

INSPIREMD, INC.

FORM S-1/A (Securities Registration Statement)

Filed 02/23/17

Telephone	(888) 776-6804
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Industry	Medical Equipment, Supplies & Distribution
Sector	Healthcare
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**UNITED STATES
SECURITIES AND EXCHANGE COMMISSION
WASHINGTON, D.C. 20549**

**AMENDMENT NO. 2
TO
FORM S-1**

REGISTRATION STATEMENT UNDER THE SECURITIES ACT OF 1933

InspireMD, Inc.

(Exact name of registrant as specified in its charter)

Delaware
(State or other jurisdiction of
incorporation or organization)

3841
(Primary Standard Industrial
Classification Code Number)

26-2123838
(I.R.S. Employer
Identification Number)

**4 Menorat Hamaor St.
Tel Aviv, Israel 6744832
(888) 776-6804**

(Address, including zip code, and telephone number, including area code, of registrant's principal executive offices)

**James Barry, Ph.D.
President and Chief Executive Officer
InspireMD, Inc.
4 Menorat Hamaor St.
Tel Aviv, Israel 6744832
(888) 776-6804**

(Name, address, including zip code, and telephone number, including area code, of agent for service)

Copies of all communications, including communications sent to agent for service, should be sent to:

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Schiff Hardin LLP
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Approximate date of commencement of proposed sale to the public: As soon as practicable after the effective date of this Registration Statement.

If any of the securities being registered on this Form are to be offered on a delayed or continuous basis pursuant to Rule 415 under the Securities Act of 1933 check the following box.

If this Form is filed to register additional securities for an offering pursuant to Rule 462(b) under the Securities Act, please check the following box and list the Securities Act registration statement number of the earlier effective registration statement for the same offering.

If this Form is a post-effective amendment filed pursuant to Rule 462(c) under the Securities Act, check the following box and list the Securities Act registration statement number of the earlier effective registration statement for the same offering.

If this Form is a post-effective amendment filed pursuant to Rule 462(d) under the Securities Act, check the following box and list the Securities Act registration statement number of the earlier effective registration statement for the same offering.

Indicate by check mark whether the registrant is a large accelerated filer, an accelerated filer, a non-accelerated filer, or a smaller reporting company. See the definitions of "large accelerated filer," "accelerated filer" and "smaller reporting company" in Rule 12b-2 of the Exchange Act. (Check one):

Large accelerated filer

Non-accelerated filer

(Do not check if a smaller reporting company)

Accelerated filer

Smaller reporting company

The registrant hereby amends this registration statement on such date or dates as may be necessary to delay its effective date until the registrant shall file a further amendment which specifically states that this registration statement shall thereafter become effective in accordance with Section 8(a) of the Securities Act of 1933 or until the registration statement shall become effective on such date as the Commission acting pursuant to said Section 8(a), may determine.

EXPLANATORY NOTE

This Amendment No. 2 to the Registration Statement on Form S-1 (File No. 333-215682) of InspireMD, Inc. is being filed solely to update the exhibit index and to replace Exhibit 5.1. Accordingly, Part I, the form of prospectus, has been omitted from this filing.

PART II

INFORMATION NOT REQUIRED IN PROSPECTUS

Item 13. Other Expenses of Issuance and Distribution.

The following table sets forth the costs and expenses, other than placement agent fees and expenses, payable by us in connection with the sale and distribution of the securities being registered. All amounts are estimates except for the Securities and Exchange Commission registration fee and the FINRA filing fee.

Securities and Exchange Commission Registration Fee	\$ 2,879.39
FINRA Filing Fee	\$ *
Accounting Fees and Expenses	\$ *
Legal Fees and Expenses	\$ *
Transfer Agent and Registrar Fees and Expenses	\$ *
Printing and Engraving Expenses	\$ *
Miscellaneous Fees and Expenses	\$ *
Total	\$ *

* To be completed by an amendment.

Item 14. Indemnification of Directors and Officers.

Section 145 of the General Corporation Law of the State of Delaware provides, in general, that a corporation incorporated under the laws of the State of Delaware, as we are, may indemnify any person who was or is a party or is threatened to be made a party to any threatened, pending or completed action, suit or proceeding (other than a derivative action by or in the right of the corporation) by reason of the fact that such person is or was a director, officer, employee or agent of the corporation, or is or was serving at the request of the corporation as a director, officer, employee or agent of another enterprise, against expenses (including attorneys' fees), judgments, fines and amounts paid in settlement actually and reasonably incurred by such person in connection with such action, suit or proceeding if such person acted in good faith and in a manner such person reasonably believed to be in or not opposed to the best interests of the corporation and, with respect to any criminal action or proceeding, had no reasonable cause to believe such person's conduct was unlawful. In the case of a derivative action, a Delaware corporation may indemnify any such person against expenses (including attorneys' fees) actually and reasonably incurred by such person in connection with the defense or settlement of such action or suit if such person acted in good faith and in a manner such person reasonably believed to be in or not opposed to the best interests of the corporation, except that no indemnification will be made in respect of any claim, issue or matter as to which such person will have been adjudged to be liable to the corporation unless and only to the extent that the Court of Chancery of the State of Delaware or any other court in which such action was brought determines such person is fairly and reasonably entitled to indemnity for such expenses.

Our certificate of incorporation and bylaws provide that we will indemnify our directors, officers, employees and agents to the extent and in the manner permitted by the provisions of the General Corporation Law of the State of Delaware, as amended from time to time, subject to any permissible expansion or limitation of such indemnification, as may be set forth in any stockholders' or directors' resolution or by contract. Any repeal or modification of these provisions approved by our stockholders will be prospective only and will not adversely affect any limitation on the liability of any of our directors or officers existing as of the time of such repeal or modification.

We are also permitted to apply for insurance on behalf of any director, officer, employee or other agent for liability arising out of his actions, whether or not the General Corporation Law of the State of Delaware would permit indemnification.

We are also permitted to apply for insurance on behalf of any director, officer, employee or other agent for liability arising out of his actions, whether or not the DGCL would permit indemnification.

Item 15. Recent Sales of Unregistered Securities.

On March 21, 2016, we sold to certain of our officers and directors 41,323 shares of our common stock and warrants to purchase 20,663 shares of our common stock in a private placement. The common stock was sold at a price of \$14.75 per share, and each purchaser received a warrant to purchase one half of one share of common stock for each share of common stock that it purchased in the private placement. The warrants are exercisable immediately and have a term of exercise of 5 years from the date of issuance and an exercise price of \$14.75. We received gross proceeds from the private placement of approximately \$0.6 million, before deducting placement agent fees and estimated offering expenses payable by us. These securities were not registered under the Securities Act of 1933, as amended, or the securities laws of any state, and were offered and sold to accredited investors (as defined by Rule 501 under the Securities Act of 1933, as amended) in reliance on the exemption from registration under the Securities Act of 1933, as amended, provided by Section 4(a)(2) and Regulation D (Rule 506) under the Securities Act of 1933, as amended.

In connection with the private placement, on March 21, 2016, we issued to Dawson James Securities, Inc., the exclusive placement agent in the private placement, warrants to purchase 2,067 shares of our common stock. The placement agent's warrants are exercisable at any time and from time to time, in whole or in part, during the period commencing on September 17, 2016 and ending on March 16, 2021, at \$18.44 per share. These warrants were not registered under the Securities Act of 1933, as amended, or the securities laws of any state, and were offered and sold in reliance on the exemption from registration under the Securities Act of 1933, as amended, provided by Section 4(a)(2) of the Securities Act of 1933, as amended. Dawson James Securities, Inc. was an accredited investor (as defined by Rule 501 under the Securities Act of 1933, as amended) at the time of the private placement.

On June 13, 2016, in connection with an amendment, dated June 13, 2016, to the loan and security agreement between us and Hercules, pursuant to which the parties agreed to a deferral of payment of principal for a four month period beginning May 1, 2016, subject to the satisfaction of certain interest only period extension conditions, we entered into a warrant agreement with Hercules, pursuant to which we issued warrants to purchase 38,691 shares of common stock at an exercise price of \$4.71. These warrants were not registered under the Securities Act of 1933, as amended, or the securities laws of any state, and were offered and sold in reliance on the exemption from registration under the Securities Act of 1933, as amended, provided by Section 4(a)(2) of the Securities Act of 1933, as amended. Hercules was an accredited investor (as defined by Rule 501 under the Securities Act of 1933, as amended) at the time the warrants were offered and sold.

Item 16. Exhibits and Financial Statement Schedules.

(a) Exhibits

<u>Exhibit No.</u>	<u>Description</u>
1.1**	Form of Placement Agent Agreement
3.1	Amended and Restated Certificate of Incorporation (incorporated by reference to Exhibit 3.1 to Quarterly Report on Form 10-Q filed with the Securities and Exchange Commission on November 9, 2015)
3.2	Amended and Restated Bylaws (incorporated by reference to Exhibit 3.2 to Current Report on Form 8-K filed with the Securities and Exchange Commission on April 1, 2011)
3.3	Certificate of Designation, Preferences and Rights of Series A Preferred Stock (incorporated by reference to Exhibit 3.1 to Current Report on Form 8-K filed with the Securities and Exchange Commission on October 25, 2013)
3.4	Certificate of Amendment to Amended and Restated Certificate of Incorporation of InspireMD, Inc. (incorporated by reference to Exhibit 3.1 to the Current Report on Form 8-K filed on May 25, 2016)

- 3.5 Certificate of Designation of Preferences, Rights and Limitations of Series B Convertible Preferred Stock (incorporated by reference to Exhibit 3.5 to the Quarterly Report on Form 10-Q filed on August 9, 2016)
- 3.6 Certificate of Amendment to Amended and Restated Certificate of Incorporation of InspireMD, Inc. (incorporated by reference to Exhibit 3.1 to the Current Report on Form 8-K filed on September 29, 2016)
- 3.7** Form of Certificate of Designation of Preferences, Rights and Limitations of Series C Convertible Preferred Stock
- 4.1 Form of Common Stock Certificate (incorporated by reference to Exhibit 4.1 to Amendment No. 3 to Registration Statement on Form S-1 filed with the Securities and Exchange Commission on March 5, 2013)
- 4.2 Rights Agreement dated as of October 22, 2013 between InspireMD, Inc. and Action Stock transfer Corporation, as Rights Agent, including exhibits thereto (incorporated by reference to an exhibit to the Registration Statement on Form 8-A filed with Securities and Exchange Commission on October 25, 2013)
- 4.3** Form of Placement Agent Warrant
- 4.4** Form of Series B Warrant Agent Agreement and Form of Series B Warrant
- 4.5** Form of Series C Warrant Agent Agreement and Form of Series C Warrant
- 5.1* Opinion of Haynes and Boone, LLP
- 10.1+ Amended and Restated 2011 Umbrella Option Plan (incorporated by reference to Exhibit 10.1 to Current Report on Form 8-K filed with the Securities and Exchange Commission on November 4, 2011)
- 10.2+ Form of Stock Option Award Agreement (incorporated by reference to Exhibit 10.2 to Current Report on Form 8-K filed with the Securities and Exchange Commission on April 6, 2011)
- 10.3 License Agreement, by and between Svelte Medical Systems, Inc. and InspireMD Ltd., dated as of March 19, 2010 (incorporated by reference to Exhibit 10.5 to Amendment No. 1 to Registration Statement on Form S-1 filed with the Securities and Exchange Commission on August 26, 2011)
- 10.4+ Employment Agreement, by and between InspireMD Ltd. and Craig Shore, dated as of November 28, 2010 (incorporated by reference to Exhibit 10.21 to Current Report on Form 8-K filed with the Securities and Exchange Commission on April 6, 2011)
- 10.5+ Form of Indemnity Agreement between InspireMD, Inc. and each of the directors and executive officers thereof (incorporated by reference to Exhibit 10.22 to Amendment No. 1 to Registration Statement on Form S-1 filed with the Securities and Exchange Commission on August 26, 2011)
- 10.6 Agreement by and between InspireMD Ltd. and MeKo Laser Material Processing, dated as of April 15, 2010 (incorporated by reference to Exhibit 10.26 to Amendment No. 1 to Registration Statement on Form S-1 filed with the Securities and Exchange Commission on August 26, 2011)
- 10.7 Agreement by and between InspireMD Ltd. and Natec Medical Ltd, dated as of September 23, 2009 (incorporated by reference to Exhibit 10.27 to Amendment No. 1 to Registration Statement on Form S-1 filed with the Securities and Exchange Commission on August 26, 2011)
- 10.8+ Stock Award Agreement, dated as of November 16, 2011, by and between InspireMD, Inc. and Sol J. Barer, Ph.D. (Incorporated by reference to Exhibit 10.1 to Current Report on Form 8-K filed with the Securities and Exchange Commission on November 18, 2011)

- 10.9+ Nonqualified Stock Option Agreement, dated as of November 16, 2011, by and between InspireMD, Inc. and Sol J. Barer, Ph.D. (Incorporated by reference to Exhibit 10.2 to Current Report on Form 8-K filed with the Securities and Exchange Commission on November 18, 2011)
- 10.10 Form of April 2012 \$1,800.00 Warrant (incorporated by reference to Exhibit 10.3 to Current Report on Form 8-K filed with the Securities and Exchange Commission on April 6, 2012)
- 10.11 First Amendment to License Agreement, dated October 20, 2012, by and among Svelte Medical Systems, Inc., InspireMD, Inc. and InspireMD Ltd. (incorporated by reference to Exhibit 10.1 to Current Report on Form 8-K filed with the Securities and Exchange Commission on October 23, 2012)
- 10.12+ Second Amendment to the InspireMD, Inc. Amended and Restated 2011 UMBRELLA Option Plan (incorporated by reference to Exhibit 10.1 to Current Report on Form 8-K filed with the Securities and Exchange Commission on December 26, 2012)
- 10.13+ Employment Agreement, dated January 3, 2013, by and between InspireMD, Inc. and Alan Milinazzo (incorporated by reference to Exhibit 10.1 to Current Report on Form 8-K filed with the Securities and Exchange Commission on January 9, 2013)
- 10.14 Form of \$750.00 Warrant (incorporated by reference to Exhibit 10.76 to Registration Statement on Form S-1 filed with the Securities and Exchange Commission on April 9, 2013)
- 10.15 Exchange and Amendment Agreement, dated April 9, 2013, by and among InspireMD, Inc., holders of convertible debentures and holders of \$1,800.00 warrants issued in April 2012 (incorporated by reference to Exhibit 10.75 to Amendment No. 6 to Registration Statement on Form S-1 filed with the Securities and Exchange Commission on April 9, 2013)
- 10.16 Letter Agreement, dated as of April 15, 2013, by and among InspireMD, Inc. and each holder of Senior Secured Convertible Debentures Due April 15, 2014 (incorporated by reference to Exhibit 10.3 to Current Report on Form 8-K filed with the Securities and Exchange Commission on April 15, 2013)
- 10.17 Form of Amended \$750.00 Warrant (incorporated by reference to Exhibit 10.4 to Current Report on Form 8-K filed with the Securities and Exchange Commission on April 15, 2013)
- 10.18+ First Amendment to Employment Agreement, dated April 24, 2013, by and between InspireMD, Inc. and Alan Milinazzo (incorporated by reference to Exhibit 10.1 to Current Report on Form 8-K filed with the Securities and Exchange Commission on April 26, 2013)
- 10.19 Second Amendment to License Agreement, dated August 22, 2013, by and among Svelte Medical Systems, Inc., InspireMD, Inc. and InspireMD Ltd. (incorporated by reference to Exhibit 10.2 to Quarterly Report on Form 10-Q filed with the Securities and Exchange Commission on November 12, 2013)
- 10.20 Loan and Security Agreement, dated October 23, 2013, by and among InspireMD, Inc., InspireM.D Ltd and Hercules Technology Growth Capital, Inc. (incorporated by reference to Exhibit 10.1 to Current Report on Form 8-K filed with the Securities and Exchange Commission on October 25, 2013)
- 10.21 Fixed Charge Debenture, dated October 23, 2013, by and among InspireMD, Inc., Inspire M.D Ltd and Hercules Technology Growth Capital, Inc. (incorporated by reference to Exhibit 10.2 to Current Report on Form 8-K filed with the Securities and Exchange Commission on October 25, 2013)

- 10.22 Floating Charge Debenture, dated October 23, 2013, by and among InspireMD, Inc., Inspire M.D Ltd and Hercules Technology Growth Capital, Inc. (incorporated by reference to Exhibit 10.3 to Current Report on Form 8-K filed with the Securities and Exchange Commission on October 25, 2013)
- 10.23 Warrant Agreement, dated October 23, 2013, by and between InspireMD, Inc. and Hercules Technology Growth Capital, Inc. (incorporated by reference to Exhibit 10.4 to Current Report on Form 8-K filed with the Securities and Exchange Commission on October 25, 2013)
- 10.24 Account Control Agreement, dated October 23, 2013, among InspireMD, Inc., Hercules Technology Growth Capital, Inc. and Bank Leumi USA (incorporated by reference to Exhibit 10.5 to Current Report on Form 8-K filed with the Securities and Exchange Commission on October 25, 2013)
- 10.25+ InspireMD, Inc. 2013 Long-Term Incentive Plan (incorporated by reference to Exhibit 10.1 to Current Report on Form 8-K filed with the Securities and Exchange Commission on December 20, 2013)
- 10.26+ Amended and Restated Employment Agreement, dated May 5, 2014, by and between InspireMD, Inc. and Craig Shore (incorporated by reference to Exhibit 10.2 to Quarterly Report on Form 10-Q filed with the Securities and Exchange Commission on May 7, 2014)
- 10.27+ First Amendment to the InspireMD, Inc. Amended and Restated 2011 UMBRELLA Option Plan (incorporated by reference to Exhibit 10.3 to Quarterly Report on Form 10-Q filed with the Securities and Exchange Commission on May 7, 2014)
- 10.28+ Form of Incentive Stock Option Award Agreement under the InspireMD, Inc. 2013 Long-Term Incentive Plan (incorporated by reference to Exhibit 99.2 to Registration Statement on Form S-8 filed with the Securities and Exchange Commission on June 5, 2014)
- 10.29+ Form of Nonqualified Stock Option Award Agreement under the InspireMD, Inc. 2013 Long-Term Incentive Plan (incorporated by reference to Exhibit 99.3 to Registration Statement on Form S-8 filed with the Securities and Exchange Commission on June 5, 2014)
- 10.30+ Form of Restricted Stock Award Agreement under the InspireMD, Inc. 2013 Long-Term Incentive Plan (incorporated by reference to Exhibit 99.4 to Registration Statement on Form S-8 filed with the Securities and Exchange Commission on June 5, 2014)
- 10.31+ Form of Restricted Stock Unit Award Agreement under the InspireMD, Inc. 2013 Long-Term Incentive Plan (incorporated by reference to Exhibit 99.5 to Registration Statement on Form S-8 filed with the Securities and Exchange Commission on June 5, 2014)
- 10.32+ Form of Section 3(i) Stock Option Award Agreement under the InspireMD, Inc. 2013 Long-Term Incentive Plan (Israeli) (incorporated by reference to Exhibit 99.6 to Registration Statement on Form S-8 filed with the Securities and Exchange Commission on June 5, 2014)
- 10.33+ Form of Section 102 Capital Gain Stock Option Award Agreement under the InspireMD, Inc. 2013 Long-Term Incentive Plan (Israeli) (incorporated by reference to Exhibit 99.7 to Registration Statement on Form S-8 filed with the Securities and Exchange Commission on June 5, 2014)
- 10.34+ Form of Section 102 Capital Gain Restricted Stock Award Agreement under the InspireMD, Inc. 2013 Long-Term Incentive Plan (Israeli) (incorporated by reference to Exhibit 99.8 to Registration Statement on Form S-8 filed with the Securities and Exchange Commission on June 5, 2014)
- 10.35+ Form of Stock Option Award Agreement under the InspireMD, Inc. 2013 Long-Term Incentive Plan (European) (incorporated by reference to Exhibit 99.9 to Registration Statement on Form S-8 filed with the Securities and Exchange Commission on June 5, 2014)
- 10.36+ Form of Restricted Stock Award Agreement under the InspireMD, Inc. 2013 Long-Term Incentive Plan (European) (incorporated by reference to Exhibit 99.10 to Registration Statement on Form S-8 filed with the Securities and Exchange Commission on June 5, 2014)

- 10.37+ Form of Stock Option Award Agreement outside the InspireMD, Inc. 2013 Long-Term Incentive Plan (incorporated by reference to Exhibit 99.11 to Registration Statement on Form S-8 filed with the Securities and Exchange Commission on June 5, 2014)
- 10.38+ Employment Agreement, dated July 14, 2014, by and between InspireMD, Inc. and James J. Barry, Ph.D. (incorporated by reference to Exhibit 10.1 to Current Report on Form 8-K filed with the Securities and Exchange Commission on July 18, 2014)
- 10.39 Form of \$437.50 Warrant (incorporated by reference to Exhibit 10.2 to Current Report on Form 8-K filed with the Securities and Exchange Commission on November 5, 2014)
- 10.40+ Second Amendment to Employment Agreement, dated January 5, 2015, by and between InspireMD, Inc. and Alan Milinazzo (incorporated by reference to Exhibit 10.1 to Current Report on Form 8-K filed with the Securities and Exchange Commission on January 6, 2015)
- 10.41+ Amendment to Employment Agreement, dated January 5, 2015, by and between InspireMD, Inc. and James J. Barry, PhD (incorporated by reference to Exhibit 10.2 to Current Report on Form 8-K filed with the Securities and Exchange Commission on January 6, 2015)
- 10.42+ First Amendment to Amended and Restated Employment Agreement, dated January 5, 2015, by and between InspireMD, Inc. and Craig Shore (incorporated by reference to Exhibit 10.3 to Current Report on Form 8-K filed with the Securities and Exchange Commission on January 6, 2015)
- 10.43+ Amendment Number Two to Employment Agreement, dated February 22, 2015, by and between InspireMD, Inc. and James J. Barry, PhD (incorporated by reference to Exhibit 10.1 to Current Report on Form 8-K filed with the Securities and Exchange Commission on February 25, 2015)
- 10.44 Form of \$137.50 Warrant (incorporated by reference to Exhibit 10.2 to Current Report on Form 8-K filed with the Securities and Exchange Commission on March 4, 2015)
- 10.45+ Third Amendment to Employment Agreement, dated June 29, 2015, by and between InspireMD, Inc. and Alan Milinazzo (incorporated by reference to Exhibit 10.1 to Current Report on Form 8-K filed with the Securities and Exchange Commission on July 6, 2015)
- 10.46+ First Amendment to the InspireMD, Inc. 2013 Long-Term Incentive Plan (incorporated by reference to Exhibit 10.1 to the Current Report on Form 8-K filed on September 9, 2015)
- 10.47+ Offer Letter, between InspireMD, Inc. and Isaac Blech, dated January 16, 2016 (incorporated by reference to Exhibit 10.1 to the Current Report on Form 8-K filed on January 22, 2016)
- 10.48+ Fourth Amendment to Employment Agreement, dated January 21, 2016, by and between InspireMD, Inc. and Alan Milinazzo (incorporated by reference to Exhibit 10.2 to the Current Report on Form 8-K filed on January 22, 2016)
- 10.49+ Option Cancellation and Release Agreement, dated January 26, 2016, by and between InspireMD, Inc. and Sol J. Barer (incorporated by reference to Exhibit 10.1 to the Current Report on Form 8-K filed on January 28, 2016)

- 10.50+ Option Cancellation and Release Agreement, dated January 26, 2016, by and between InspireMD, Inc. and James Barry (incorporated by reference to Exhibit 10.2 to the Current Report on Form 8-K filed on January 28, 2016)
- 10.51+ Option Cancellation and Release Agreement, dated January 26, 2016, by and between InspireMD, Inc. and Michael Berman (incorporated by reference to Exhibit 10.3 to the Current Report on Form 8-K filed on January 28, 2016)
- 10.52+ Option Cancellation and Release Agreement, dated January 26, 2016, by and between InspireMD, Inc. and Paul Stuka (incorporated by reference to Exhibit 10.4 to the Current Report on Form 8-K filed on January 28, 2016)
- 10.53+ Option Cancellation and Release Agreement, dated January 26, 2016, by and between InspireMD, Inc. and Campbell Rogers (incorporated by reference to Exhibit 10.5 to the Current Report on Form 8-K filed on January 28, 2016)
- 10.54+ Option Cancellation and Release Agreement, dated January 26, 2016, by and between InspireMD, Inc. and James Loughlin (incorporated by reference to Exhibit 10.6 to the Current Report on Form 8-K filed on January 28, 2016)
- 10.55+ Option Cancellation and Release Agreement, dated January 26, 2016, by and between InspireMD, Inc. and Alan Milinazzo (incorporated by reference to Exhibit 10.7 to the Current Report on Form 8-K filed on January 28, 2016)
- 10.56+ Option Cancellation and Release Agreement, dated January 26, 2016, by and between InspireMD, Inc. and Craig Shore (incorporated by reference to Exhibit 10.8 to the Current Report on Form 8-K filed on January 28, 2016)
- 10.57+ Third Amendment to Employment Agreement, dated March 28, 2016, by and between InspireMD, Inc. and James J. Barry, PhD (incorporated by reference to Exhibit 10.66 to the Annual Report on Form 10-K filed on March 28, 2016)
- 10.58 Form of \$14.75 Underwritten Warrant (incorporated by reference to Exhibit 10.2 to Current Report on Form 8-K filed with the Securities and Exchange Commission on March 16, 2016)
- 10.59 Form of \$18.44 Underwriter Warrant (incorporated by reference to Exhibit 10.3 to Current Report on Form 8-K filed with the Securities and Exchange Commission on March 16, 2016)
- 10.60 Form of \$14.75 Private Placement Warrant (incorporated by reference to Exhibit 10.5 to Current Report on Form 8-K filed with the Securities and Exchange Commission on March 16, 2016)
- 10.61 Form of \$18.44 Placement Agent Warrant (incorporated by reference to Exhibit 10.7 to Current Report on Form 8-K filed with the Securities and Exchange Commission on March 16, 2016)
- 10.62+ Second Amendment to the InspireMD, Inc. 2013 Long-Term Incentive Plan (incorporated by reference to Exhibit 10.1 to the Current Report on Form 8-K filed on May 25, 2016)
- 10.63+ Fourth Amendment to Employment Agreement, dated June 6, 2016, by and between InspireMD, Inc. and James Barry, Ph.D. (incorporated by reference to Exhibit 10.1 to the Current Report on Form 8-K filed on June 7, 2016)
- 10.64 Amendment No. 1 to Loan and Security Agreement, dated November 19, 2013, by and among InspireMD, Inc., Inspire M.D Ltd and Hercules Technology Growth Capital, Inc. (incorporated by reference to Exhibit 10.1 to the Current Report on Form 8-K filed on June 14, 2016)
- 10.65 Amendment No.2 to Loan and Security Agreement, dated July 23, 2014, by and among InspireMD, Inc., Inspire M.D Ltd and Hercules Technology Growth Capital, Inc. (incorporated by reference to Exhibit 10.2 to the Current Report on Form 8-K filed on June 14, 2016)

- 10.66 Amendment No. 3 to Loan and Security Agreement, dated June 13, 2016, by and among InspireMD, Inc., Inspire M.D Ltd and Hercules Capital, Inc. (incorporated by reference to Exhibit 10.3 to the Current Report on Form 8-K filed on June 14, 2016)
- 10.67 Amendment to Debenture of Fixed Charge, dated June 13, 2016, by and between Inspire M.D Ltd and Hercules Capital, Inc. (incorporated by reference to Exhibit 10.4 to the Current Report on Form 8-K filed on June 14, 2016)
- 10.68 Amendment to Debenture of Floating Charge, dated June 13, 2016, by and between Inspire M.D Ltd and Hercules Capital, Inc. (incorporated by reference to Exhibit 10.5 to the Current Report on Form 8-K filed on June 14, 2016)
- 10.69 Warrant Agreement, dated June 13, 2016, by and between InspireMD, Inc. and Hercules Capital, Inc. (incorporated by reference to Exhibit 10.6 to the Current Report on Form 8-K filed on June 14, 2016)
- 10.70 Intellectual Property Security Agreement, dated as of June 13, 2016, by and among InspireMD, Inc., several banks and other financial institutions or entities from time to time parties to the Loan and Security Agreement, and Hercules Capital, Inc., as agent (incorporated by reference to Exhibit 10.7 to the Current Report on Form 8-K filed on June 14, 2016)
- 10.71 Intellectual Property Security Agreement, dated as of June 13, 2016, by and among Inspire M.D LTD, several banks and other financial institutions or entities from time to time parties to the Loan and Security Agreement, and Hercules Capital, Inc., as agent (incorporated by reference to Exhibit 10.8 to the Current Report on Form 8-K filed on June 14, 2016)
- 10.72 Amendment to Securities Purchase Agreement, dated June 17, 2016, by and among InspireMD, Inc. and the Purchasers identified on the signature pages thereto (incorporated by reference to Exhibit 10.76 to the Registration Statement on Form S-1/A filed on June 17, 2016)
- 10.73 Placement Agent Unit Purchase Option, dated June 7, 2016, issued to Dawson James Securities, Inc. (incorporated by reference to Exhibit 10.12 to the Quarterly Report on Form 10-Q filed on August 9, 2016)
- 10.74 Warrant Agent Agreement and Form of Warrant, dated as of July 7, 2016, between InspireMD, Inc. and Action Stock Transfer Corporation, as Warrant Agent (incorporated by reference to an exhibit to the Registration Statement on Form 8-A filed with Securities and Exchange Commission on July 26, 2016)
- 10.75+ Second Amendment to Amended and Restated Employment Agreement, dated July 25, 2016, by and between InspireMD, Inc. and Craig Shore agent (incorporated by reference to Exhibit 10.1 to the Current Report on Form 8-K filed on July 29, 2016)
- 10.76+ Third Amendment to the InspireMD, Inc. 2013 Long-Term Incentive Plan (incorporated by reference to Exhibit 10.1 to the Current Report on Form 8-K filed on September 29, 2016)
- 10.77+ Employment Agreement, dated October 24, 2016, by and between InspireMD, Inc. and Agustin Gago (incorporated by reference to Exhibit 10.1 to the Current Report on Form 8-K filed on October 27, 2016)
- 10.78+ Director Offer Letter, between InspireMD, Inc. and Thomas J. Kester, dated September 6, 2016 (incorporated by reference to Exhibit 10.79 to the Annual Report on Form 10-K filed on February 16, 2017)
- 21.1 List of Subsidiaries (incorporated by reference to Exhibit 21.1 to Current Report on Form 8-K filed with the Securities and Exchange Commission on April 6, 2011)
- 23.1** Consent of Kesselman & Kesselman, Independent Registered Public Accounting Firm
- 23.2* Consent of Haynes and Boone, LLP (included in Exhibit 5.1)
- 24.1 Power of Attorney (included in the signature page)
- 101**¥ The following materials for the twelve months ended December 31, 2016, formatted in XBRL (eXtensible Business Reporting Language), (i) Consolidated Balance Sheets, (ii) Consolidated Statements of Income, (iii) Consolidated Statements of Comprehensive Income, (iv) Statements of Cash Flows, (v) Consolidated Statement of Stockholders' Equity (Capital Deficiency) and (vi) Notes to Consolidated Financial Statements

* Filed herewith.

** Previously Filed.

¥ Pursuant to Rule 406T of Regulation S-T, the Interactive Data Files on Exhibit 101 hereto are deemed furnished and not filed or part of a registration statement or prospectus for purposes of Sections 11 or 12 of the Securities Act of 1933, as amended, are deemed furnished and not filed for purposes of Section 18 of the Securities Exchange Act of 1934, as amended, and otherwise are not subject to liability under these sections.

+ Management contract or compensatory plan or arrangement.

^ Confidential treatment has been granted with respect to certain portions of this exhibit by the Securities and Exchange Commission under a confidential treatment request pursuant to Rule 24b-2 of the Securities Exchange Act of 1934, as amended.

(b) Financial Statement Schedules

No financial statement schedules are provided because the information is not required or is shown either in the financial statements or the notes thereto.

Item 17. Undertakings.

a. The undersigned registrant hereby undertakes:

1. To file, during any period in which offers or sales are being made, a post-effective amendment to this registration statement:
 - i. To include any prospectus required by section 10(a)(3) of the Securities Act of 1933;
 - ii. To reflect in the prospectus any facts or events arising after the effective date of the registration statement (or the most recent post-effective amendment thereof) which, individually or in the aggregate, represent a fundamental change in the information set forth in the registration statement. Notwithstanding the foregoing, any increase or decrease in volume of securities offered (if the total dollar value of securities offered would not exceed that which was registered) and any deviation from the low or high end of the estimated maximum offering range may be reflected in the form of prospectus filed with the Commission pursuant to Rule 424(b) if, in the aggregate, the changes in volume and price represent no more than 20% change in the maximum aggregate offering price set forth in the "Calculation of Registration Fee" table in the effective registration statement; and
 - iii. To include any material information with respect to the plan of distribution not previously disclosed in the registration statement or any material change to such information in the registration statement;

provided, however, that paragraphs (a)(1)(i), (ii), and (iii) of this section do not apply if the information required to be included in a post-effective amendment by those paragraphs is contained in reports filed with or furnished to the Commission by the registrant pursuant to section 13 or section 15(d) of the Securities Exchange Act of 1934 (15 U.S.C. 78m or 78o(d)) that are incorporated by reference in the registration statement, or, as to a registration statement.

2. That, for the purpose of determining any liability under the Securities Act of 1933, each such post-effective amendment shall be deemed to be a new registration statement relating to the securities offered therein, and the offering of such securities at that time shall be deemed to be the initial bona fide offering thereof.
3. To remove from registration by means of a post-effective amendment any of the securities being registered which remain unsold at the termination of the offering.
4. That, for the purpose of determining liability of the registrant under the Securities Act of 1933 to any purchaser in the initial distribution of the securities: The undersigned registrant undertakes that in a primary offering of securities of the undersigned registrant pursuant to this registration statement, regardless of the underwriting method used to sell the securities to the purchaser, if the securities are offered or sold to such purchaser by means of any of the following communications, the undersigned registrant will be a seller to the purchaser and will be considered to offer or sell such securities to such purchaser:

- i. Any preliminary prospectus or prospectus of the undersigned registrant relating to the offering required to be filed pursuant to Rule 424;
 - ii. Any free writing prospectus relating to the offering prepared by or on behalf of the undersigned registrant or used or referred to by the undersigned registrant;
 - iii. The portion of any other free writing prospectus relating to the offering containing material information about the undersigned registrant or its securities provided by or on behalf of the undersigned registrant; and
 - iv. Any other communication that is an offer in the offering made by the undersigned registrant to the purchaser.
- b. The undersigned registrant hereby undertakes that, for purposes of determining any liability under the Securities Act of 1933, each filing of the registrant's annual report pursuant to section 13(a) or section 15(d) of the Securities Exchange Act of 1934 (and, where applicable, each filing of an employee benefit plan's annual report pursuant to section 15(d) of the Securities Exchange Act of 1934) that is incorporated by reference in the registration statement shall be deemed to be a new registration statement relating to the securities offered therein, and the offering of such securities at that time shall be deemed to be the initial bona fide offering thereof.
- c. Insofar as indemnification for liabilities arising under the Securities Act of 1933 may be permitted to directors, officers and controlling persons of the registrant pursuant to the foregoing provisions, or otherwise, the registrant has been advised that in the opinion of the Securities and Exchange Commission such indemnification is against public policy as expressed in the Securities Act of 1933 and is, therefore, unenforceable. In the event that a claim for indemnification against such liabilities (other than the payment by the registrant of expenses incurred or paid by a director, officer or controlling person of the registrant in the successful defense of any action, suit or proceeding) is asserted by such director, officer or controlling person in connection with the securities being registered, the registrant will, unless in the opinion of its counsel the matter has been settled by controlling precedent, submit to a court of appropriate jurisdiction the question whether such indemnification by it is against public policy as expressed in the Act and will be governed by the final adjudication of such issue.
- d. The undersigned registrant hereby undertakes that:
1. For purposes of determining any liability under the Securities Act of 1933, the information omitted from the form of prospectus filed as part of this registration statement in reliance upon Rule 430A and contained in a form of prospectus filed by the registrant pursuant to Rule 424(b)(1) or (4) or 497(h) under the Securities Act shall be deemed to be part of this registration statement as of the time it was declared effective.
 2. For the purpose of determining any liability under the Securities Act of 1933, each post-effective amendment that contains a form of prospectus shall be deemed to be a new registration statement relating to the securities offered therein, and the offering of such securities at that time shall be deemed to be the initial bona fide offering thereof.

SIGNATURES

Pursuant to the requirements of the Securities Act of 1933, the registrant has duly caused this Amendment No. 2 to registration statement to be signed on its behalf by the undersigned, thereunto duly authorized in the City of Boston, Commonwealth of Massachusetts on February 23, 2017.

INSPIREMD, INC.

By: /s/ James Barry
Name: James Barry, Ph.D.
Title: Chief Executive Officer

In accordance with the requirements of the Securities Act of 1933, this Amendment No. 2 to registration statement has been signed by the following persons in the capacities and on the dates indicated.

<u>Signature</u>	<u>Title</u>	<u>Date</u>
<u>/s/ James Barry</u> James Barry, Ph.D.	President, Chief Executive Officer and Director (principal executive officer)	February 23, 2017
<u>/s/ Craig Shore</u> Craig Shore	Chief Financial Officer, Chief Administrative Officer Secretary and Treasurer (principal financial and accounting officer)	February 23, 2017
* <u>Sol J. Barer, Ph.D.</u>	Chairman of the Board of Directors	February 23, 2017
* <u>Isaac Blech</u>	Vice Chairman of the Board of Directors	February 23, 2017
* <u>Michael Berman</u>	Director	February 23, 2017
* <u>Campbell Rogers, M.D.</u>	Director	February 23, 2017
* <u>Paul Stuka</u>	Director	February 23, 2017
* <u>Thomas J. Kester</u>	Director	February 23, 2017

*By: /s/ James Barry
James Barry, Ph.D.
Attorney-in-Fact

February 23, 2017

InspireMD, Inc.
321 Columbus Avenue
Boston, Massachusetts 02116

Re: InspireMD, Inc. Registration Statement on Form S-1

Ladies and Gentlemen:

We have acted as counsel to InspireMD, Inc., a Delaware corporation (the “Company”), in connection with the proposed registration of (i) up to an aggregate of approximately \$7.5 million of units (the “Units”) that are being offered by the Company, with each unit consisting of (A) one share of Series C Convertible Preferred Stock of the Company, par value \$0.0001 per share (the “Preferred Stock”), (B) a five-year warrant to purchase 4 shares of the Company’s common stock, par value \$0.0001 per share (the “Common Stock”), and (C) a six-month warrant to purchase 4 shares of Common Stock, (ii) the shares of Preferred Stock (the “Offering Shares”) included in the Units (which equals, in aggregate, 750,000 shares of Preferred Stock, based on an assumed offering price of \$10.00 per unit and a Preferred Stock conversion price of \$2.50 per share of Common Stock, but which may be more or fewer shares depending on the actual offering price), (iii) the five-year warrants to purchase an aggregate of 3,000,000 shares of Common Stock (based on the assumed offering price of \$10.00 per unit and a Preferred Stock conversion price of \$2.50 per share of Common Stock, but which may be more or fewer shares depending on the actual offering price) included in the Units (the “Series B Warrants”), (iv) the six-month warrants to purchase an aggregate of 3,000,000 shares of Common Stock (based on the assumed offering price of \$10.00 per unit and a Preferred Stock conversion price of \$2.50 per share of Common Stock, but which may be more or fewer shares depending on the actual offering price) included in the Units (the “Series C Warrant” and, together with the Series B Warrants, the “Offering Warrants”), (v) an aggregate of 3,000,000 shares of Common Stock issuable upon conversion of the Offering Shares (based on the assumed offering price of \$10.00 per unit and a Preferred Stock conversion price of \$2.50 per share of Common Stock, but which may be more or fewer shares depending on the actual offering price)(the “Conversion Shares”), (vi) an aggregate of 6,000,000 shares of Common Stock issuable upon exercise of the Offering Warrants (based on the assumed offering price of \$10.00 per unit and a Preferred Stock conversion price of \$2.50 per share of Common Stock, but which may be more or fewer shares depending on the actual offering price)(the “Offering Warrant Shares”), (vii) a warrant to purchase up to 5% of the number of Conversion Shares sold to investors granted to Dawson James Securities, Inc. (the “Placement Agent”) by the Company (the “Placement Agent Warrant” and, together with the Offering Warrants, the “Warrants”), (viii) 150,000 shares of Common Stock issuable upon exercise of the Placement Agent Warrant (together with the Offering Warrant Shares, the “Warrant Shares” and, all of the securities listed in (i) through (viii) above, the “Securities”), pursuant to a Registration Statement on Form S-1 under the Securities Act of 1933, as amended (the “Securities Act”), originally filed with the Securities and Exchange Commission (the “Commission”) on January 24, 2017 (Registration No. 333-215682), as amended to date (the “Registration Statement”).

The opinion expressed herein is limited exclusively to (i) the General Corporation Law of the State of Delaware (the “DGCL”) and (ii) the laws of the State of New York, in each case as in effect on the date hereof, and we have not considered, and express no opinion on, any other laws or the laws of any other jurisdiction.

In rendering the opinions expressed herein, we have examined and relied upon the originals, or copies certified to our satisfaction, of (i) the Registration Statement and the prospectus included therein (the “Prospectus”), and all exhibits thereto; (ii) the Company’s Certificate of Incorporation and any amendments to date certified by the Secretary of State of the State of Delaware; (iii) the Company’s By-laws and any amendments to date certified by the Secretary of the Company; (iv) the minutes and records of the corporate proceedings of the Company with respect to the authorization of the issuance of the Securities covered by the Registration Statement and related matters thereto; (v) the form of Placement Agency Agreement to be entered into between the Company and the Placement Agent (the “Placement Agent Agreement”); (vi) the forms of Series B Warrant Agent Agreement and Series C Warrant Agent Agreement, to be entered into by the Company and Action Stock Transfer Corp., as warrant agent, and Forms of Series B Warrant certificate and Series C Warrant certificate, (vii) the form of Common Stock certificate, (viii) the form of Placement Agent Warrant; and (ix) such other records, documents and instruments as we have deemed necessary for the expression of the opinions stated herein.

In making the foregoing examinations, we have assumed the genuineness of all signatures (other than those of the Company), the authenticity of all documents submitted to us as originals, the conformity to original documents of all documents submitted to us as certified or photostatic copies thereof and the authenticity of the originals of such latter documents. As to all questions of fact material to this opinion, where such facts have not been independently established, we have relied, to the extent we have deemed reasonably appropriate, upon representations or certificates of officers of the Company or governmental officials and representations of the Company in the Placement Agent Agreement.

Based upon and subject to the foregoing and to the other qualifications and limitations set forth herein, we are of the opinion that the (1) the Units, Offering Shares and the the Conversion Shares have been duly authorized, and in the case of the Units and the Offering Shares, if, as, and when issued by the Company in accordance with and in the manner described in the Prospectus and, in the case of the Conversion Shares, when issued in accordance with the terms of the Offering Shares, will be validly issued, fully paid and non-assessable; (2) (a) when issued by the Company in accordance with and in the manner described in the Prospectus, the Offering Warrants; and (b) when issued by the Company in accordance with and in the manner described in the Prospectus and the Placement Agent Agreement, the Placement Agent Warrant, will be legally binding obligations of the Company in accordance with their terms, except that with respect to the Warrants: (i) as such enforceability may be limited by bankruptcy, insolvency, reorganization or similar laws affecting creditors’ rights generally and by general equitable principles (regardless of whether enforceability is considered in a proceeding in equity or at law), (ii) as enforceability of any indemnification or contribution provision may be limited under the Federal and state securities laws, and (iii) that the remedy of specific performance and injunctive and other forms of equitable relief may be subject to the equitable defenses and to the discretion of the court before which any proceeding therefor may be brought; (3) the Warrant Shares have been duly authorized, and if, as and when issued in accordance with the terms of the Warrants, will be validly issued, fully paid and non-assessable.

InspireMD, Inc.
February 23, 2017
Page 3

We hereby consent to the filing of this opinion with the Commission as Exhibit 5.1 to the Registration Statement and any abbreviated registration statements relating thereto that may be filed to register additional securities identical to those covered by the Registration Statement (including a registration statement filed pursuant to Rule 462(b) under the Securities Act), and to the reference to our firm under the caption "Legal Matters" in the prospectus constituting part of such Registration Statement. In giving such consent, we do not hereby admit that we are in the category of persons whose consent is required under Section 7 of the Securities Act.

Very truly yours,

/s/ Haynes and Boone, LLP

Haynes and Boone, LLP
