you expressly for use therein.

(c) (i) At the earliest time after the filing of the Registration Statement that the Company or another offering participant made a *bona fide* offer (within the meaning of Rule 164(h)(2)) of the Shares and (ii) as of the date hereof, the Company is not an “ineligible issuer” in connection with the offering pursuant to Rules 164, 405 and 433 under the Securities Act. Any free writing prospectus that the Company is required to file pursuant to Rule 433(d) under the Securities Act has been, or will be, filed with the Commission in accordance with the requirements of the Securities Act and the applicable rules and regulations of the Commission thereunder. 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 (x) complies or will comply in all material respects with the requirements of the Securities Act and the applicable rules and regulations of the Commission thereunder and (y) does not include any information that conflicts with the information contained in the Registration Statement, including any document incorporated therein by reference and any prospectus supplement deemed to be a part thereof that has not been superseded or modified. Except for the free writing prospectuses, if any, identified in Schedule II hereto forming part of the Time of Sale Prospectus, and electronic road shows, if any, each furnished to you before first use, the

Company has not prepared, used or referred to, and will not, without your prior consent, prepare, use or refer to, any free writing prospectus.

(d) There has not occurred any material adverse change, or any development involving a prospective material adverse change, in the condition, financial or otherwise, or in the earnings, business or operations of the Company and its subsidiaries, taken as a whole, from that set forth in the Time of Sale Prospectus.

(e) The Company has been duly incorporated, is validly existing as a corporation in good standing under the laws of the jurisdiction of its incorporation, has the corporate power and authority to own its property and to conduct its business as described in the Time of Sale Prospectus and is duly qualified to transact business and is in good standing in each jurisdiction in which the conduct of its business or its ownership or leasing of property requires such qualification, except to the extent that the failure to be so qualified or be in good standing would not have a material adverse effect on the Company and its subsidiaries, taken as a whole.

(f) The Company's only subsidiaries are as described in Exhibit 21.1 of the Company's Annual Report on Form 10-K for the fiscal year ended December 31, 2016.

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

(h) The authorized capital stock of the Company conforms as to legal matters to the description thereof contained in each of the Time of Sale Prospectus and the Prospectus.

(i) The shares of Common Stock outstanding prior to the issuance of the Shares have been duly authorized and are validly issued, fully paid and non-assessable.

(j) The Shares have been duly authorized and, when issued and delivered in accordance with the terms of this Agreement, will be validly issued, fully paid and non-assessable, and the issuance of such Shares will not be subject to any preemptive or similar rights, which have not otherwise been waived.

(k) The execution and delivery by the Company of, and the performance by the Company of its obligations under, this Agreement will not contravene any provision of (i) applicable law, (ii) the articles of incorporation or bylaws of the Company, (iii) any agreement or other instrument binding upon the Company or any of its subsidiaries or (iv) any judgment, order or decree of any governmental body, agency or court having jurisdiction over the Company or any subsidiary, except in the cases of clauses (i), (iii) and (iv) for any such contravention that would not, singly or in the aggregate, have a material adverse effect on the Company and its subsidiaries taken as a whole, and no consent, approval, authorization or order of, or qualification with, any governmental body or agency is required for the performance by the Company of its obligations under this Agreement, except such as may be required under the Securities Act or the rules and regulations thereunder or by the securities or Blue Sky laws of the various states or the rules and regulations of the Financial Industry Regulatory Authority ("FINRA") in connection with the offer and sale of the Shares.

(l) There are no legal or governmental proceedings pending or, to the knowledge of the Company, threatened to which the Company or any of its subsidiaries is a party or to which any of the properties of the Company or any of its subsidiaries is subject other than (i) proceedings accurately described in all material respects in the Time of Sale Prospectus or (ii) proceedings that would not reasonably be expected to have a material adverse effect on the Company and its subsidiaries, taken as a whole, or on the power or ability of the Company to perform its obligations under this Agreement or to consummate the transactions contemplated by the Time of Sale Prospectus; and there are no statutes, regulations, contracts or other documents that are required to be described in the Registration Statement or the Prospectus or to be filed as exhibits to the Registration Statement that are not described or filed as required.

(m) Each preliminary prospectus with respect to the offering of the Shares filed as part of the Registration Statement as originally filed or as part of any amendment thereto, or filed pursuant to Rule 424 under the Securities Act, complied when so filed in all material respects with the Securities Act and the applicable rules and regulations of the Commission thereunder.

(n) The Company is not, and after giving effect to the offering and sale of the Shares and the application of the proceeds thereof as described in the Prospectus will not be, required to be registered as an “investment company” as such term is defined in the Investment Company Act of 1940, as amended.

(o) The Company and its subsidiaries (i) are in compliance with any and all applicable foreign, federal, state and local laws and regulations relating to the protection of human health and safety, the environment or hazardous or toxic substances or wastes, pollutants or contaminants (“**Environmental Laws**”), (ii) have received all permits, licenses or other approvals required of them under applicable Environmental Laws to conduct their respective businesses and (iii) are in compliance with all terms and conditions of any such permit, license or approval, except where such noncompliance with Environmental Laws, failure to receive required permits, licenses or other approvals or failure to comply with the terms and conditions of such permits, licenses or approvals would not, singly or in the aggregate, have a material adverse effect on the Company and its subsidiaries, taken as a whole.

(p) To the Company’s knowledge, there are no facts currently existing that will require the Company or any of its subsidiaries to incur costs or liabilities associated with Environmental Laws (including, without limitation, any capital or operating expenditures required for clean-up, closure of properties or compliance with Environmental Laws or any permit, license or approval, any related constraints on operating activities and any potential liabilities to third parties) which would, singly or in the aggregate, have a material adverse effect on the Company and its subsidiaries, taken as a whole.

(q) Except as disclosed in the Time of Sale Prospectus and the Prospectus, neither the Company nor any of its business operations 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 to result in a material adverse effect on the Company and its subsidiaries, taken as a whole. For purposes of this Agreement, “**Health Care Laws**” means, to the extent applicable to the Company, (i) the Federal Food, Drug, and Cosmetic Act, and the regulations

promulgated thereunder, (ii) all federal and state fraud and abuse laws, including, without limitation, the federal Anti-Kickback Statute (42 U.S.C. §1320a-7b(b)), the Stark Law (42 U.S.C. §1395nn), the civil False Claims Act (31 U.S.C. §3729 et seq.), Sections 1320a-7 and 1320a-7a of Title 42 of the United States Code and the regulations promulgated pursuant to such statutes, (iii) the administrative simplification provisions of the Health Insurance Portability and Accountability Act of 1996 (18 U.S.C. §§669, 1035, 1347 and 1518; 42 U.S.C. §1320d et seq.) and the regulations promulgated thereunder, (iv) Titles XVIII (42 U.S.C. §1395 et seq.) and XIX (42 U.S.C. §1396 et seq.) of the Social Security Act and the regulations promulgated thereunder, (v) the Medicare Prescription Drug, Improvement, and Modernization Act of 2003 (42 U.S.C. §1395w-101 et seq.) and the regulations promulgated thereunder, (vi) all statutes, rules or regulations of applicable governmental authorities applicable to the ownership, testing, development, manufacture, quality, safety, accreditation, packaging, use, distribution, labeling, promotion, sale, offer for sale, import, export or disposal of any product manufactured or distributed by the Company and (vii) any and all other health care laws and regulations applicable to the business of the Company as currently conducted by it as described in the Time of Sale Prospectus, each of (i) through (vii) as may be amended from time to time.

(r) Except as described in the Time of Sale Prospectus and the Prospectus, there are no contracts, agreements or understandings between the Company and any person granting such person the right to require the Company to file a registration statement under the Securities Act with respect to any securities of the Company or to require the Company to include such securities with the Shares registered pursuant to the Registration Statement.

(s) Neither the Company nor any of its subsidiaries or affiliates, nor any director or officer, nor to the knowledge of the Company, any employee, agent or representative of the Company or of any of its subsidiaries or affiliates, has taken any action (i) in violation of the Foreign Corrupt Practices Act of 1977, as amended, or any applicable law or regulation implementing the OECD Convention on Combating Bribery of Foreign Public Officials in International Business Transactions, and the Bribery Act 2010 of the United Kingdom or any other applicable anti-bribery or anti-corruption law (collectively “**Anti-Corruption Laws**”), or (ii) in furtherance of an offer, payment, promise to pay, or authorization or approval of the payment or giving or receiving of money, property, gifts or anything else of value (including nonmonetary benefits such as employment opportunities, gifts, travel, or entertainment), directly or indirectly, to any “government official” (including any officer or employee of a government or government-owned or controlled entity or of a public international organization, or any person acting in an official capacity for or on behalf of any of the foregoing, or any political party or party official or candidate for political office) or any other person to influence official action, to gain or retain business, or secure an improper advantage for the benefit of the Company. The Company and its subsidiaries have conducted their businesses in compliance in all material respects with the Anti-Corruption Laws, and the Company and its subsidiaries will not knowingly, directly or indirectly, use the proceeds of the offering and sale of the Shares, or lend, contribute or otherwise make available such proceeds to any subsidiary, affiliate, agent, partner or other person or entity, for the purpose of financing or facilitating any activity that would violate any of the Anti-Corruption Laws.

(t) The operations of the Company and its subsidiaries are and have been conducted at all times in compliance with applicable financial recordkeeping and reporting requirements, including, without limitation, those of the Bank Secrecy Act, as amended by Title III of the Uniting and Strengthening America by Providing Appropriate Tools Required to Intercept and Obstruct Terrorism Act of 2001, and the applicable anti-money laundering statutes of jurisdictions where the Company and its subsidiaries conduct business, the rules and regulations thereunder and any related or similar rules, regulations or guidelines, issued, administered or enforced by any governmental agency where the Company and its subsidiaries conduct business (collectively, the “**Anti-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 Anti-Money Laundering Laws is pending or, to the best knowledge of the Company, threatened.

(u) Neither the Company nor any of its subsidiaries or, any director, officer, or to the knowledge of the Company, any employee, agent, affiliate or representative of the Company or any of its subsidiaries, is an individual or entity (“**Person**”) that is, or is owned or controlled by a Person that is: (i) the subject of any sanctions administered or enforced by the U.S. Department of Treasury’s Office of Foreign Assets Control (and including, without limitation, the designation as a “specially designated national” or “blocked person”), the United Nations Security Council, the European Union, Her Majesty’s Treasury or other relevant sanctions authority (collectively, “**Sanctions**”), nor (ii) located, organized or resident in a country or territory that is the subject of Sanctions (including, without limitation, Cuba, Iran, North Korea, Sudan, Syria and the Crimea region of Ukraine). For the past 5 years, the Company has not knowingly engaged in and is not now knowingly engaged in any dealings or transactions with any Person, or in any country or territory, that at the time of the dealing or transaction is or was the subject of Sanctions.

(v) Subsequent to the respective dates as of which information is given in each of the Registration Statement, the Time of Sale Prospectus and the Prospectus, (i) the Company and its subsidiaries have not incurred any material liability or obligation, direct or contingent, nor entered into any material transaction; (ii) the Company has not purchased any of its outstanding capital stock, nor declared, paid or otherwise made any dividend or distribution of any kind on its capital stock other than ordinary and customary dividends and net settlements in connection with the Company’s existing employee compensation plans; and (iii) there has not been any material change in the capital stock, short-term debt or long-term debt of the Company and its subsidiaries, except in each case as described in each of the Registration Statement, the Time of Sale Prospectus and the Prospectus, respectively, or except for a change in the number of outstanding shares of common stock of the Company due to the issuance of shares upon the exercise of currently outstanding options or other stock-based awards or the vesting of restricted stock units under (i) the Company’s Amended and Restated 2000 Stock Incentive Plan (the “**2000 Plan**”), 2013 Incentive Plan (the “**2013 Plan**”), 2015 Incentive Plan (the “**2015 Plan**”), and 2017 Incentive Plan (the “**2017 Plan**”) or (ii) inducement grants previously made to new employees.

(w) The Company and its subsidiaries do not own any real property. The Company and its subsidiaries have good title to all personal property owned by them which is material to the business of the Company and its subsidiaries, in each case free and clear of all liens,

encumbrances and defects except such as are described in the Time of Sale Prospectus or such as do not materially affect the value of such property and do not interfere with the use made and proposed to be made of such property by the Company and its subsidiaries; and any material real property and buildings held under lease by the Company and its subsidiaries are held by them under valid, subsisting and enforceable leases with such exceptions as are not material and do not interfere with the use made and proposed to be made of such property and buildings by the Company and its subsidiaries, in each case except as described in the Time of Sale Prospectus.

(x) Except as described in the Time of Sale Prospectus, (A) the Company and its subsidiaries own or possess, or can acquire on reasonable terms, all material patents, patent rights, licenses, inventions, copyrights, know-how (including trade secrets and other unpatented and/or unpatentable proprietary or confidential information, systems or procedures), trademarks, service marks, trade names and other intellectual property (collectively, “**Intellectual Property**”) currently used and proposed to be used by them in connection with the Company’s business as now conducted and as described in the Time of Sale Prospectus, and (B) neither the Company nor any of its subsidiaries has breached any material provision of any Intellectual Property license or received any notice of infringement of or conflict with asserted rights of others with respect to any of the foregoing, in the case of each of (A) and (B), which, singly or in the aggregate, if the subject of an unfavorable decision, ruling or finding, would reasonably be expected to have a material adverse effect on the Company and its subsidiaries, taken as a whole. There are no valid and enforceable rights of third parties to any Intellectual Property that are or would be infringed by the business currently conducted or planned to be conducted by the Company and its subsidiaries or in the manufacture, use, sale or offer for sale of its presently proposed products, as such planned business and proposed products are described in the Time of Sale Prospectus which infringement, singly or in the aggregate, would reasonably be expected to have a material adverse effect on the Company and its subsidiaries, taken as a whole. There are no pending patent applications of which the Company is aware, which, if granted in current form, would be infringed by the business currently conducted by it or proposed to be conducted by it as described in the Time of Sale Prospectus, which infringement, singly or in the aggregate, would reasonably be expected to have a material adverse effect on the Company and its subsidiaries, taken as a whole. Neither the Company, nor any of its subsidiaries, is subject to any judgment, order, writ, injunction or decree of any court or any federal, state, local, foreign or other governmental department, commission, board, bureau, agency or instrumentality, domestic or foreign, or any arbitrator, nor has it entered into or is it a party to any contract, in the case of each of the foregoing, which materially restricts or impairs its use of any Intellectual Property and which restriction or impairment, singly or in the aggregate, would reasonably be expected to have a material adverse effect on the Company and its subsidiaries, taken as a whole. To the knowledge of the Company, there are no ongoing infringements by others of any Intellectual Property owned by the Company or its subsidiaries in connection with the business currently conducted by the Company and its subsidiaries or its presently proposed products, as described in the Time of Sale Prospectus, which infringement, singly or in the aggregate, would reasonably be expected to have a material adverse effect on the Company and its subsidiaries, taken as a whole. The Company is not aware of any reason why any Intellectual Property owned or controlled by it is or should be held to be invalid or

unenforceable, which infringement, singly or in the aggregate, would reasonably be expected to have a material adverse effect on the Company and its subsidiaries, taken as a whole.

(y) Except as described in the Time of Sale Prospectus, no material labor dispute with the employees of the Company or any of its subsidiaries exists or, to the knowledge of the Company, is imminent; and the Company is not aware of any existing, threatened or imminent labor disturbance by the employees of any of its principal suppliers, manufacturers or contractors that could have a material adverse effect on the Company and its subsidiaries, taken as a whole.

(z) The Company and each of its subsidiaries are insured by insurers of recognized financial responsibility against such losses and risks and in such amounts as are prudent in the reasonable opinion of the Company's management and customary in the businesses in which they are engaged; neither the Company nor any of its subsidiaries has been refused any insurance coverage sought or applied for; and neither the Company nor any of its subsidiaries has any reason to believe that it will not be able to renew its existing insurance coverage as and when such coverage expires or to obtain comparable coverage from similar insurers as may be necessary to continue its business at a cost that would not reasonably be expected to have a material adverse effect on the Company and its subsidiaries, taken as a whole, except as described in the Time of Sale Prospectus.

(aa) The Company and its subsidiaries possess all material certificates, authorizations and permits issued by the appropriate federal, state or foreign regulatory authorities necessary to conduct their respective businesses in the manner described in the Time of Sale Prospectus, including, without limitation, (i) all U.S. Food and Drug Administration (the "FDA") clearances or approvals necessary to conduct the Company's business as now conducted and (ii) applicable foreign regulatory agency clearances, permits or approvals necessary to conduct the Company's business as now conducted. Neither the Company nor any of its subsidiaries has received any notice of proceedings relating to the revocation or modification of any such certificate, authorization or permit, including, without limitation, any FDA Form 483, notice of adverse finding, warning letter, untitled letter or other correspondence or notice from the FDA, any other governmental or regulatory authority or any third party which, singly or in the aggregate, if the subject of an unfavorable decision, ruling or finding, would reasonably be expected to have a material adverse effect on the Company and its subsidiaries, taken as a whole, except as described in the Time of Sale Prospectus.

(bb) The Company and each of its subsidiaries have operated their businesses and currently are in compliance in all material respects with all applicable rules, regulations and policies of the FDA and any applicable comparable foreign regulatory organization, including, without limitation, all applicable directives and regulations of the European Medicines Agency. The Company has not received notice of any claim, action, suit, proceeding, hearing, enforcement, investigation, arbitration or other action from the FDA, any other federal, state, local or foreign governmental or regulatory authority or third party alleging that any product operation or activity is in material violation of any applicable laws or material certificates, authorizations or permits and has no knowledge that the FDA or any other federal, state, local or foreign governmental or regulatory authority or third party is considering any such claim, litigation, arbitration, action, suit, investigation or proceeding.

(cc) The description of the results of the studies, tests and trials conducted by or on behalf of the Company contained in the Time of Sale Prospectus and the Prospectus are accurate in all material respects and the Company has no knowledge of any other studies, tests or trials, the results of which are materially inconsistent with the results described in the Time of Sale Prospectus and the Prospectus

(dd) Any clinical trials or human and animal studies conducted by or on behalf of the Company and described in the Time of Sale Prospectus were and, if still pending, are being conducted (to the Company's knowledge, after due inquiry, with respect to such studies conducted by third parties) in accordance, in all material respects, with standard medical and scientific research procedures, the Federal Food, Drug and Cosmetic Act and the rules and regulations promulgated thereunder, and all applicable rules, regulations and policies of the FDA, including, where applicable, current good clinical practices and Good Laboratory Practices, as such terms are understood in the Company's industry, and all applicable foreign regulatory requirements and standards. Except as described in the Time of Sale Prospectus or the Registration Statement, the Company has not received any notices or correspondence from the FDA or any other governmental authority contemplating or requiring the termination, suspension or modification of any studies, tests or preclinical or clinical trials conducted by or on behalf of the Company, other than ordinary course communications with respect to modifications in connection with the design and implementation of such studies, trials and tests, none of which modifications would have a material impact on such study, trial or test.

(ee) Except as described in the Time of Sale Prospectus or the Registration Statement, the Company and each of its subsidiaries maintain a system of internal accounting controls sufficient to provide reasonable assurance that (i) transactions are executed in accordance with management's general or specific authorizations; (ii) transactions are recorded as necessary to permit preparation of financial statements in conformity with generally accepted accounting principles and to maintain asset accountability; (iii) access to assets is permitted only in accordance with management's general or specific authorization; and (iv) the recorded accountability for assets is compared with the existing assets at reasonable intervals and appropriate action is taken with respect to any differences. Except as described in the Time of Sale Prospectus, since the end of the Company's most recent audited fiscal year, there has been (A) no material weakness in the Company's internal control over financial reporting (whether or not remediated) and (B) no change in the Company's internal control over financial reporting that has materially affected, or is reasonably likely to materially affect, the Company's internal control over financial reporting.

(ff) Except as described in the Time of Sale Prospectus or the Registration Statement, the Company has not sold, issued or distributed any shares of Common Stock during the six-month period preceding the date hereof, including any sales pursuant to Rule 144A under, or Regulation D or S of, the Securities Act, other than shares issued pursuant to employee benefit plans, qualified stock option plans or other compensation or incentive plans or pursuant to the exercise or vesting of, as applicable, outstanding options, restricted stock units, other stock-based awards or inducement grants made to new employee hires.

(gg) The Company has filed all federal, state, local and foreign tax returns required to be filed through the date of this Agreement or has requested extensions thereof (except, in

each case, where the failure to file would not, individually or in the aggregate, reasonably be expected to have a material adverse effect on the Company and its subsidiaries, taken as a whole) and has paid all taxes required to be paid thereon (except for cases in which the failure to file or pay would not reasonably be expected to have a material adverse effect on the Company and its subsidiaries, taken as a whole, or, except as currently being contested in good faith and for which reserves required by U.S. GAAP have been recorded in the financial statements of the Company), and there is no tax deficiency which if determined adversely to the Company would reasonably be expected to have (nor does the Company have any notice or knowledge of any tax deficiency which would reasonably be expected to be determined adversely to the Company and which would reasonably be expected to have) a material adverse effect on the Company and its subsidiaries, taken as a whole.

2. *Agreements to Sell and Purchase*. The Company hereby agrees to sell to the several Underwriters, and each Underwriter, upon the basis of the representations and warranties herein contained, but subject to the conditions hereinafter stated, agrees, severally and not jointly, to purchase from the Company the respective numbers of Firm Shares set forth in Schedule I hereto opposite its name at \$26.79 a share (the “**Purchase Price**”).

On the basis of the representations and warranties contained in this Agreement, and subject to its terms and conditions, the Company agrees to sell to the Underwriters the Additional Shares, and the Underwriters shall have the right to purchase, severally and not jointly, up to 1,842,150 Additional Shares at the Purchase Price, provided that the Purchase Price per Additional Share shall be reduced by an amount per share equal to any dividends or distributions declared by the Company and payable on the Firm Shares but not payable on the Additional Shares. You may exercise this right on behalf of the Underwriters in whole or, from time to time, in part by giving written notice to the Company not later than 30 days after the date of the Prospectus. Any exercise notice shall specify the number of Additional Shares to be purchased by the Underwriters and the date on which such shares are to be purchased. Each purchase date must be at least two business days after the written notice is given and may not be earlier than the Closing Date nor later than ten business days after the date of such notice; provided, however, that if an exercise notice is delivered prior to the Closing Date, then the purchase date for such notice shall be the Closing Date. On each day, if any, that Additional Shares are to be purchased (an “**Option Closing Date**”), each Underwriter agrees, severally and not jointly, to purchase the number of Additional Shares (subject to such adjustments to eliminate fractional shares as you may determine) that bears the same proportion to the total number of Additional Shares to be purchased on such Option Closing Date as the number of Firm Shares set forth in Schedule I hereto opposite the name of such Underwriter bears to the total number of Firm Shares.

3. *Terms of Public Offering*. The Company is advised by you that the Underwriters propose to make a public offering of their respective portions of the Shares as soon after the Registration Statement and this Agreement have become effective as in your judgment is advisable. The Company is further advised by you that the Shares are to be offered to the public initially at \$28.50 a share (the “**Public Offering Price**”) and to certain dealers selected by you at a price that represents a concession not in excess of \$1.026 a share under the Public Offering Price.

4. *Payment and Delivery* . Payment for the Firm Shares shall be made to the Company in Federal or other funds immediately available in New York City against delivery of such Firm Shares for the respective accounts of the several Underwriters at 10:00 a.m., New York City time, on September 11, 2017 or at such other time on the same or such other date, not later than the fifth business day thereafter, as shall be designated in writing by you. The time and date of such payment are hereinafter referred to as the “ **Closing Date** .”

Payment for any Additional Shares shall be made to the Company in Federal or other funds immediately available in New York City against delivery of such Additional Shares for the respective accounts of the several Underwriters at 10:00 a.m., New York City time, on the date specified in the corresponding notice described in Section 2 or at such other time on the same or on such other date, in any event not later than the tenth business day thereafter, as shall be designated in writing by you.

The Firm Shares and Additional Shares shall be registered in such names and in such denominations as you shall request in writing not later than one full business day prior to the Closing Date or the applicable Option Closing Date, as the case may be. The Firm Shares and Additional Shares shall be delivered to you on the Closing Date or the applicable Option Closing Date, as the case may be, for the respective accounts of the several Underwriters, with any transfer taxes payable in connection with the transfer of the Shares to the Underwriters duly paid, against payment of the Purchase Price therefor.

5. *Conditions to the Underwriters' Obligations* . The several obligations of the Underwriters are subject to the following conditions:

(a) Subsequent to the execution and delivery of this Agreement and prior to the Closing Date and any Option Closing Date:

(i) 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 of the securities of the Company or any of its subsidiaries by any “nationally recognized statistical rating organization,” as such term is defined for purposes of Section 3(A)(62) of the Exchange Act; and

(ii) there shall not have occurred any change, or any development involving a prospective change, in the condition, financial or otherwise, or in the earnings, business, prospects or operations of the Company and its subsidiaries, taken as a whole, from that set forth in the Time of Sale Prospectus as of the date of this Agreement that, in your judgment, is material and adverse or is reasonably likely to be material and adverse, and that makes it, in your judgment, impracticable to market the Shares on the terms and in the manner contemplated in the Time of Sale Prospectus.

(b) The Underwriters shall have received on the Closing Date a certificate, dated the Closing Date and signed by an executive officer of the Company, to the effect set forth in Section 5(a)(i) above and to the effect that (i) the representations and warranties of the Company contained in this Agreement are true and correct as of the Closing Date and (ii) that

the Company has complied with all of the agreements and satisfied all of the conditions on its part to be performed or satisfied hereunder on or before the Closing Date.

The officer signing and delivering such certificate may rely upon the best of his or her knowledge as to proceedings threatened.

(c) The Underwriters shall have received on the Closing Date an opinion and negative assurance letter of Covington & Burling LLP, special counsel for the Company, dated the Closing Date, in the form previously agreed, which shall be rendered to the Underwriters at the request of the Company and shall so state therein.

(d) The Underwriters shall have received on the Closing Date an opinion of Hunton & Williams LLP, Virginia counsel for the Company, dated the Closing Date, in the form previously agreed, which shall be rendered to the Underwriters at the request of the Company and shall so state therein.

(e) The Underwriters shall have received on the Closing Date an opinion of Cooley LLP, intellectual property counsel to the Company, dated the Closing Date, in the form previously agreed.

(f) The Underwriters shall have received on the Closing Date an opinion or opinions of Ropes & Gray LLP, counsel for the Underwriters, dated the Closing Date, in form and substance reasonably satisfactory to the Managers, and such counsel shall have received such papers and information as they may reasonably request to enable them to pass upon such matters.

(g) The Underwriters shall have received, on each of the date hereof and the Closing Date, a letter, dated the date hereof or the Closing Date, as the case may be, in form and substance satisfactory to the Underwriters, from Ernst & Young LLP, independent public accountants, containing statements and information of the type ordinarily included in accountants' "comfort letters" to underwriters with respect to the financial statements and certain financial information contained in the Registration Statement, the Time of Sale Prospectus and the Prospectus; provided that the letter delivered on the Closing Date shall use a "cut-off date" not earlier than the date hereof.

(h) The "lock-up" agreements, each substantially in the form of Exhibit A hereto, between you and each executive officer and director of the Company relating to sales and certain other dispositions of shares of Common Stock or certain other securities, delivered to you on or before the date hereof, shall be in full force and effect on the Closing Date.

(i) The several obligations of the Underwriters to purchase Additional Shares hereunder are subject to the delivery to you on the applicable Option Closing Date of the following:

(i) a certificate, dated the Option Closing Date and signed by an executive officer of the Company, confirming that the certificate delivered on the Closing Date pursuant to Section 5(b) hereof remains true and correct as of such Option Closing Date;

(ii) an opinion and negative assurance letter of Covington & Burling LLP, special counsel for the Company, dated the Option Closing Date, relating to the Additional Shares to be purchased on such Option Closing Date and otherwise to the same effect as the opinion required by Section 5(c) hereof;

(iii) an opinion of Hunton & Williams LLP, Virginia counsel for the Company, dated the Option Closing Date, relating to the Additional Shares to be purchased on such Option Closing Date and otherwise to the same effect as the opinion required by Section 5(d) hereof;

(iv) an opinion of Cooley LLP, intellectual property counsel to the Company, dated the Option Closing Date and otherwise to the same effect as the opinion required by Section 5(e) hereof;

(v) an opinion or opinions of Ropes & Gray LLP, counsel for the Underwriters, dated the Option Closing Date, relating to the Additional Shares to be purchased on such Option Closing Date and otherwise to the same effect as the opinion required by Section 5(f) hereof;

(vi) a letter dated the Option Closing Date, in form and substance satisfactory to the Underwriters, from Ernst & Young, LLP, independent public accountants, substantially in the same form and substance as the letter furnished to the Underwriters pursuant to Section 5(g) hereof; provided that the letter delivered on the Option Closing Date shall use a “cut-off date” not earlier than three business days prior to such Option Closing Date; and

(vii) such other documents as you may reasonably request with respect to the good standing of the Company, the due authorization and issuance of the Additional Shares to be sold on such Option Closing Date and other matters related to the issuance of such Additional Shares.

6. *Covenants of the Company* . The Company covenants with each Underwriter as follows:

(a) To furnish to you, without charge, a signed copy of the Registration Statement (including exhibits thereto) and for delivery to each other Underwriter a conformed copy of the Registration Statement (without exhibits thereto) and to furnish to you in New York City, without charge, as promptly as practicable and in any event no later than 10:00 a.m. New York City time on the second business day succeeding the date of this Agreement and during the period mentioned in Section 6(e) or 6(f) below, as many copies of the Time of Sale Prospectus, the Prospectus and any supplements and amendments thereto or to the Registration Statement as you may reasonably request.

(b) Before amending or supplementing the Registration Statement, the Time of Sale Prospectus or the Prospectus, to furnish to you a copy of each such proposed amendment or supplement and to provide you a reasonable opportunity to comment on any such proposed amendment or supplement prior to filing it, and to file with the Commission within the

applicable period specified in Rule 424(b) under the Securities Act any prospectus required to be filed pursuant to such Rule.

(c) To furnish to you a copy of each proposed free writing prospectus to be prepared by or on behalf of, used by, or referred to by the Company with respect to the Shares and not to use or refer to any such proposed free writing prospectus to which you reasonably and promptly object.

(d) Not to take any action that would result in an Underwriter or the Company being required to file with the Commission pursuant to Rule 433(d) under the Securities Act a free writing prospectus prepared by or on behalf of the Underwriter that the Underwriter otherwise would not have been required to file thereunder.

(e) If the Time of Sale Prospectus is being used to solicit offers to buy the Shares at a time when the Prospectus is not yet available to prospective purchasers and any event shall occur or condition exist as a result of which it is necessary to amend or supplement the Time of Sale Prospectus in order to make the statements therein, in the light of the circumstances, not misleading, or if, in the opinion of counsel for the Company or the Underwriters, it is necessary to amend or supplement the Time of Sale Prospectus to comply with applicable law, promptly to 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, in the light of the circumstances under which they were made, when the Time of Sale Prospectus is delivered to a prospective purchaser, be misleading, or so that the Time of Sale Prospectus, as amended or supplemented, will comply with applicable law.

(f) If, during such period after the first date of the public offering of the Shares as in the opinion of counsel for the Company or the Underwriters the Prospectus (or in lieu thereof the notice referred to in Rule 173(a) under the Securities Act) is required by law to be delivered in connection with sales by an Underwriter or dealer, any event shall occur or condition exist as a result of which it is necessary to amend or supplement the Prospectus in order to make the statements therein, in the light of the circumstances under which they were made, when the Prospectus (or in lieu thereof the notice referred to in Rule 173(a) under the Securities Act) is delivered to a purchaser, not misleading, or if, in the opinion of counsel for the Company or the Underwriters, it is necessary to amend or supplement the Prospectus to comply with applicable law, promptly to prepare, file with the Commission and furnish, at its own expense, to the Underwriters and to the dealers (whose names and addresses you will furnish to the Company) to which Shares may have been sold by you on behalf of the Underwriters and to any other dealers upon request, either amendments or supplements to the Prospectus so that the statements in the Prospectus as so amended or supplemented will not, in the light of the circumstances under which they were made, when the Prospectus (or in lieu thereof the notice referred to in Rule 173(a) under the Securities Act) is delivered to a purchaser, be misleading or so that the Prospectus, as amended or supplemented, will comply with applicable law.

(g) To endeavor to qualify the Shares for offer and sale under the securities or Blue Sky laws of such jurisdictions as you shall reasonably request; provided, that in no event shall

the Company or any of its subsidiaries be obligated to qualify to do business as a foreign corporation in any jurisdiction in which it is not now so qualified or to file any general consent to service of process.

(h) To make generally available to the Company's security holders and to you as soon as practicable an earning statement covering a period of at least 12 months beginning with the first fiscal quarter of the Company occurring after the date of this Agreement which shall satisfy the provisions of Section 11(a) of the Securities Act and the rules and regulations of the Commission thereunder.

(i) The Company will not, directly or indirectly, knowingly use the proceeds of the offering, or lend, contribute or otherwise make available such proceeds to any subsidiary, joint venture partner or other Person: (x) to fund or facilitate any activities or business of or with any Person or in any country or territory that, at the time of such funding or facilitation, is the subject of Sanctions; or (y) in any other manner that will result in a violation of Sanctions by any Person (including any Person participating in the offering, whether as underwriter, advisor, investor or otherwise).

(j) Whether or not the transactions contemplated in this Agreement are consummated or this Agreement is terminated, to pay or cause to be paid all expenses incident to the performance of the Company's obligations under this Agreement, including: (i) the fees, disbursements and expenses of the Company's counsel and the Company's accountants in connection with the registration and delivery of the Shares under the Securities Act and all other fees or expenses in connection with the preparation and filing of the Registration Statement, any preliminary prospectus, the Time of Sale Prospectus, the Prospectus, any free writing prospectus prepared by or on behalf of, used by, or referred to by the Company and amendments and supplements to any of the foregoing, including all printing costs associated therewith, and the mailing and delivering of copies thereof to the Underwriters and dealers, in the quantities hereinabove specified, (ii) all costs and expenses related to the transfer and delivery of the Shares to the Underwriters, including any transfer or other taxes payable thereon, (iii) the cost of printing or producing any Blue Sky or Legal Investment memorandum in connection with the offer and sale of the Shares under state securities laws and all expenses in connection with the qualification of the Shares for offer and sale under state securities laws as provided in Section 6(g) hereof, including filing fees and the reasonable fees and disbursements of counsel for the Underwriters in connection with such qualification and in connection with the Blue Sky or Legal Investment memorandum, (iv) all filing fees and the reasonable fees and disbursements of counsel to the Underwriters incurred in connection with the review and qualification of the offering of the Shares by FINRA, (v) all costs and expenses incident to listing the Shares on the Nasdaq Global Select Market, (vi) the cost of printing certificates representing the Shares, (vii) the costs and charges of any transfer agent, registrar or depository for the Shares, (viii) the costs and expenses of the Company relating to investor presentations on any "road show" undertaken in connection with the marketing of the offering of the Shares, including, 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 written approval of the Company, travel and lodging expenses of the representatives and officers of the Company and

any such consultants, and the cost of any aircraft chartered in connection with any road show (provided, that the prior written approval of the Company is obtained prior to the chartering of any such aircraft), (ix) the document production charges and expenses associated with printing this Agreement, and (x) all other costs and expenses incident to the performance of the obligations of the Company hereunder for which provision is not otherwise made in this Section. It is understood, however, that except as provided in this Section 6, Section 8 entitled "Indemnity and Contribution," the last sentence of Section 9 below and the last paragraph of Section 10 below, the Underwriters will pay all of their costs and expenses, including fees and disbursements of their counsel, stock transfer taxes payable on resale of any of the Shares by them, travel and lodging expenses of their representatives in connection with any road show, and any advertising expenses connected with any offers they may make, it being further understood, however, that the fees and disbursements of counsel for the Underwriters to be paid by the Company pursuant to clauses (iii) and (iv) above shall not exceed \$10,000, in the aggregate.

The Company also covenants with each Underwriter that, without the prior written consent of the Managers on behalf of the Underwriters, it will not, during the period through the 90th day after the date of the Prospectus, (A) offer, pledge, sell, contract to sell, sell any option or contract to purchase, purchase any option or contract to sell, grant any option, right or warrant to purchase, lend, or otherwise transfer or dispose of, directly or indirectly, any shares of Common Stock or any securities convertible into or exercisable or exchangeable for Common Stock or (B) enter into any swap or other arrangement that transfers to another, in whole or in part, any of the economic consequences of ownership of the Common Stock, whether any such transaction described in clause (A) or (B) above is to be settled by delivery of Common Stock or such other securities, in cash or otherwise or (C) file any registration statement (other than on Form S-8) with the Commission relating to the offering of any shares of Common Stock or any securities convertible into or exercisable or exchangeable for Common Stock.

The restrictions contained in the preceding paragraph shall not apply to (1) the Shares to be sold hereunder, (2) (i) the issuance by the Company of Common Stock upon the exercise of outstanding stock options or other stock-based awards or vesting of outstanding restricted stock units or other stock-based awards or issuances of shares of Common Stock under the 2000 Plan, the 2013 Plan, the 2015 Plan or the 2017 Plan or pursuant to inducement grants to new employees or upon the exercise of currently outstanding options granted outside of such plans, (ii) the grant by the Company of stock options, restricted stock units or other stock-based awards under the 2017 Plan or pursuant to inducement grants to new employees or (iii) the conversion of a security outstanding on the date hereof described in the Registration Statement or of which the Underwriters have been advised in writing or (3) issuances of Common Stock or other securities in connection with a transaction that includes a commercial relationship (including joint ventures, marketing or distribution arrangements, collaboration agreements or intellectual property license agreements) or any acquisition of assets or at least a controlling portion of the equity of another entity provided that (x) the aggregate number of shares of securities issued pursuant to this clause (3) shall not exceed 10% of the total number of outstanding shares of Common Stock immediately following the issuance and sale of the Shares pursuant hereto and (y) the holder of such shares or securities shall sign a lock-up agreement in the form attached hereto as Exhibit A if the issuance of Common Stock or other securities occurs during the 60-day restricted period.

7. *Covenants of the Underwriters* . Each Underwriter severally covenants with the Company not to take any action that would result in the Company being required to file with the Commission under Rule 433(d) a free writing prospectus prepared by or on behalf of such Underwriter that otherwise would not be required to be filed by the Company thereunder, but for the action of the Underwriter.

8. *Indemnity and Contribution* .

(a) The Company agrees to indemnify and hold harmless each Underwriter, the directors, officers, employees, affiliates and agents of each Underwriter and each person, if any, who controls any Underwriter within the meaning of either Section 15 of the Securities Act or Section 20 of the Exchange Act and each affiliate of any Underwriter within the meaning of Rule 405 under the Securities Act from and against any and all losses, claims, damages and liabilities (including, without limitation, any legal or other expenses reasonably incurred in connection with defending or investigating any such action or claim) caused by any untrue statement or alleged untrue statement of a material fact contained in the Registration Statement or any amendment thereof, any preliminary prospectus, the Time of Sale Prospectus or any amendment or supplement thereto, any issuer free writing prospectus as defined in Rule 433(h) under the Securities Act, any Company information that the Company has filed, or is required to file, pursuant to Rule 433(d) under the Securities Act, any road show as defined in Rule 433(h) under the Securities Act (a “ **road show** ”) or the Prospectus or any amendment or supplement thereto, or caused by 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, except insofar as such losses, claims, damages or liabilities are caused by any such untrue statement or omission or alleged untrue statement or omission based upon information relating to any Underwriter furnished to the Company in writing by such Underwriter through you expressly for use therein.

(b) Each Underwriter agrees, severally and not jointly, to indemnify and hold harmless the Company, its directors, its officers who sign the Registration Statement and each person, if any, who controls the Company within the meaning of either Section 15 of the Securities Act or Section 20 of the Exchange Act to the same extent as the foregoing indemnity from the Company to such Underwriter, but only with reference to information relating to such Underwriter furnished to the Company in writing by such Underwriter through you expressly for use in the Registration Statement, any preliminary prospectus, the Time of Sale Prospectus, any issuer free writing prospectus, road show or the Prospectus or any amendment or supplement thereto.

(c) In case any proceeding (including any governmental investigation) shall be instituted involving any person in respect of which indemnity may be sought pursuant to Section 8(a) or 8(b), such person (the “ **indemnified party** ”) shall promptly notify the person against whom such indemnity may be sought (the “ **indemnifying party** ”) in writing and the indemnifying party, upon request of the indemnified party, shall retain counsel reasonably satisfactory to the indemnified party to represent the indemnified party and any others the indemnifying party may designate in such proceeding and shall pay the reasonably incurred fees and disbursements of such counsel related to such proceeding. In any such proceeding, any indemnified party shall have the right to retain its own counsel, but the fees and expenses

of such counsel shall be at the expense of such indemnified party unless (i) the indemnifying party and the indemnified party shall have mutually agreed to the retention of such counsel, (ii) the named parties to any such proceeding (including any impleaded parties) include both the indemnifying party and the indemnified party and representation of both parties by the same counsel would be inappropriate due to actual or potential differing interests between them or (iii) the use of counsel chosen by the indemnifying party to represent the indemnified party would present such counsel with a conflict of interest. It is understood that the indemnifying party shall not, in respect of the legal expenses of any indemnified party in connection with any proceeding or related proceedings in the same jurisdiction, be liable for the fees and expenses of more than one separate firm (in addition to any local counsel) for all such indemnified parties and that all such fees and expenses shall be reimbursed as they are incurred. Such firm shall be designated in writing by the Managers, in the case of parties indemnified pursuant to Section 8(a), and by the Company, in the case of parties indemnified pursuant to Section 8(b). The indemnifying party 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 from and against any loss or liability by reason of such settlement or judgment. No indemnifying party shall, without the prior written consent of the indemnified party, effect any settlement of any pending or threatened proceeding in respect of which any indemnified party is or could have been a party and indemnity could have been sought hereunder by such indemnified party, unless such settlement includes an unconditional release of such indemnified party from all liability on claims that are the subject matter of such proceeding and does not include a statement as to or an admission of fault, culpability or a failure to act by or on behalf of any indemnified party.

(d) To the extent the indemnification provided for in Section 8(a) or Section 8(b) is unavailable to an indemnified party or insufficient in respect of any losses, claims, damages or liabilities referred to therein, then each indemnifying party under such paragraph, in lieu of indemnifying such indemnified party thereunder, shall contribute to the amount paid or payable by such indemnified party as a result of such losses, claims, damages or liabilities (i) in such proportion as is appropriate to reflect the relative benefits received by the Company on the one hand and the Underwriters on the other hand from the offering of the Shares or (ii) if the allocation provided by Section 8(d)(i) above is not permitted by applicable law, in such proportion as is appropriate to reflect not only the relative benefits referred to in Section 8(d)(i) above but also the relative fault of the Company on the one hand and of the Underwriters on the other hand in connection with the statements or omissions that resulted in such losses, claims, damages or liabilities, as well as any other relevant equitable considerations. The relative benefits received by the Company on the one hand and the Underwriters on the other hand in connection with the offering of the Shares shall be deemed to be in the same respective proportions as the net proceeds from the offering of the Shares (before deducting expenses) received by the Company and the total underwriting discounts and commissions received by the Underwriters, in each case as set forth in the table on the cover of the Prospectus, bear to the aggregate Public Offering Price of the Shares. The relative fault of the Company on the one hand and the Underwriters on the other hand shall be determined by reference to, among other things, whether the untrue or alleged untrue statement fact or the omission or alleged omission to state a material fact relates to information supplied by the Company or by the Underwriters and the parties' relative intent,

knowledge, access to information and opportunity to correct or prevent such statement or omission. The Underwriters' respective obligations to contribute pursuant to this Section 8 are several in proportion to the respective number of Shares they have purchased hereunder, and not joint.

(e) The Company and the Underwriters agree that it would not be just or equitable if contribution pursuant to this Section 8 were determined by pro rata allocation (even if the Underwriters were treated as one entity for such purpose) or by any other method of allocation that does not take account of the equitable considerations referred to in Section 8(d). The amount paid or payable by an indemnified party as a result of the losses, claims, damages and liabilities referred to in Section 8(d) shall be deemed to include, subject to the limitations set forth above, any legal or other expenses reasonably incurred by such indemnified party in connection with investigating or defending any such action or claim. Notwithstanding the provisions of this Section 8, no Underwriter shall be required to contribute any amount in excess of the amount by which the total underwriting discounts and commissions received by such Underwriter with respect to the offering of the Shares exceeds the amount of any damages that such Underwriter has otherwise been required to pay by reason of such untrue or alleged untrue statement or omission or alleged omission. Notwithstanding anything herein to the contrary, 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 remedies provided for in this Section 8 are not exclusive and shall not limit any rights or remedies which may otherwise be available to any indemnified party at law or in equity.

(f) The indemnity and contribution provisions contained in this Section 8 and the representations and warranties of the Company contained in this Agreement shall remain operative and in full force and effect regardless of (i) any termination of this Agreement, (ii) any investigation made by or on behalf of any Underwriter, any person controlling any Underwriter or any affiliate of any Underwriter or by or on behalf of the Company, its officers or directors or any person controlling the Company and (iii) acceptance of and payment for any of the Shares.

9. *Termination*. The Underwriters may terminate this Agreement by notice given by you to the Company, if after the execution and delivery of this Agreement and prior to the Closing Date (a) trading generally shall have been suspended or materially limited on, or by, as the case may be, any of the New York Stock Exchange, the NYSE Amex Equities (formerly known as the American Stock Exchange), the Nasdaq Global Select Market or the Nasdaq Global Market, (b) trading of any securities of the Company shall have been suspended on any exchange or in any over-the-counter market, (c) a material disruption in securities settlement, payment or clearance services in the United States shall have occurred, (d) any moratorium on commercial banking activities shall have been declared by Federal or New York state authorities or (e) there shall have occurred any outbreak or escalation of hostilities, or any change in financial markets or any calamity or crisis that, in your judgment, is material and adverse and which, singly or together with any other event specified in this clause (e), makes it, in your judgment, impracticable or inadvisable to proceed with the offer, sale or delivery of the Shares on the terms and in the manner contemplated in the Time of Sale Prospectus or the Prospectus. If this Agreement shall be terminated by the Underwriters pursuant to this Section 9, the Company will

reimburse the Underwriters for all out-of-pocket accountable expenses (including the fees and disbursements of their counsel) reasonably incurred by such Underwriters in connection with this Agreement or the offering contemplated hereunder.

10. *Effectiveness; Defaulting Underwriters* . This Agreement shall become effective upon the execution and delivery hereof by the parties hereto.

If, on the Closing Date or an Option Closing Date, as the case may be, any one or more of the Underwriters shall fail or refuse to purchase Shares that it has or they have agreed to purchase hereunder on such date, and the aggregate number of Shares which such defaulting Underwriter or Underwriters agreed but failed or refused to purchase is not more than one-tenth of the aggregate number of the Shares to be purchased on such date, the non-defaulting Underwriters shall be obligated severally in the proportions that the number of Firm Shares set forth opposite their respective names in Schedule I bears to the aggregate number of Firm Shares set forth opposite the names of all such non-defaulting Underwriters, or in such other proportions as you may specify, to purchase the Shares which such defaulting Underwriter or Underwriters agreed but failed or refused to purchase on such date; provided that in no event shall the number of Shares that any Underwriter has agreed to purchase pursuant to this Agreement be increased pursuant to this Section 10 by an amount in excess of one-ninth of such number of Shares without the written consent of such Underwriter. If, on the Closing Date, any Underwriter or Underwriters shall fail or refuse to purchase Firm Shares and the aggregate number of Firm Shares with respect to which such default occurs is more than one-tenth of the aggregate number of Firm Shares to be purchased on such date, and arrangements satisfactory to you and the Company for the purchase of such Firm Shares are not made within 48 hours after such default, this Agreement shall terminate. In the event of such termination, the Company shall have no liability to any Underwriter (except to the extent provided in Sections 6(j) and 8 hereof) nor shall any Underwriter (other than an Underwriter who shall have failed otherwise than for some reason permitted under this Agreement to purchase the amount of Firm Shares agreed by such Underwriter to be purchased hereunder) be under any liability to the Company (except to the extent provided under Sections 6(j) and 8 hereof). In any such case either you or the Company shall have the right to postpone the Closing Date, but in no event for longer than seven days, in order that the required changes, if any, in the Registration Statement, in the Time of Sale Prospectus, in the Prospectus or in any other documents or arrangements may be effected. If, on an Option Closing Date, any Underwriter or Underwriters shall fail or refuse to purchase Additional Shares and the aggregate number of Additional Shares with respect to which such default occurs is more than one-tenth of the aggregate number of Additional Shares to be purchased on such Option Closing Date, the non-defaulting Underwriters shall have the option to (a) terminate their obligation hereunder to purchase the Additional Shares to be sold on such Option Closing Date or (b) purchase not less than the number of Additional Shares that such non-defaulting Underwriters would have been obligated to purchase in the absence of such default. Any action taken under this paragraph shall not relieve any defaulting Underwriter from liability in respect of any default of such Underwriter under this Agreement.

If this Agreement shall be terminated by the Underwriters because of any failure or refusal on the part of the Company to comply with the terms or to fulfill any of the conditions of this Agreement, or if for any reason the Company shall be unable to perform its obligations under this Agreement (unless such failure to comply or inability to perform is due primarily to

any default of any Underwriter), the Company will reimburse the Underwriters or such Underwriters as have so terminated this Agreement with respect to themselves, severally, for all out-of-pocket accountable expenses (including the fees and disbursements of their counsel) reasonably incurred by such Underwriters in connection with this Agreement or the offering contemplated hereunder.

11. *Entire Agreement* .

(a) This Agreement, together with any contemporaneous written agreements that relate to the offering of the Shares, represents the entire agreement between the Company and the Underwriters with respect to the preparation of any preliminary prospectus, the Time of Sale Prospectus, the Prospectus, the conduct of the offering, and the purchase and sale of the Shares.

(b) The Company acknowledges that in connection with the offering of the Shares: (i) the Underwriters have acted at arms' length, are not agents of, and owe no fiduciary duties to, the Company or any other person, (ii) the Underwriters owe the Company only those duties and obligations set forth in this Agreement and prior written agreements (to the extent not superseded by this Agreement), if any, and (iii) the Underwriters may have interests that differ from those of the Company. The Company waives to the full extent permitted by applicable law any claims it may have against the Underwriters arising from an alleged breach of fiduciary duty in connection with the offering of the Shares.

12. *Waiver of Jury Trial* . The Company 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.

13. *Counterparts* . This Agreement may be signed in two or more counterparts (which may include counterparts delivered by any standard form of electronic communication), each of which shall be an original, with the same effect as if the signatures thereto and hereto were upon the same instrument.

14. *Applicable Law* . This Agreement shall be governed by and construed in accordance with the laws of the state of New York without regard to principles of conflict of laws that would result in the application of any law other than the laws of the state of New York. The Company agrees that any suit or proceeding arising in respect of this Agreement will be tried exclusively in the U.S. District Court for the Southern District of New York or, if that court does not have subject matter jurisdiction, in any state court located in The City and County of New York, and the Company agrees to submit to the jurisdiction of, and to venue in, such courts.

15. *Headings* . The headings of the sections of this Agreement have been inserted for convenience of reference only and shall not be deemed a part of this Agreement.

16. *Notices* . All communications hereunder shall be in writing and effective only upon receipt and if to the Underwriters shall be delivered, mailed or sent to Goldman Sachs & Co. LLC, 200 West Street, New York, New York 10282-2198, Attention: Registration Department, and Leerink Partners LLC, One Federal Street, Floor 37, Boston, Massachusetts 02110,

Attention: John I. Fitzgerald, Esq; and if to the Company shall be delivered, mailed or sent to 10 Finderne Avenue, Building 10 Bridgewater, New Jersey 08807, Attention: General Counsel, with a copy (which shall not constitute notice) to Covington & Burling LLP, One CityCenter, 850 Tenth Street, NW, Washington, DC 20001-4956, Attention: Michael J. Riella, fax: 202-662-6291.

(Remainder of page intentionally left blank.)

Very truly yours,

INSMED INCORPORATED

By: /s/ William H. Lewis
Name: William H. Lewis
Title: Chief Executive Officer

[Underwriting Agreement]

Accepted as of the date hereof

GOLDMAN SACHS & CO. LLC
LEERINK PARTNERS LLC

Acting severally on behalf of themselves and the
several Underwriters named in Schedule I
hereto.

By: Goldman Sachs & Co. LLC

By: /s/ Adam Greene
Name: Adam Greene
Title: Vice President

By: Leerink Partners LLC

By: /s/ John I. Fitzgerald, Esq.
Name: John I. Fitzgerald, Esq.
Title: Managing Director

[Underwriting Agreement]

SCHEDULE I

Underwriter	Number of Firm Shares To Be Purchased
Goldman Sachs & Co. LLC	5,219,425
Leerink Partners LLC	3,991,325
Evercore Group L.L.C.	1,842,150
Stifel, Nicolaus & Company, Incorporated	1,228,100
Total:	12,281,000

Time of Sale Prospectus

1. Basic Prospectus, dated May 19, 2017, included in the Registration Statement
2. Preliminary prospectus, dated September 5, 2017
3. Orally communicated pricing information:
 - a.) Number of shares to be offered by the Company: 12,281,000 shares
 - b.) Public Offering Price: \$28.50
 - c.) Underwriting discounts and commissions per share: \$1.71

FORM OF LOCK-UP LETTER

, 2017

Goldman Sachs & Co. LLC
Leerink Partners LLC
as Managers of the several Underwriters

c/o Goldman Sachs & Co. LLC
200 West Street
New York, NY 10282

c/o Leerink Partners LLC
One Federal Street, 37th Floor
Boston, MY 02110

Ladies and Gentlemen:

The undersigned understands that Goldman Sachs & Co. LLC and Leerink Partners LLC, as managers of the Underwriters (as defined below) (the “**Managers**”), propose to enter into an Underwriting Agreement (the “**Underwriting Agreement**”) with Insmmed Incorporated, a Virginia corporation (the “**Company**”), providing for the public offering (the “**Public Offering**”) by the several Underwriters listed on Schedule I to the Underwriting Agreement (the “**Underwriters**”), of shares of the common stock, \$0.01 par value per share, of the Company (the “**Common Stock**”).

To induce the Underwriters that may participate in the Public Offering to continue their efforts in connection with the Public Offering, the undersigned hereby agrees that, without the prior written consent of the Managers on behalf of the Underwriters, it will not, during the period commencing on the date hereof through the 60th day after the date of the final prospectus relating to the Public Offering (the “**Restricted Period**”), (1) offer, pledge, sell, contract to sell, sell any option or contract to purchase, purchase any option or contract to sell, grant any option, right or warrant to purchase, lend, or otherwise transfer or dispose of, directly or indirectly, any shares of Common Stock beneficially owned (as such term is used in Rule 13d-3 of the Securities Exchange Act of 1934, as amended (the “**Exchange Act**”)), by the undersigned or any securities so owned convertible into or exercisable or exchangeable for Common Stock or (2) enter into any swap or other arrangement that transfers to another, in whole or in part, any of the economic consequences of ownership of the Common Stock, whether any such transaction described in clause (1) or (2) above is to be settled by delivery of Common Stock or such other securities, in cash or otherwise.

The foregoing sentence shall not apply to (a) transfers of shares of Common Stock or any security convertible into Common Stock as a bona fide gift or by will, other testamentary document or intestate succession, (b) distributions of shares of Common Stock or any security

convertible into Common Stock to limited partners, members, stockholders, or wholly-owned subsidiaries of the undersigned, (c) transfers of shares of Common Stock or any security convertible into Common Stock pursuant to any order or settlement agreement not involving any public sale of shares of Common Stock or other securities and approved by any court of competent jurisdiction, (d) transfers of shares of Common Stock or any security convertible into Common Stock to any trust for the direct or indirect benefit of the undersigned or the immediate family of the undersigned; (e) transfers of shares of Common Stock or any security convertible into Common Stock to any corporation, partnership, limited liability company or similar entity of which all of the beneficial ownership interests are held by the undersigned or the immediate family of the undersigned; provided that in the case of any transfer or distribution pursuant to clauses (a)-(e), (i) each donee, distributee or transferee shall sign and deliver to the Managers a lock-up letter substantially in the form of this letter, (ii) no public announcement or filing by any party (the undersigned, donor, donee, distributor, distributee, transferor or transferee) under the Exchange Act, including, without limitation, any Section 16(a) filing, shall be required or voluntarily made in connection with such transfer or distribution and (iii) any such transfer or distribution shall not involve a disposition for value, or (f) the establishment of a new trading plan pursuant to Rule 10b5-1 under the Exchange Act (a “ **10b5-1 trading plan** ”) providing for dispositions or sales of Common Stock; provided that such plan does not permit dispositions or sales of shares of Common Stock or any security convertible into Common Stock during the Restricted Period and no public announcement or filing under the Exchange Act regarding the establishment of such plan shall be voluntarily made during the Restricted Period, (g) transfers of shares of Common Stock pursuant to a 10b5-1 trading plan entered into prior to the date of this agreement; provided that to the extent a public announcement or filing under the Exchange Act is required for such transfer, such announcement or filing shall include a statement to the effect that the transfer was made pursuant to a 10b5-1 trading plan, (h) the exercise of options or other stock-based awards to purchase Common Stock or vesting of restricted stock units or other stock-based awards outstanding as of the date hereof or granted under equity incentive plans or pursuant to inducement awards in effect as of the date hereof or described in the registration statement with respect to the Public Offering; provided that the underlying Common Stock continues to be subject to the terms of this agreement, (i) transfers of shares of Common Stock or any security convertible into Common Stock pursuant to a bona fide third party tender offer, merger, consolidation or other similar transaction made to holders of the Common Stock involving a change of control of the Company; provided that in the event that the tender offer, merger, consolidation or other such transaction is not completed during the Restricted Period, the undersigned shall remain subject to the restrictions contained herein during such period, (j) the repurchase or forfeiture of securities by the Company in connection with termination of the undersigned’s employment with the Company; and (k) the settlement of restricted stock, restricted stock units, options or other stock-based awards on a “net” basis or any other withholding of shares of Common Stock by the Company upon vesting and/or settlement of restricted stock, restricted stock units, options or other stock-based awards; provided that (x) the underlying shares of Common Stock received by the undersigned shall continue to be subject to the restrictions on transfer set forth in this agreement and (y) any such settled or withheld shares are surrendered to the Company in the net exercise; provided further, in each case (a) through (f) and (h) through (k), that the undersigned shall provide you two days’ advance notice of such transfers, distributions, plan establishments, exercises, repurchases, forfeitures, settlements or withholdings, as applicable.

In addition, the undersigned agrees that, without the prior written consent of the Managers on behalf of the Underwriters, it will not, during the Restricted Period, make any demand for or exercise any right with respect to, the registration of any shares of Common Stock or any security convertible into or exercisable or exchangeable for Common Stock. The undersigned also agrees and consents to the entry of stop transfer instructions with the Company's transfer agent and registrar against the transfer of the undersigned's shares of Common Stock except in compliance with the foregoing restrictions.

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

Whether or not the Public Offering actually occurs depends on a number of factors, including market conditions. Any Public Offering will only be made pursuant to the Underwriting Agreement, the terms of which are subject to negotiation between the Company and the Underwriters. If (i) the closing of the Public Offering has not occurred prior to October 15, 2017, (ii) the Company notifies you in writing that it does not intend to proceed with the Public Offering, (iii) the registration statement filed with respect to the Public Offering is withdrawn or (iv) for any reason the Underwriting Agreement shall be terminated prior to the Closing Date (as defined in the Underwriting Agreement), this agreement shall be of no further force or effect.

In the event that either of the Managers withdraws from or declines to participate in the Public Offering, all references to the Managers contained in this agreement shall be deemed to refer to the sole Manager that continues to participate in the Public Offering (the "**Sole Manager**"), and, in such event, any written consent, waiver or notice given or delivered in connection with this agreement by the Sole Manager shall be deemed to be sufficient and effective for all purposes under this agreement.

This agreement shall be governed by and construed in accordance with the laws of the State of New York, without regard to the conflict of laws principles thereof.

[Signature page follows]

Very truly yours,

(Name of Party—Please Print)

(Signature)

(Name of Signatory if Party is an entity—Please Print)

(Title of Signatory if Party is an entity—Please Print)



HUNTON & WILLIAMS LLP
RIVERFRONT PLAZA, EAST TOWER
951 EAST BYRD STREET
RICHMOND, VIRGINIA 23219-4074

TEL 804 • 788 • 8200
FAX 804 • 788 • 8218

FILE NO: 58036.000021

September 11, 2017

Insmed Incorporated
10 Finderne Avenue, Building 10
Bridgewater, New Jersey 08807

Insmed Incorporated
Public Offering of 14,123,150 Shares of Common Stock

Ladies and Gentlemen:

We have acted as special Virginia counsel to Insmed Incorporated, a Virginia corporation (the “Company”), in connection with the Company’s issuance and sale of 14,123,150 shares of its common stock, par value \$0.01 per share (the “Shares”), pursuant to (i) the Registration Statement on Form S-3 (Registration No. 333-218118) (the “Registration Statement”) filed by the Company with the Securities and Exchange Commission (the “Commission”) on May 19, 2017 pursuant to the Securities Act of 1933, as amended (the “Securities Act”), and (ii) the prospectus, dated May 19, 2017, contained in the Registration Statement and the prospectus supplement thereto, dated September 6, 2017 (collectively, the “Prospectus”).

This opinion is being furnished in accordance with the requirements of Item 16 of Form S-3 and Item 601(b)(5)(i) of Regulation S-K.

In connection with this opinion, we have examined originals or copies, certified or otherwise identified to our satisfaction, of such documents and records of the Company, certificates of public officials and officers of the Company and such other documents, certificates and records as we have deemed necessary to render the opinions set forth herein, including, among other things, (i) the Company’s Articles of Incorporation, as amended through the date hereof, (ii) the Company’s Amended and Restated Bylaws, as amended through the date hereof, (iii) the Registration Statement, (iv) the Prospectus, (v) the Underwriting Agreement, dated September 6, 2017 (the “Underwriting Agreement”), by and among the Company and Goldman Sachs & Co. LLC and Leerink Partners LLC, as managers of the several underwriters named therein (collectively, the “Underwriters”), (vi) resolutions

ATLANTA AUSTIN BANGKOK BEIJING BRUSSELS CHARLOTTE DALLAS HOUSTON LONDON LOS ANGELES
McLEAN MIAMI NEW YORK NORFOLK RALEIGH RICHMOND SAN FRANCISCO TOKYO WASHINGTON
www.hunton.com

of the Company's Board of Directors and pricing committee thereof and (vii) a certificate issued by the Clerk of the State Corporation Commission of the Commonwealth of Virginia (the "SCC") on September 5, 2017, and confirmed on the date hereof, to the effect that the Company is existing under the laws of the Commonwealth of Virginia and in good standing.

For purposes of the opinions expressed below, we have assumed (i) the authenticity of all documents submitted to us as originals, (ii) the conformity to the originals of all documents submitted to us as certified, photostatic or electronic copies and the authenticity of the originals thereof, (iii) the legal capacity of natural persons, (iv) the genuineness of all signatures and the completion of all deliveries not witnessed by us and (v) the due authorization, execution and delivery of all documents by all parties and the validity, binding effect and enforceability thereof on such parties (other than the authorization, execution and delivery of certain documents by the Company).

As to factual matters, we have relied upon, and assumed the accuracy of, representations included in the documents submitted to us, upon certificates of officers of the Company and upon certificates of public officials. Except as otherwise expressly indicated, we have not undertaken any independent investigation of factual matters.

We do not purport to express an opinion on any laws other than those of the Commonwealth of Virginia.

Based upon the foregoing and such other information and documents as we have considered necessary for the purposes hereof, and subject to the assumptions, qualifications and limitations stated herein, we are of the opinion that:

1. The Company is a corporation validly existing and in good standing under the laws of the Commonwealth of Virginia with the corporate power to issue the Shares.
2. The Shares have been duly authorized and, when issued and delivered to and paid for by the Underwriters in accordance with the terms of the Underwriting Agreement, will be validly issued, fully paid and nonassessable.

We hereby consent to (i) the filing of this opinion with the Commission as an exhibit to the Company's Current Report on Form 8-K filed on the date hereof, (ii) the incorporation

by reference of this opinion into the Registration Statement and (iii) the reference to our firm under the heading “Legal Matters” in the Registration Statement and the Prospectus. In giving this consent, we do not admit that we are within the category of persons whose consent is required by Section 7 of the Securities Act and the rules and regulations of the Commission promulgated thereunder.

This opinion is rendered as of the date hereof, and we disclaim any obligation to advise you of facts, circumstances, events or developments that hereafter may be brought to our attention and that may alter, affect or modify the opinion expressed herein. Our opinion is expressly limited to the matters set forth above and we render no opinion, whether by implication or otherwise, as to any matters beyond the matters expressly set forth herein.

Very truly yours,

/s/ Hunton & Williams LLP



Insmmed Announces Proposed Public Offering of Common Stock

BRIDGEWATER, NJ, September 5, 2017 — Insmmed Incorporated (Nasdaq: INSM) announced today that it has commenced an underwritten public offering of \$250 million of shares of its common stock. All of the shares of common stock in the offering would be sold by Insmmed. In addition, Insmmed intends to grant the underwriters a 30-day option to purchase up to an additional 15 percent of the shares of common stock offered in the public offering at the public offering price, less the underwriting discount. The offering is subject to market and other conditions, and there can be no assurance as to whether or when the offering may be completed, or as to the actual size or terms of the offering.

Insmmed intends to use the net proceeds from this offering to fund ongoing and future clinical development of amikacin liposome inhalation suspension (ALIS) for patients with treatment refractory nontuberculous mycobacteria (NTM) lung disease caused by *Mycobacterium avium* complex (MAC) and its efforts to obtain potential regulatory approvals and, if approved, commercialize ALIS in its approved indication; invest in increased third-party manufacturing capacity for and commercial inventory production of ALIS in anticipation of possible commercial launch, initially in the United States and subsequently in Japan and other countries; fund further clinical development of INS1007, a novel oral reversible inhibitor of dipeptidyl peptidase 1; and fund working capital, potential debt repayment, capital expenditures, general research and development, and for other general corporate purposes, which may include the acquisition or in-license of additional compounds, product candidates, technology or businesses.

Goldman Sachs & Co. LLC and Leerink Partners LLC are acting as joint book-running managers for the offering. Evercore Group L.L.C. is acting as a passive bookrunner. Stifel, Nicolaus & Company, Incorporated is acting as co-lead.

A shelf registration statement on Form S-3 relating to the public offering of the shares of common stock described above has been filed with the Securities and Exchange Commission (SEC) and became automatically effective upon filing. A preliminary prospectus supplement relating to the offering will be filed with the SEC and will be available on the SEC's website at www.sec.gov. Copies of the preliminary prospectus supplement and the accompanying prospectus related to this offering may be obtained, when available, from (1) Goldman Sachs & Co. LLC at Prospectus Department, 200 West Street, New York, NY 10282, by telephone at 1-866-471-2526, by facsimile at 212-902-9316 or by email at prospectus-ny@ny.email.gs.com, or (2) Leerink Partners LLC at Attention: Syndicate Department, One Federal Street, 37th Floor, Boston, MA 02110, by telephone at (800) 808-7525 extension 6132 or by email at syndicate@leerink.com.

This press release shall not constitute an offer to sell or a solicitation of an offer to buy, nor shall there be any sale of these securities in any state or jurisdiction in which such an offer, solicitation or sale would be unlawful prior to registration or qualification under the securities laws of any such state or jurisdiction.

About Insmed

Insmed Incorporated is a global biopharmaceutical company focused on the unmet needs of patients with rare diseases. The Company's lead product candidate is ALIS for adult patients with treatment refractory NTM lung disease caused by MAC, which is a rare and often chronic infection that is capable of causing irreversible lung damage and can be fatal. The Company is not aware of any approved inhaled therapies specifically indicated for refractory NTM lung disease caused by MAC in North America, Japan or Europe. Insmed's earlier-stage clinical pipeline includes INS1007, a novel oral reversible inhibitor of dipeptidyl peptidase 1 with therapeutic potential in non-cystic fibrosis bronchiectasis, and INS1009, an inhaled nanoparticle formulation of a treprostinil prodrug that may offer a differentiated product profile for rare pulmonary disorders, including pulmonary arterial hypertension.

Forward-looking statements

This press release contains forward looking statements. "Forward-looking statements," as that term is defined in the Private Securities Litigation Reform Act of 1995, are statements that are not historical facts and involve a number of risks and uncertainties. Words herein such as "may," "will," "should," "could," "would," "expects," "plans," "anticipates," "believes," "estimates," "projects," "predicts," "intends," "potential," "continues," and similar expressions (as well as other words or expressions referencing future events, conditions or circumstances) may identify forward-looking statements.

The forward-looking statements in this press release are based upon the Company's current expectations and beliefs, and involve known and unknown risks, uncertainties and other factors, which may cause the Company's actual results, performance and achievements and the timing of certain events to differ materially from the results, performance, achievements or timing discussed, projected, anticipated or indicated in any forward-looking statements. Such factors include, among others: risks that the full six-month data from the CONVERT study or subsequent data from the remainder of the study's treatment and off-treatment phases will not be consistent with the top-line six-month results of the study; uncertainties in the research and development of the Company's existing product candidates, including due to delays in data readouts, such as the full data from the CONVERT study, patient enrollment and retention or failure of the Company's preclinical studies or clinical trials to satisfy pre-established endpoints, including secondary endpoints in the CONVERT study and endpoints in the CONVERT extension study; failure to obtain, or delays in obtaining, regulatory approval from the U.S. Food and Drug Administration, Japan's Ministry of Health, Labour and Welfare, the European Medicines Agency, and other regulatory authorities for the Company's product candidates or their delivery devices, such as the eFlow Nebulizer System, including due to insufficient clinical data, selection of endpoints that are not satisfactory to regulators, complexity in the review process for combination products or inadequate or delayed data from a human factors study required for U.S. regulatory approval; failure to maintain regulatory approval for the Company's product candidates, if received, due to a failure to satisfy post-approval regulatory requirements, such as the submission of sufficient data from confirmatory clinical studies; safety and efficacy concerns related to the Company's product candidates; lack of experience in conducting and

managing preclinical development activities and clinical trials necessary for regulatory approval, including the regulatory filing and review process; failure to comply with extensive post-approval regulatory requirements or imposition of significant post-approval restrictions on the Company's product candidates by regulators; uncertainties in the rate and degree of market acceptance of product candidates, if approved; inability to create an effective direct sales and marketing infrastructure or to partner with third parties that offer such an infrastructure for distribution of the Company's product candidates, if approved; inaccuracies in the Company's estimates of the size of the potential markets for the Company's product candidates or limitations by regulators on the proposed treatment population for the Company's product candidates; failure of third parties on which the Company is dependent to conduct the Company's clinical trials, to manufacture sufficient quantities of the Company's product candidates for clinical or commercial needs, including the Company's raw materials suppliers, or to comply with the Company's agreements or laws and regulations that impact the Company's business; inaccurate estimates regarding the Company's future capital requirements, including those necessary to fund the Company's ongoing clinical development, regulatory and commercialization efforts as well as milestone payments or royalties owed to third parties; failure to develop, or to license for development, additional product candidates, including a failure to attract experienced third-party collaborators; uncertainties in the timing, scope and rate of reimbursement for the Company's product candidates; changes in laws and regulations applicable to the Company's business and failure to comply with such laws and regulations; inability to repay the Company's existing indebtedness or to obtain additional capital when needed; failure to obtain, protect and enforce the Company's patents and other intellectual property and costs associated with litigation or other proceedings related to such matters; restrictions imposed on the Company by license agreements that are critical for the Company's product development, including the Company's license agreements with PARI Pharma GmbH and AstraZeneca AB, and failure to comply with the Company's obligations under such agreements; competitive developments affecting the Company's product candidates and potential exclusivity related thereto; the cost and potential reputational damage resulting from litigation to which the Company is a party, including, without limitation, the class action lawsuit pending against the Company; loss of key personnel; lack of experience operating internationally; and risks that the net proceeds from the offering are not spent as currently intended or in ways that enhance the value of your investment in the Company's common stock.

For additional information about the risks and uncertainties that may affect the Company's business, please see the factors discussed in Item 1A, "Risk Factors," in the Company's Annual Report on Form 10-K for the year ended December 31, 2016.

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Insmmed Announces Pricing of Public Offering of Common Stock

BRIDGEWATER, NJ, September 6, 2017 — Insmmed Incorporated (Nasdaq:INSM) announced today that it priced an offering of 12,281,000 shares of its common stock in a registered underwritten public offering at a price of \$28.50 per share before underwriting discounts and commissions. All of the shares of common stock in the offering are to be sold by Insmmed. Gross proceeds from this offering before deducting underwriting discounts and commissions are expected to be approximately \$350.0 million. Insmmed has granted the underwriters a 30-day option to purchase up to an additional 1,842,150 shares of its common stock at the offering price, less underwriting discounts and commissions.

Insmmed intends to use the net proceeds from this offering to fund ongoing and future clinical development of amikacin liposome inhalation suspension (ALIS) for patients with treatment refractory nontuberculous mycobacteria (NTM) lung disease caused by *Mycobacterium avium* complex (MAC) and its efforts to obtain potential regulatory approvals and, if approved, commercialize ALIS in its approved indication; invest in increased third-party manufacturing capacity for and commercial inventory production of ALIS in anticipation of possible commercial launch, initially in the United States and subsequently in Japan and other countries; fund further clinical development of INS1007, a novel oral reversible inhibitor of dipeptidyl peptidase 1; and fund working capital, potential debt repayment, capital expenditures, general research and development, and for other general corporate purposes, which may include the acquisition or in-license of additional compounds, product candidates, technology or businesses.

Goldman Sachs & Co. LLC and Leerink Partners LLC are acting as joint book-running managers for the offering. Evercore Group L.L.C. is acting as a passive bookrunner. Stifel, Nicolaus & Company, Incorporated is acting as co-lead manager. The offering is expected to close on September 11, 2017, subject to the satisfaction of customary closing conditions.

A shelf registration statement on Form S-3 relating to the public offering of the shares of common stock described above has been filed with the Securities and Exchange Commission (SEC) and became automatically effective upon filing. A preliminary prospectus supplement relating to and describing the terms of the offering was filed with the SEC and is available on the SEC's website at www.sec.gov. Copies of the final prospectus supplement and the accompanying prospectus relating to this offering, when available, may be obtained from (1) Goldman Sachs & Co. LLC, Attention: Prospectus Department, 200 West Street, New York, NY 10282, by telephone at 1-866-471-2526, by facsimile at 212-902-9316 or by email at prospectus-ny@ny.email.gs.com, or (2) Leerink Partners LLC, c/o Attention: Syndicate Department, One Federal Street, 37th Floor, Boston, MA 02110, by telephone at (800) 808-7525 extension 6132 or by email at syndicate@leerink.com.

This press release shall not constitute an offer to sell or a solicitation of an offer to buy, nor shall there be any sale of these securities in any state or jurisdiction in which such an offer, solicitation

or sale would be unlawful prior to registration or qualification under the securities laws of any such state or jurisdiction.

About Insmed

Insmed Incorporated is a global biopharmaceutical company focused on the unmet needs of patients with rare diseases. The Company's lead product candidate is ALIS for adult patients with treatment refractory NTM lung disease caused by MAC, which is a rare and often chronic infection that is capable of causing irreversible lung damage and can be fatal. The Company is not aware of any approved inhaled therapies specifically indicated for refractory NTM lung disease caused by MAC in North America, Japan or Europe. Insmed's earlier-stage clinical pipeline includes INS1007, a novel oral reversible inhibitor of dipeptidyl peptidase 1 with therapeutic potential in non-cystic fibrosis bronchiectasis, and INS1009, an inhaled nanoparticle formulation of a treprostinil prodrug that may offer a differentiated product profile for rare pulmonary disorders, including pulmonary arterial hypertension.

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based, or that may affect the likelihood that actual results will differ from those set forth in the forward-looking statements.

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