

INSPIREMD, INC.

Filed by
BARER SOL J

FORM SC 13D/A

(Amended Statement of Beneficial Ownership)

Filed 04/20/16

Address	321 COLUMBUS AVENUE BOSTON, MA 02116
Telephone	(857) 453-6553
CIK	0001433607
Symbol	NSPR
Fiscal Year	12/31

UNITED STATES
SECURITIES AND EXCHANGE COMMISSION
Washington, D.C. 20549

SCHEDULE 13D

(Amendment No. 2)

Under the Securities Exchange Act of 1934*

InspireMD, Inc.

(Name of Issuer)

Common Stock

(Title of Class of Securities)

45779A309

(CUSIP Number)

Sol J. Barer, Ph.D.
c/o InspireMD, Inc.
321 Columbus Avenue
Boston, MA 02116
(857) 453-6553

(Name, Address and Telephone Number of Person Authorized to Receive Notices and Communications)

March 9, 2015

(Date of Event which Requires Filing of this Statement)

If the filing person has previously filed a statement on Schedule 13G to report the acquisition that is the subject of this Schedule 13D, and is filing this schedule because of §§240.13d-1(e), (f) or (g), check the following box.

Note: Schedules filed in paper format shall include a signed original and five copies of the schedule, including all exhibits. See §240.13d-7(b) for other parties to whom copies are to be sent.

*The remainder of this cover page shall be filled out for a reporting person's initial filing on this form with respect to the subject class of securities, and for any subsequent amendment containing information which would alter disclosures provided in a prior cover page.

The information required on the remainder of this cover page shall not be deemed to be "filed" for the purpose of Section 18 of the Securities Exchange Act of 1934 ("Act") or otherwise subject to the liabilities of that section of the Act but shall be subject to all other provisions of the Act (however, see the Notes).

1	NAME OF REPORTING PERSON Sol J. Barer	
2	CHECK THE APPROPRIATE BOX IF A MEMBER OF A GROUP (a) <input type="checkbox"/> (b) <input checked="" type="checkbox"/>	
3	SEC USE ONLY	
4	SOURCE OF FUNDS OO	
5	CHECK IF DISCLOSURE OF LEGAL PROCEEDINGS IS REQUIRED PURSUANT TO ITEMS 2(d) OR 2(e) <input type="checkbox"/>	
6	CITIZENSHIP OR PLACE OF ORGANIZATION United States of America	
NUMBER OF SHARES BENEFICIALLY OWNED BY EACH REPORTING PERSON WITH	7	SOLE VOTING POWER 2,000,046 ¹
	8	SHARED VOTING POWER 85,000 ²
	9	SOLE DISPOSITIVE POWER 2,000,046 ¹
	10	SHARED DISPOSITIVE POWER 85,000 ²
11	AGGREGATE AMOUNT BENEFICIALLY OWNED BY EACH REPORTING PERSON 2,085,046	
12	CHECK IF THE AGGREGATE AMOUNT IN ROW (11) EXCLUDES CERTAIN SHARES <input type="checkbox"/>	
13	PERCENT OF CLASS REPRESENTED BY AMOUNT IN ROW (11) 18.14% ³	
14	TYPE OF REPORTING PERSON IN	

¹ Includes (i) 85,000 shares held by a grantor retained annuity trust, (ii) 90,011 shares of common stock issuable to Dr. Barer upon exercise of options that are currently exercisable or exercisable within 60 days of this Amendment No. 2 to Statement of Beneficial Ownership on Schedule 13D, and (iii) 683,345 shares of common stock issuable to Dr. Barer upon exercise of currently exercisable warrants.

² Comprised of 85,000 shares of common stock held by Dr. Barer's spouse.

³ Based upon 10,722,974 shares of common stock of the issuer outstanding as of March 31, 2016, as disclosed in the Registration Statement on Form S-1 filed by the issuer with the Securities and Exchange Commission on April 14, 2016.

This Amendment No. 2 to Schedule 13D (this “*Amendment*”) is filed by and on behalf of the Reporting Person to amend the Schedule 13D related to common stock, par value \$0.0001 per share (the “*Common Stock*”) of InspireMD, Inc., a Delaware corporation (the “*Issuer*”) previously filed by the Reporting Person with the Securities and Exchange Commission (the “*Commission*”) on November 28, 2011, as amended and/or supplemented by Amendment No. 1 to the Schedule 13D filed on April 26, 2013 (as amended, the “*Schedule 13D*”). Each capitalized term used and not defined herein shall have the meaning assigned to such term in the Schedule 13D. Except as otherwise provided herein, each Item of the Schedule 13D remains unchanged.

Unless otherwise indicated, all information in this Amendment No. 2 reflects a one-for-four reverse stock split of the Issuer’s Common Stock that occurred on December 21, 2012 and a one-for-ten reverse stock split of the Issuer’s Common Stock that occurred on October 1, 2015.

Item 1. Security and Issuer.

Item 1 is amended by deleting the second sentence and replacing it with the following:

The principal executive offices of the Issuer are located at 321 Columbus Avenue, Boston, MA 02116.

Item 2. Identity and Background.

Item 2(c) is deleted and replaced with the following:

- (c) Dr. Barer is currently the Chairman and a member of the board of directors of the Issuer. He is also a member of the board of directors of Teva Pharmaceutical Industries Ltd., Edge Therapeutics, Inc., Medgenics, Inc., Centrexion Corporation, ContraFect Corporation, Amicus Therapeutics, Inc. and Aegerion Pharmaceuticals, Inc. and serves as a senior advisor to a number of other biotechnology companies.

Item 3. Source and Amount of Funds or Other Consideration.

Item 3 is supplemented by adding the following at the end of the bullet list:

- On April 24, 2013, Dr. Barer purchased 2,000 shares of Common Stock at a weighted average price of \$21.00 per share in an open market transaction. Dr. Barer used personal funds to fund the purchase.
- On April 28, 2013, Dr. Barer purchased 2,000 shares of Common Stock at a weighted average price of \$21.50 per share in an open market transaction. Dr. Barer used personal funds to fund the purchase.
- On April 29, 2013, Dr. Barer purchased 2,000 shares of Common Stock at a weighted average price of \$20.90 per share in an open market transaction. Dr. Barer used personal funds to fund the purchase.
- On April 30, 2013, Dr. Barer purchased 2,000 shares of Common Stock at a weighted average price of \$20.70 per share in an open market transaction. Dr. Barer used personal funds to fund the purchase.
- On April 31, 2013, Dr. Barer purchased 2,000 shares of Common Stock at a weighted average price of \$22.60 per share in an open market transaction. Dr. Barer used personal funds to fund the purchase.
- On May 9, 2013, as compensation for his service on the board of directors of the Issuer, the Issuer granted Dr. Barer an option to purchase 10,000 shares of Common Stock at an exercise price of \$27.50 per share (the “\$27.50 Option”), subject to the terms and conditions of the Issuer’s 2011 U.S. Equity Incentive Plan, a sub-plan of the Issuer’s 2011 Umbrella Option Plan. The \$27.50 Option will vest and become exercisable in three equal annual installments. The first installment became exercisable on May 9, 2014, the second installment becomes exercisable on May 9, 2015 and the third installment becomes exercisable on May 9, 2016, subject to Dr. Barer’s continued service.

- On November 16, 2011, Dr. Barer was granted an option to purchase 18,125 shares of Common Stock at an exercise price of \$78.00 (the “November 2011 Tranche C Option”), subject to the terms and conditions of a Nonqualified Stock Option Agreement, that was to vest in full upon the Issuer receiving research coverage from at least two investment banks that ranked in the top twenty investment banks in terms of underwritings as of their most recently completed fiscal year. On May 8, 2013, the Issuer received research coverage from a second investment bank that ranked in the top twenty investment banks in terms of life science underwritings as of its most recently completed fiscal year, after already receiving research coverage from one such other investment bank. On May 10, 2013, the compensation committee of the Issuer determined that the vesting requirement set forth in the nonqualified stock option agreement between the Issuer and Dr. Barer was satisfied and that the November 2011 Tranche C Option should vest immediately.
- On January 29, 2014, as compensation for his service on the board of directors of the Issuer, the Issuer granted Dr. Barer an option to purchase 8,500 shares of Common Stock at an exercise price of \$31.00 per share (the “\$31.00 Option”), subject to the terms and conditions of the Issuer’s 2013 Long-Term Incentive Plan. The \$31.00 Option will vest and become exercisable in three equal annual installments. The first installment became exercisable on January 29, 2015, the second installment became exercisable on January 29, 2016 and the third installment becomes exercisable on January 29, 2017, provided that if Dr. Barer fails to be reelected or nominated for reelection at the 2015 annual meeting of stockholders, the option vests and becomes exercisable as of such date.
- On May 12, 2014, Dr. Barer purchased 480 shares of Common Stock at a weighted average price of \$24.17 per share in an open market transaction. Dr. Barer used personal funds to fund the purchase.
- On May 13, 2014, Dr. Barer purchased 4,520 shares of Common Stock at a weighted average price of \$24.45 per share in an open market transaction. Dr. Barer used personal funds to fund the purchase.
- On November 7, 2014, in connection with the Issuer’s registered direct offering, Dr. Barer purchased 19,231 shares of Common Stock and warrants to purchase 9,616 shares of Common Stock. The purchase price was \$13.00 per share of Common Stock and accompanying warrant to purchase one-half share of Common Stock, which were purchased together in the offering. The warrants have an exercise price of \$17.50 per full share of Common Stock. Dr. Barer used personal funds to fund the purchase.
- On January 5, 2015, the Issuer granted Dr. Barer an option to purchase 4,161 shares of Common Stock at an exercise price of \$7.80 per share (the “\$7.80 Option”), subject to the terms and conditions of the Issuer’s 2013 Long-Term Incentive Plan. The \$7.80 Option was immediately vested and exercisable. The \$7.80 option had a black-scholes value equal to \$17,500, which was owed to Dr. Barer for his service as a director for the third and fourth calendar quarters of 2014, and was provided to Dr. Barer in lieu of such cash compensation.
- On January 26, 2015, as compensation for his service on the board of directors of the Issuer, the Issuer granted Dr. Barer an option to purchase 9,160 shares of Common Stock at an exercise price of \$7.20 per share (the “\$7.20 Option”), subject to the terms and conditions of the Issuer’s 2013 Long-Term Incentive Plan. The \$7.20 Option will vest and become exercisable in three equal annual installments. The first installment became exercisable on January 26, 2016, the second installment becomes exercisable on January 26, 2017 and the third installment becomes exercisable on January 26, 2018, subject to Dr. Barer’s continued service.

- On March 9, 2015, in connection with the Issuer’s public offering, Dr. Barer purchased 250,000 shares of Common Stock and warrants to purchase 250,000 shares of Common Stock. The purchase price was \$4.00 per share of Common Stock and accompanying warrant to purchase one share of Common Stock, which were purchased together in the offering. The warrants have an exercise price of \$5.50 per share of Common Stock. Dr. Barer used personal funds to fund the purchase.
- On March 31, 2015, the Issuer granted Dr. Barer an option to purchase 4,389 shares of Common Stock at an exercise price of \$3.20 per share (the “\$3.20 Option”), subject to the terms and conditions of the Issuer’s 2013 Long-Term Incentive Plan. The \$3.20 Option was immediately vested and exercisable. The \$3.20 option had a black-scholes value equal to \$8,750, which was owed to Dr. Barer for his service as a director for the first calendar quarter of 2015, and was provided to Dr. Barer in lieu of such cash compensation.
- On June 30, 2015, the Issuer granted Dr. Barer an option to purchase 4,967 shares of Common Stock at an exercise price of \$2.80 per share (the “\$2.80 Option”), subject to the terms and conditions of the Issuer’s 2013 Long-Term Incentive Plan. The \$2.80 Option was immediately vested and exercisable. The \$2.80 option had a black-scholes value equal to \$8,750, which was owed to Dr. Barer for his service as a director for the second calendar quarter of 2015, and was provided to Dr. Barer in lieu of such cash compensation.
- On September 30, 2015, the Issuer granted Dr. Barer an option to purchase 8,155 shares of Common Stock at an exercise price of \$1.70 per share (the “\$1.70 Option”), subject to the terms and conditions of the Issuer’s 2013 Long-Term Incentive Plan. The \$1.70 Option was immediately vested and exercisable. The \$1.70 option had a black-scholes value equal to \$8,750, which was owed to Dr. Barer for his service as a director for the third calendar quarter of 2015, and was provided to Dr. Barer in lieu of such cash compensation.
- On January 26, 2016, the Issuer granted Dr. Barer one share of Common Stock as consideration for entering into that certain Option Cancellation and Release Agreement between the Issuer and Dr. Barer.
- On March 21, 2016, in connection with the Issuer’s private placement, Dr. Barer purchased 847,458 shares of Common Stock and warrants to purchase 423,729 shares of Common Stock. The purchase price was \$0.59 per share of Common Stock and accompanying warrant to purchase one half of one share of Common Stock, which were purchased together in the offering. The warrants have an exercise price of \$0.59 per share of Common Stock. Dr. Barer used personal funds to fund the purchase.

Item 5. Interest in Securities of the Issuer.

Item 5 is deleted in its entirety and replaced with the following:

(a) The aggregate number and percentage of the class of securities identified pursuant to Item 1 beneficially owned by Dr. Barer is stated in Items 11 and 13 on the cover page hereto.

(b) Number of shares as to which Dr. Barer has:

(i) sole power to vote or to direct the vote:

See Item 7 on the cover page hereto.

(ii) shared power to vote or to direct the vote:

See Item 8 on the cover page hereto.

(iii) sole power to dispose or to direct the disposition of:

See Item 9 on the cover page hereto.

- (iv) shared power to dispose or to direct the disposition of:

See Item 10 on the cover page hereto.

- (c) The response to Item 3 is incorporated herein by reference.

(d) No other person is known to have the right to receive or the power to direct the receipt of dividends from, or the proceeds from the sale of, any shares of Common Stock owned or shares of Common Stock issuable upon exercise of stock options owned by Dr. Barer, except that 85,000 shares of such Common Stock are held by Dr. Barer's spouse.

- (e) Inapplicable.

Item 6. Contracts, Arrangements, Understandings or Relationships with Respect to Securities of the Issuer.

Item 6 is amended and supplemented by adding the following:

The response to Items 3 and 5 are hereby incorporated by reference in this Item 6.

Item 7. Material to be Filed as Exhibits.

<u>Exhibit</u>	<u>Description of Exhibit</u>
1	\$2.50 Nonqualified Stock Option Agreement, dated as of July 11, 2011, by and between InspireMD, Inc. and Sol J. Barer, Ph.D (incorporated herein by reference to Exhibit 10.2 to the Issuer's Current Report on Form 8-K filed with the Securities and Exchange Commission on July 15, 2011).
2	Stock Award Agreement, dated as of November 16, 2011, by and between InspireMD, Inc. and Sol J. Barer, Ph.D. (incorporated herein by reference to Exhibit 10.2 to the Issuer's Current Report on Form 8-K filed with the Securities and Exchange Commission on November 18, 2011).
3	Nonqualified Stock Option Agreement, dated as of November 16, 2011, by and between InspireMD, Inc. and Sol J. Barer, Ph.D. (incorporated herein by reference to Exhibit 10.2 to the Issuer's Current Report on Form 8-K filed with the Securities and Exchange Commission on November 18, 2011).
4	Amended and Restated 2011 Umbrella Option Plan (incorporated by reference to Exhibit 10.1 to the Issuer's Current Report on Form 8-K filed with the Securities and Exchange Commission on November 4, 2011)
5	Form of Stock Option Award Agreement (incorporated by reference to Exhibit 10.2 to the Issuer's Current Report on Form 8-K filed with the Securities and Exchange Commission on April 6, 2011)
6	InspireMD, Inc. 2013 Long-Term Incentive Plan (incorporated by reference to Exhibit 10.1 to the Issuer's Current Report on Form 8-K filed with the Securities and Exchange Commission on December 20, 2013)
7	Form of Nonqualified Stock Option Award Agreement under the InspireMD, Inc. 2013 Long-Term Incentive Plan (incorporated by reference to Exhibit 99.3 to the Issuer's Registration Statement on Form S-8 filed with the Securities and Exchange Commission on June 5, 2014)
8	Form of Securities Purchase Agreement in connection with registered direct offering (incorporated by reference to Exhibit 10.1 to the Issuer's Current Report on Form 8-K filed with the Securities and Exchange Commission on November 5, 2014)

- 9 Form of \$1.75 Warrant (incorporated by reference to Exhibit 10.2 to the Issuer's Current Report on Form 8-K filed with the Securities and Exchange Commission on November 5, 2014)
- 10 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 Issuer's Current Report on Form 8-K filed with the Securities and Exchange Commission on January 28, 2015)
- 11 Form of \$0.55 Warrant (incorporated by reference to Exhibit 10.2 to the Issuer's Current Report on Form 8-K filed with the Securities and Exchange Commission on March 4, 2015)
- 12 Form of Securities Purchase Agreement in connection with private placement (incorporated by reference to Exhibit 10.4 to the Issuer's Current Report on Form 8-K filed with the Securities and Exchange Commission on March 16, 2016)
- 13 Form of Private Placement Warrant (incorporated by reference to Exhibit 10.5 to the Issuer's Current Report on Form 8-K filed with the Securities and Exchange Commission on March 16, 2016)

SIGNATURES

After reasonable inquiry and to the best of my knowledge and belief, the undersigned certifies that the information set forth in this Amendment No. 2 to Schedule 13D is true, complete and correct.

Date: April 20, 2016

/s/ Sol J. Barer, Ph.D.

Sol J. Barer, Ph.D.

EXHIBITS

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