

INOVIO PHARMACEUTICALS, INC.

Form S-3

July 23, 2014

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As filed with the Securities and Exchange Commission on July 23, 2014

Registration Statement No. _____

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

FORM S-3
REGISTRATION STATEMENT
UNDER
THE SECURITIES ACT OF 1933

Inovio Pharmaceuticals, Inc.

(Exact name of Registrant as specified in its charter)

Delaware
(State or other jurisdiction of
incorporation or organization)

33-0969592
(I.R.S. Employer
Identification No.)

Inovio Pharmaceuticals, Inc.

660 West Germantown Pike, Suite 110

Plymouth Meeting, Pennsylvania 19462

(877) 446-6846

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

Dr. J. Joseph Kim,

Chief Executive Officer

Inovio Pharmaceuticals, Inc.

660 West Germantown Pike, Suite 110

Plymouth Meeting, Pennsylvania 19462

(877) 446-6846

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

Copies to:

John W. Kauffman, Esq.

Duane Morris LLP

30 South 17th Street

Philadelphia PA, 19103

(215) 979-1227

Approximate date of commencement of proposed sale to the public: From time to time after the effective date of this registration statement.

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If the only securities being registered on this form are being offered pursuant to dividend or interest reinvestment plans, please check the following box.

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, other than securities offered only in connection with dividend or interest reinvestment plans, 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 registration statement pursuant to General Instruction I.D. or a post-effective amendment thereto that shall become effective upon filing with the Commission pursuant to Rule 462(e) under the Securities Act, check the following box.

If this Form is a post-effective amendment to a registration statement filed pursuant to General Instruction I.D. filed to register additional securities or additional classes of securities pursuant to Rule 413(b) under the Securities Act, check the following box.

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 definitions of large accelerated filer, accelerated filer and smaller reporting company in Rule 12b-2 of the Exchange Act. (Check one):

Large accelerated filer Accelerated filer
 Non-accelerated filer (Do not check if a smaller reporting company) Smaller reporting company

CALCULATION OF REGISTRATION FEE

| Title of each class of securities to be registered | Amount to be registered | Proposed maximum offering price per unit | Proposed maximum aggregate offering price | Amount of registration fee |
|---|--------------------------------|---|--|-----------------------------------|
| Common stock, \$0.001 per share | (1) | (2) | (2) | (3) |
| Preferred stock, \$0.001 par value | (1) | (2) | (2) | (3) |
| Debt securities | (1) | (2) | (2) | (3) |
| Warrants | (1) | (2) | (2) | (3) |

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| | | | | |
|-------|-----|-----|---------------|----------------|
| Units | (1) | (2) | (2) | (3) |
| Total | (1) | (2) | \$175,000,000 | \$14,586.81(3) |

- (1) We are registering under this registration statement such indeterminate number of shares of common stock and preferred stock, such indeterminate principal amount of debt securities, such indeterminate number of warrants to purchase common stock, preferred stock and/or debt securities, and such indeterminate number of units as may be sold by the registrant from time to time, which together shall have an aggregate initial offering price not to exceed \$175,000,000. If we issue any debt securities at an original issue discount, then the offering price of such debt securities shall be in such greater principal amount at maturity as shall result in an aggregate offering price not to exceed \$175,000,000, less the aggregate dollar amount of all securities previously issued hereunder. We may sell any securities we are registering under this registration statement separately or as units with the other securities we are registering under this registration statement. We will determine, from time to time, the proposed maximum offering price per unit in connection with our issuance

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of the securities we are registering under this registration statement. The securities we are registering under this registration statement also include such indeterminate number of shares of common stock and preferred stock and amount of debt securities as we may issue upon conversion of or exchange for preferred stock or debt securities that provide for conversion or exchange, upon exercise of warrants or pursuant to the antidilution provisions of any of such securities. In addition, pursuant to Rule 416 under the Securities Act of 1933, the shares we are registering under this registration statement include such indeterminate number of shares of common stock and preferred stock as may be issuable with respect to the shares we are registering as a result of stock splits, stock dividends or similar transactions.

- (2) We will determine the proposed maximum aggregate offering price per class of security from time to time in connection with our issuance of the securities we are registering under this registration statement and we are not specifying such price as to each class of security pursuant to General Instruction II.D. of Form S-3 under the Securities Act.
- (3) Calculated in accordance with Rule 457(o). An aggregate principal amount of \$61,748,390 of the registrant's securities registered hereunder are unsold securities previously registered on the registrant's registration statement on Form S-3 that was declared effective on February 13, 2014 (No. 333-193698) (the "Prior S-3"). Pursuant to Rule 415(a)(6) under the Securities Act, the \$8,146.80 registration fee previously paid in connection with such unsold securities registered in the Prior S-3 will continue to be applied to such unsold securities in this registration statement, so no registration fee is required to be paid with this registration statement with respect to those securities because they constitute unsold securities being moved from the Prior S-3 to this replacement registration statement. Accordingly, the amount of the registration fee in the Calculation of Registration Fee table (\$14,393.20), as to the primary offering by the registrant, relates to the additional aggregate principal amount of \$113,251,610 of the registrant's securities being registered hereunder. Pursuant to Rule 415(a)(6) under the Securities Act, the offering of unsold securities under the Prior S-3 will be deemed terminated as of the date of effectiveness of this registration statement.

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, as amended, or until the registration statement shall become effective on such date as the Commission, acting pursuant to said Section 8(a), may determine.

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The information in this prospectus is not complete and may be changed. We may not sell these securities until the registration statement filed with the Securities and Exchange Commission is effective. This prospectus is not an offer to sell these securities and is not soliciting an offer to buy these securities in any state where the offer or sale is not permitted.

Subject to completion, dated July 23, 2014

INOVIO PHARMACEUTICALS, INC.

\$175,000,000

Common Stock

Preferred Stock

Debt Securities

Warrants

Units

From time to time, we may offer up to \$175,000,000 of any combination of the securities described in this prospectus, either individually or in units. We may also offer common stock or preferred stock upon conversion of debt securities, common stock upon conversion of preferred stock, or common stock, preferred stock or debt securities upon the exercise of warrants. We will provide the specific terms of these offerings and securities in one or more supplements to this prospectus. We may also authorize the provision to you of one or more free writing prospectuses in connection with these offerings. The prospectus supplement and any related free writing prospectus may also add, update or change information we include in this prospectus. You should carefully read this prospectus, the applicable prospectus supplement and any related free writing prospectus, as well as any documents we incorporate by reference, before buying any of the securities being offered.

Our common stock is traded on the NYSE MKT under the symbol INO. On July 21 2014, the last reported sale price of our common stock on the NYSE MKT was \$11.01. The applicable prospectus supplement will contain information, where applicable, as to any other listing, if any, on the NYSE MKT or any securities market or other exchange of the securities covered by the applicable prospectus supplement.

On July 21, 2014, the aggregate market value of our outstanding common stock our non-affiliates held was approximately \$626.0 million.

We may sell the securities directly to investors, through agents designated from time to time or to or through underwriters or dealers, on a continuous or delayed basis. For additional information on the methods of sale, you should refer to the section entitled Plan of Distribution in this prospectus. If any agents or underwriters are involved in the sale of any securities with respect to which this prospectus is being delivered, we will set forth in a prospectus supplement the names of such agents or underwriters and any applicable fees, commissions, discounts and over-allotment options. We will also set forth in a prospectus supplement the price to the public of such securities and the net proceeds that we expect to receive from such sale.

Investing in our securities involves a high degree of risk. You should review carefully the risks and uncertainties described under the heading Risk Factors contained in the applicable prospectus supplement and any related free writing prospectus, and under similar headings in the other documents that we incorporate by reference into this prospectus.

This prospectus may not be used to consummate a sale of any securities unless accompanied by a prospectus supplement.

Neither the U.S. Securities and Exchange Commission, any state securities commission nor any other regulatory body has approved or disapproved of these securities or passed upon the accuracy or adequacy of this prospectus. Any representation to the contrary is a criminal offense.

This prospectus is dated July 23, 2014.

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You should rely only on the information contained in this prospectus, any applicable prospectus supplement and any related free writing prospectus, including the information we incorporate by reference as described under Where You Can Find More Information. We have not authorized anyone to provide you with different information. If you receive any other information, you should not rely on it. No dealer, salesperson or other person is authorized to give any information or to represent anything not contained in this prospectus, any applicable prospectus supplement or any related free writing prospectus that we may authorize to be provided to you. You must not rely on any unauthorized information or representation. This prospectus is an offer to sell only the securities offered hereby, but only under circumstances and in jurisdictions where it is lawful to do so. You should assume that the information in this prospectus, any applicable prospectus supplement or any related free writing prospectus is accurate only as of the date on the front of the document and that any information we have incorporated by reference is accurate only as of the date of the document incorporated by reference, regardless of the time of delivery of this prospectus, any applicable prospectus supplement or any related free writing prospectus, or any sale of a security.

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RISK FACTORS

Investing in our securities involves a high degree of risk. You should carefully consider the specific risks and uncertainties we describe under the caption "Risk Factors" or similar heading in our periodic reports referred to in "Where You Can Find More Information" below and, if included in an applicable prospectus supplement or free writing prospectus under the caption "Risk Factors" or similar heading in the applicable prospectus supplement. Additional risks not presently known to us or that we currently believe are immaterial may also significantly impair our business operations.

ABOUT THIS PROSPECTUS

All references in this prospectus to "Inovio," "Company," "we," "our" and "us" refer to Inovio Pharmaceuticals, Inc. and its consolidated subsidiaries unless the context otherwise requires.

This prospectus is part of a registration statement on Form S-3 that we have filed with the Securities and Exchange Commission, or "SEC," using a "shelf" registration process. Under this shelf registration process, we and certain holders of our securities may sell the securities described in this prospectus in one or more offerings, up to the total dollar amount of \$175,000,000. This prospectus provides you with a general description of the securities we may offer. Each time we or holders of our securities offer to sell securities under this shelf registration statement, we will provide a prospectus supplement that will contain more specific information about the terms of the offering and those securities. We may also authorize one or more free writing prospectuses to be provided to you that may contain material information relating to these offerings. The prospectus supplement and any related free writing prospectus that we may authorize to be provided to you may also modify, add to or supersede the information contained in this prospectus or in the documents we have incorporated by reference into this prospectus. You should read this prospectus together with the documents incorporated by reference, the applicable prospectus supplement and any related free writing prospectus, with the additional information referred to below under "Where You Can Find More Information," before buying any of the securities being offered.

We have filed a registration statement on Form S-3 with the SEC relating to the securities covered by this prospectus. This prospectus is a part of the registration statement and does not contain all of the information in the registration statement. Whenever we refer in this prospectus, including other documents we incorporate by reference, to a Company contract or other document, please be aware that the reference is only a summary and that you should refer to the exhibits that are a part of the registration statement for a copy of the applicable contract or other document. We qualify all of the summaries in their entirety by the actual documents. Copies of some of the documents referred to herein have been filed, will be filed or will be incorporated by reference as exhibits to the registration statement of which this prospectus is a part, and you may obtain copies of those documents as described below under the heading "Where You Can Find Additional Information."

WHERE YOU CAN FIND MORE INFORMATION

We file annual, quarterly and current reports, proxy statements and other information with the SEC. You may read and copy any documents we file with the SEC at the SEC's public reference room at 100 F Street, N.E., Washington, D.C. 20549. Please call the SEC at 1-800-SEC-0330 for further information on the public reference room. Our filings with the SEC are also available to the public through the SEC's Internet site at <http://www.sec.gov>.

The SEC's rules allow us to incorporate by reference information into this prospectus. Therefore, we can disclose important information to you by referring you to any of the SEC filings we reference in the list below. Any information we refer to in this way in this prospectus or the applicable prospectus supplement is considered

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part of this prospectus or the applicable prospectus supplement. Any reports we file with the SEC after the date of this prospectus and before the date that the offering of securities by means of this prospectus terminates will automatically update and, where applicable, supersede any information contained or incorporated by reference in this prospectus or the applicable prospectus supplement.

We incorporate by reference into this prospectus the following documents or information we file with the SEC, other than, in each case, documents or information deemed to have been furnished and not filed in accordance with SEC rules. The SEC file number for these documents is 001-14888.

Our annual report on Form 10-K for the year ended December 31, 2013 we filed with the SEC on March 17, 2014;

Our quarterly report on Form 10-Q for the quarter ended March 31, 2014 we filed with the SEC on May 12, 2014;

Our current reports on Form 8-K we filed on February 26, 2014, February 27, 2014, March 4, 2014, March 10, 2014, March 17, 2014, May 22, 2014, May 30, 2014, June 6, 2014 and July 23, 2014, other than current reports furnished under Item 2.02 or Item 7.01 of Form 8-K and exhibits we file on such form that relate to such items;

The description of our common stock contained in our registration statement filed pursuant to Section 12 of the Securities Exchange Act of 1934, or the Exchange Act, as modified by our reports we file under the Exchange Act; and

All documents we file under Sections 13(a), 13(c), 14 or 15(d) of the Exchange Act on or after the date of this prospectus and before the termination of the offering of securities under this prospectus, other than current reports furnished under Item 2.02 or Item 7.01 of Form 8-K and exhibits we file on such form that relate to such items.

Any statement contained in a document incorporated by reference in this prospectus will be deemed to be modified or superseded for purposes of this prospectus to the extent that any statement contained in this prospectus or in any subsequently filed document, which also is or is deemed to be incorporated by reference in this prospectus or any prospectus supplement, modifies or supersedes this statement. Any statement modified or superseded in this way will not be deemed, except as so modified or superseded, to constitute a part of this prospectus or any prospectus supplement. The information incorporated by reference contains information about us and our financial condition and performance and is an important part of this prospectus.

We will provide without charge to each person, including any beneficial owner, to whom this prospectus is delivered, upon his or her written or oral request, a copy of any or all documents referred to above that have been or may be incorporated by reference into this prospectus, excluding exhibits to those documents unless they are specifically incorporated by reference into those documents. You can request those documents from Inovio Pharmaceuticals, Inc., Attention: Investor Relations, 10480 Wateridge Circle, San Diego, California, 92121-5773, telephone (858) 597-6006.

CAUTIONARY STATEMENT ON FORWARD-LOOKING INFORMATION

This prospectus, including documents we incorporate by reference, any applicable prospectus supplement and any related free writing prospectus, contains forward-looking statements, as defined in Section 27A of the Securities Act of 1933 and Section 21E of the Securities Exchange Act of 1934. These statements relate to future events or our future financial performance. In some cases, you can identify forward-looking statements by terminology such as may, will, should, expect, plan, anticipate, believe, estimate, predict, potential or continue, the negative of such comparable terminology. These statements are only predictions. Actual events or results may differ materially.

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Although we believe that the expectations reflected in the forward-looking statements are reasonable, we cannot guarantee future results, levels of activity, performance or achievements. Moreover, neither we, nor any other person, assume responsibility for the accuracy and completeness of the forward-looking statements. We are under no obligation to update any of the forward-looking statements after the date of this prospectus and any applicable prospectus supplement to conform such statements to actual results or to changes in our expectations.

Readers are also urged to carefully review and consider the various disclosures made by us that attempt to advise interested parties of the factors that affect our business, including without limitation the disclosures made in our quarterly report on Form 10-Q for the quarter ended March 31, 2014 under the caption Risk Factors.

Risk factors that could cause actual results to differ from those contained in the forward-looking statements include but are not limited to: our history of losses; our lack of products that have received regulatory approval; uncertainties inherent in clinical trials and product development programs, including but not limited to the fact that pre-clinical and clinical results may not be indicative of results achievable in other trials or for other indications, that results from one study may not necessarily be reflected or supported by the results of other similar studies, that results from an animal study may not be indicative of results achievable in human studies, that clinical testing is expensive and can take many years to complete, that the outcome of any clinical trial is uncertain and failure can occur at any time during the clinical trial process, and that our electroporation technology and DNA vaccines may fail to show the desired safety and efficacy traits in clinical trials; the availability of funding; the ability to manufacture vaccine candidates; the availability or potential availability of alternative therapies or treatments for the conditions targeted by us or our collaborators, including alternatives that may be more efficacious or cost-effective than any therapy or treatment that we and our collaborators hope to develop; whether our proprietary rights are enforceable or defensible or infringe or allegedly infringe on rights of others or can withstand claims of invalidity; and the impact of government healthcare proposals.

OUR COMPANY

We are engaged in the discovery, development, and delivery of a new generation of vaccines and immune therapies, called synthetic vaccines, focused on cancers and infectious diseases. Our DNA-based immune therapies, in combination with our proprietary electroporation delivery, are generating best-in-class immune responses, with therapeutic T-cell responses exceeding other technologies in terms of magnitude, breadth, and response rate. Our DNA-based SynCon® technology is also designed to provide universal protection against known as well as new unmatched strains of pathogens such as influenza. Human data to date have shown a favorable safety profile. Our clinical programs include HPV/cervical cancer (therapeutic), avian influenza (preventive), prostate cancer (therapeutic), leukemia (therapeutic), HCV, HBV and HIV vaccines. We are advancing preclinical research for a universal seasonal/pandemic influenza vaccine as well as other products. Our partners and collaborators include Roche, University of Pennsylvania, Drexel University, National Microbiology Laboratory of the Public Health Agency of Canada, Program for Appropriate Technology in Health/Malaria Vaccine Initiative, National Institute of Allergy and Infectious Diseases, United States Military HIV Research Program, U.S. Army Medical Research Institute of Infectious Diseases, HIV Vaccines Trial Network and Department of Homeland Security.

All of our potential human products are in research and development phases. We have not generated any revenues from the sale of any such products, and we do not expect to generate any such revenues for at least the next several years. We earn revenue from license fees and milestone revenue, collaborative research and development agreements, grants and government contracts. Our product candidates will require significant additional research and development efforts, including extensive preclinical and clinical testing. All product candidates that we advance to clinical testing will require regulatory approval prior to commercial use, and will require significant costs for commercialization. We may not be successful in our research and development efforts, and we may never generate sufficient product revenue

to be profitable.

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Our executive offices are located at 660 West Germantown Pike, Suite 110, Plymouth Meeting, Pennsylvania 19462, and our telephone number is (877) 446-6846. We maintain an Internet website at www.inovio.com. Information contained in or accessible through our website does not constitute part of this prospectus.

STATEMENT OF COMPUTATION OF RATIOS

The following table sets forth our ratio of earnings to fixed charges and to combined fixed charges and preferred stock dividends for the years ended December 31, 2009, 2010, 2011, 2012, 2013 and the three months ended March 31, 2014⁽¹⁾.

| | Years Ended December 31, | | | | | Three Months Ended March 31, |
|---|-------------------------------------|-------------|-------------|-------------|-------------|---|
| | 2009 | 2010 | 2011 | 2012 | 2013 | 2014 |
| Ratio of earnings to fixed charges ⁽²⁾ | | | | | | |

Ratio of earnings to Combined Fixed Charges and Preferred Stock dividends ⁽³⁾

- (1) We reported a loss from continuing operations for the years ended December 31, 2009, 2010, 2011, 2012, 2013 and the three months ended March 31, 2014 and would have needed to generate additional income of \$24,458,924, \$17,638,746, \$15,304,095, \$19,712,980, \$66,083,532 and \$10,830,868, respectively, to cover our fixed charges of \$408,647, \$261,425, \$141,900, \$146,520, \$313,500 and \$90,090, respectively.
- (2) For purposes of computing the ratio of earnings to fixed charges, earnings consist of net loss plus fixed charges. Fixed charges consist of interest expense and an estimate of the interest within rental expense.
- (3) For purposes of computing the ratio of earnings to combined fixed charges and preferred stock dividends, earnings consist of net loss plus fixed charges. Combined fixed charges and preferred stock dividends consist of interest expense, an estimate of interest within rental expense and preferred stock dividends.

USE OF PROCEEDS

Except as described in any prospectus supplement or in any related free writing prospectus that we may authorize to be provided to you, we currently intend to use the net proceeds from the sale of the securities offered hereby for general corporate purposes, research and development and clinical trial costs, including the costs associated with preparing for and conducting current and potential Phase 1, Phase 2 and Phase 3 clinical trials. We may also use a portion of the net proceeds to acquire or invest in businesses, products and technologies that are complementary to our own. Pending these uses, we expect to invest the net proceeds in short-term, investment-grade securities.

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The following table sets forth our historical selected financial information. The share and per share information in the following table reflects the 4:1 reverse split of each share of our outstanding common stock effected on June 5, 2014.

| | Year Ended December 31, 2013 | Year Ended December 31, 2012 | Year Ended December 31, 2011 | Year Ended December 31, 2010 | Year Ended December 31, 2009 | Three Months Ended March 31, 2014 | | 2013 |
|--|---|---|---|---|---|--|----|-------------|
| <i>Operations Data:</i> | | | | | | | | |
| Revenue under collaborative research and development arrangements, including from affiliated entity contracts and miscellaneous revenue | \$ 9,664,547 | \$ 660,003 | \$ 567,856 | \$ 527,222 | \$ 5,055,305 | \$ 1,552,691 | \$ | 120,500 |
| Total revenues | 13,467,346 | 4,118,652 | 9,795,257 | 6,144,705 | 9,120,111 | 2,357,643 | | 1,455,220 |
| Loss from operations | (19,544,332) | (23,493,532) | (21,638,540) | (19,220,162) | (13,957,755) | (10,000,055) | | (6,634,040) |
| Interest and other income, net | 132,214 | 166,113 | 34,285 | 147,406 | 30,329 | 52,076 | | 39,460 |
| Change in fair value of common stock warrants | (45,632,669) | 1,982,620 | 8,690,658 | 2,403,924 | (1,286,884) | (505,926) | | (1,427,610) |
| (Loss) Gain on investment in affiliated entity | (1,038,745) | 1,631,819 | (2,390,498) | (969,914) | (9,244,614) | (376,963) | | (836,080) |
| Net loss | (66,083,532) | (19,712,980) | (15,304,095) | (17,638,746) | (24,458,924) | (10,830,868) | | (8,858,280) |
| Net loss attributable to non-controlling interest | 55,084 | 44,025 | 51,150 | 24,950 | 47,439 | 9,408 | | 14,160 |
| Net loss attributable to Inovio Pharmaceuticals, Inc. | \$ (66,028,448) | \$ (19,668,955) | \$ (15,252,945) | \$ (17,613,796) | \$ (24,411,485) | \$ (10,821,460) | \$ | (8,844,120) |

*Per common
share basic and
diluted:*

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| | | | | | | | |
|--|---------------|---------------|---------------|---------------|---------------|---------------|---------------|
| Net loss ⁽¹⁾ | \$ (1.43) | \$ (0.58) | \$ (0.48) | \$ (0.68) | \$ (1.31) | \$ (0.20) | \$ (0.20) |
| Net loss attributable to common stockholders ⁽¹⁾ | \$ (1.43) | \$ (0.58) | \$ (0.48) | \$ (0.68) | \$ (1.31) | \$ (0.20) | \$ (0.20) |
| Weighted average number of common shares outstanding, basic and diluted ⁽¹⁾ | 46,087,773 | 34,127,312 | 31,559,834 | 25,800,470 | 18,678,535 | 55,159,001 | 39,038,888 |
| Balance Sheet Data: | | | | | | | |
| Cash and cash equivalents | \$ 33,719,796 | \$ 5,646,021 | \$ 17,350,116 | \$ 19,998,489 | \$ 30,296,215 | \$ 98,770,907 | \$ 20,086,796 |
| Short-term investments | 18,905,608 | 8,034,001 | 12,863,420 | 1,849,271 | 10,397,530 | 18,011,492 | 7,978,344 |
| Total assets | 88,287,207 | 45,138,754 | 61,106,561 | 56,067,391 | 80,628,917 | 151,657,645 | 58,201,444 |
| Current liabilities | 28,966,456 | 8,376,577 | 11,043,021 | 6,436,708 | 19,350,038 | 15,641,074 | 15,978,200 |
| Cumulated deficit | (295,788,577) | (229,760,129) | (210,091,174) | (194,838,229) | (177,224,433) | (306,610,037) | (238,604,244) |
| Total stockholders' equity | 52,902,683 | 34,857,405 | 47,861,662 | 47,100,911 | 61,184,947 | 129,179,907 | 40,420,599 |

(1) These amounts were revised to retroactively reflect effects of the June 5, 2014, 4 for 1 reverse stock split.

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DESCRIPTION OF CAPITAL STOCK

This prospectus contains summary descriptions of the common stock, preferred stock, warrants, debt securities and units that we may offer and sell from time to time. When we offer one or more of these securities in the future, a prospectus supplement will explain the particular terms of the securities and the extent to which these general provisions may apply. These summary descriptions and any summary descriptions in the applicable prospectus supplement do not purport to be complete descriptions of the terms and conditions of each security and are qualified in their entirety by reference to our certificate of incorporation and by-laws, each as amended to date, the Delaware General Corporation Law, or DGCL, and any other documents referenced in such summary

descriptions and from which such summary descriptions are derived. If any particular terms of a security described in the applicable prospectus supplement differ from any of the terms described in this prospectus, then the terms described in this prospectus will be deemed superseded by the terms set forth in that prospectus supplement.

We may issue securities in book-entry form through one or more depositories, such as The Depository Trust Company, named in the applicable prospectus supplement. Each sale of a security in book-entry form will settle in immediately available funds through the applicable depository, unless otherwise stated. We will issue the securities only in registered form, without coupons, although we may issue the securities in bearer form if so specified in the applicable prospectus supplement. If any securities are to be listed or quoted on a securities exchange or quotation system, the applicable prospectus supplement will so indicate.

Capital Stock

Our authorized capital stock consists of 600,000,000 shares of common stock, \$0.001 par value per share, and 10,000,000 shares of preferred stock, \$0.001 par value per share. As of July 21, 2014, there were:

60,317,679 shares of common stock outstanding; and

23 shares of Series C Cumulative Convertible Preferred Stock outstanding.

On June 5, 2014, we effected a reverse stock split of our common stock, whereby each four outstanding shares of our common stock were combined into one share of our common stock. All share numbers and prices per share in this prospectus reflect the consummation of such reverse stock split.

Common Stock

The holders of our common stock are entitled to one vote for each share held of record on all matters submitted to a vote of stockholders and do not have any cumulative voting rights. Any election at a meeting of stockholders is determined by a plurality of the votes cast by the stockholders entitled to vote at the election, and all other matters are generally determined by a majority of the votes cast on the matter. Holders of our common stock are entitled to receive ratably such dividends, if any, as may be declared by our board of directors out of funds legally available. In the event of we liquidate, dissolve or wind up, after payment of all of our debts and liabilities, and subject to the preferential rights, if any, of any outstanding preferred stock, the holders of our common stock are entitled to share ratably in all assets. Our common stock has no preemptive or conversion rights or other subscription rights, and there are no redemptive or sinking funds provisions applicable to the our common stock. We have received full payment for all outstanding shares of our common stock and cannot require our stockholders to make further payments on the

stock.

Preferred Stock

Pursuant to our certificate of incorporation, our board of directors has the authority, without further action by the stockholders (unless such stockholder action is required by applicable law or NYSE MKT rules), to designate and issue up to 10,000,000 shares of preferred stock in one or more series, to establish from time to time the number

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of shares to be included in each such series, to fix the designations, powers, preferences and rights of the shares of each wholly unissued series, and any qualifications, limitations or restrictions thereon, and to increase or decrease the number of shares of any such series, but not below the number of shares of such series then outstanding.

We will fix the designations, powers, preferences and rights of the preferred stock of each series, as well as the qualifications, limitations or restrictions thereon, in the certificate of designation relating to that series. We will file as an exhibit to the registration statement of which this prospectus is a part, or will incorporate by reference from reports that we file with the SEC, the form of any certificate of designation that describes the terms of the series of preferred stock we are offering before the issuance of that series of preferred stock. This description will include:

the title and stated value;

the number of shares we are offering;

the liquidation preference per share;

the purchase price;

the dividend rate, period and payment date and method of calculation for dividends;

whether dividends will be cumulative or non-cumulative and, if cumulative, the date from which dividends will accumulate;

the procedures for any auction and remarketing, if any;

the provisions for a sinking fund, if any;

the provisions for redemption or repurchase, if applicable, and any restrictions on our ability to exercise those redemption and repurchase rights;

any listing of the preferred stock on any securities exchange or market;

whether the preferred stock will be convertible into our common stock, and, if applicable, the conversion price, or how it will be calculated, and the conversion period;

whether the preferred stock will be exchangeable into debt securities, and, if applicable, the exchange price, or how it will be calculated, and the exchange period;

voting rights, if any, of the preferred stock;

preemptive rights, if any;

restrictions on transfer, sale or other assignment, if any;

whether interests in the preferred stock will be represented by depositary shares;

a discussion of any material United States federal income tax considerations applicable to the preferred stock;

the relative ranking and preferences of the preferred stock as to dividend rights and rights if we liquidate, dissolve or wind up our affairs;

any limitations on the issuance of any class or series of preferred stock ranking senior to or on a parity with the series of preferred stock as to dividend rights and rights if we liquidate, dissolve or wind up our affairs; and

any other specific terms, preferences, rights or limitations of, or restrictions on, the preferred stock.

Our board of directors may authorize the issuance of preferred stock with voting or conversion rights that could adversely affect the voting power or other rights of the holders of our common stock. Preferred stock could be issued quickly with terms designed to delay or prevent a change in control of our company or make removal of management more difficult. Additionally, the issuance of preferred stock may have the effect of decreasing the market price of our common stock.

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Stock Options, Warrants and Convertible Preferred Stock

As of July 21, 2014, we have reserved 7,368,144 shares of common stock for issuance under our equity compensation plans, upon exercise of outstanding stock options, warrants or upon conversion of outstanding convertible preferred stock. Of this number, we have reserved 4,943,567 shares for issuance upon exercise of outstanding options that we previously granted under our stock option plans, 972,779 shares for issuance upon exercise of options that we may grant in the future under our stock option plans, 1,443,342 shares for issuance upon exercise of outstanding warrants and 8,456 shares for issuance upon conversion of outstanding shares of preferred stock.

Delaware Anti-Takeover Law and Certain Charter Provisions

Delaware Section 203. We are subject to the provisions of Section 203 of the Delaware General Corporation Law. In general, the statute prohibits a publicly held Delaware corporation from engaging in a business combination with an interested stockholder for a period of three years following the date that the stockholder became an interested stockholder unless:

prior to such date, the board of directors of the corporation approved either the business combination or the transaction that resulted in the stockholder becoming an interested stockholder;

upon consummation of the transaction that resulted in the stockholder becoming an interested stockholder, the interested stockholder owned at least 85% of the voting stock of the corporation outstanding at the time the transaction commenced, excluding for purposes of determining the number of shares outstanding, those shares owned by persons who are directors and also officers, and employee stock plans in which employee participants do not have the right to determine confidentially whether shares held subject to the plan will be tendered in a tender or exchange offer; or

on or subsequent to such date, the board of directors approves the business combination and stockholders authorize the business combination at an annual or special meeting of stockholders, and not by written consent, by the affirmative vote of at least two-thirds of the outstanding voting stock that the interested stockholder does not own.

A business combination includes a merger, asset or stock sale or other transaction resulting in financial benefit to the stockholder. An interested stockholder is a person who, together with affiliates and associates, owns, or within three years prior, did own, 15% or more of a corporation's outstanding voting stock.

Charter Provisions. Our amended and restated certificate of incorporation includes the following provisions, among others:

the authority of our board of directors to issue shares of undesignated preferred stock and to determine the rights, preferences and privileges of these shares, without stockholder approval;

all stockholder actions must be effected at a duly called meeting of stockholders and not by written consent;
and

the elimination of cumulative voting.

Indemnification. Our certificate of incorporation and our bylaws provide that we will indemnify officers and directors against losses as they incur in investigations and legal proceedings resulting from their services to us, which may include service in connection with takeover.

These provisions may have the effect of deterring hostile takeovers or delaying changes in our control or management. We intend these provisions to enhance the likelihood of continued stability in the composition of our board of directors and in the policies they implement, and to discourage certain types of transactions that may involve an actual or threatened change of our control. We designed these provisions to reduce our vulnerability to an unsolicited acquisition proposal. We also intend for the provisions to discourage certain tactics that may be

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used in proxy fights. However, such provisions could have the effect of discouraging others from making tender offers for our shares and, as a consequence, they also may inhibit fluctuations in the market price of our shares that could result from actual or rumored takeover attempts. Such provisions may also have the effect of preventing changes in our management.

Transfer Agent and Registrar

The transfer agent and registrar for our common stock is Computershare. Its address is 3rd Floor 510 Burrard St., Vancouver, BC V6C 3B9, and its telephone number is (604) 661-0258. The transfer agent for any series of preferred stock that we may offer under this prospectus will be named and described in the prospectus supplement for that series.

DESCRIPTION OF DEBT SECURITIES

We may issue debt securities, in one or more series, as either senior or subordinated debt or as senior or subordinated convertible debt. While the terms we have summarized below will apply generally to any debt securities that we may offer under this prospectus, we will describe the particular terms of any debt securities that we may offer in more detail in the applicable prospectus supplement. The terms of any debt securities offered under a prospectus supplement may differ from the terms described below. Unless the context requires otherwise, whenever we refer to the indentures, we also are referring to any supplemental indentures that specify the terms of a particular series of debt securities.

We will issue the senior debt securities under the senior indenture that we will enter into with the trustee named in the senior indenture. We will issue the subordinated debt securities under the subordinated indenture that we will enter into with the trustee named in the subordinated indenture. The indentures will be qualified under the Trust Indenture Act of 1939. We use the term *debenture trustee* to refer to either the trustee under the senior indenture or the trustee under the subordinated indenture, as applicable. We have filed forms of indentures to the registration statement of which this prospectus is a part, and supplemental indentures and forms of debt securities containing the terms of the debt securities being offered will be filed as exhibits to the registration statement of which this prospectus is a part or will be incorporated by reference from reports that we file with the SEC.

The following summaries of material provisions of the senior debt securities, the subordinated debt securities and the indentures are subject to, and qualified in their entirety by reference to, all of the provisions of the indenture applicable to a particular series of debt securities. We urge you to read the applicable prospectus supplements and any related free writing prospectuses related to the debt securities that we may offer under this prospectus, as well as the complete indentures that contains the terms of the debt securities. Except as we may otherwise indicate, the terms of the senior indenture and the subordinated indenture are identical.

General

We will describe in the applicable prospectus supplement the terms of the series of debt securities being offered, including:

the title;

the principal amount being offered, and if a series, the total amount authorized and the total amount outstanding;

any limit on the amount that may be issued;

whether or not we will issue the series of debt securities in global form, the terms and who the depositary will be;

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the maturity date;

whether and under what circumstances, if any, we will pay additional amounts on any debt securities held by a person who is not a United States person for tax purposes, and whether we can redeem the debt securities if we have to pay such additional amounts;

the annual interest rate, which may be fixed or variable, or the method for determining the rate and the date interest will begin to accrue, the dates interest will be payable and the regular record dates for interest payment dates or the method for determining such dates;

whether or not the debt securities will be secured or unsecured, and the terms of any secured debt;

the terms of the subordination of any series of subordinated debt;

the place where payments will be payable;

restrictions on transfer, sale or other assignment, if any;

our right, if any, to defer payment of interest and the maximum length of any such deferral period;

the date, if any, after which, and the price at which, we may, at our option, redeem the series of debt securities pursuant to any optional or provisional redemption provisions and the terms of those redemption provisions;

the date, if any, on which, and the price at which we are obligated, pursuant to any mandatory sinking fund or analogous fund provisions or otherwise, to redeem, or at the holder's option to purchase, the series of debt securities and the currency or currency unit in which the debt securities are payable;

whether the indenture will restrict our ability and/or the ability of our subsidiaries to:

incur additional indebtedness;

issue additional securities;

create liens;

pay dividends and make distributions in respect of our capital stock and the capital stock of our subsidiaries;

redeem capital stock;

place restrictions on our subsidiaries' ability to pay dividends, make distributions or transfer assets;

make investments or other restricted payments;

sell or otherwise dispose of assets;

enter into sale-leaseback transactions;

engage in transactions with stockholders and affiliates;

issue or sell stock of our subsidiaries; or

effect a consolidation or merger;

whether the indenture will require us to maintain any interest coverage, fixed charge, cash flow-based, asset-based or other financial ratios;

a discussion of any material United States federal income tax considerations applicable to the debt securities;

information describing any book-entry features;

provisions for a sinking fund purchase or other analogous fund, if any;

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the applicability of the provisions in the indenture on discharge;

whether the debt securities are to be offered at a price such that they will be deemed to be offered at an original issue discount as defined in paragraph (a) of Section 1273 of the Internal Revenue Code;

the denominations in which we will issue the series of debt securities, if other than denominations of \$1,000 and any integral multiple thereof;

the currency of payment of debt securities if other than U.S. dollars and the manner of determining the equivalent amount in U.S. dollars; and

any other specific terms, preferences, rights or limitations of, or restrictions on, the debt securities, including any additional events of default or covenants provided with respect to the debt securities, and any terms that may be required by us or advisable under applicable laws or regulations.

Conversion or Exchange Rights

We will set forth in the prospectus supplement the terms on which a series of debt securities may be convertible into or exchangeable for our common stock or our other securities. We will include provisions as to whether conversion or exchange is mandatory, at the option of the holder or at our option. We may include provisions pursuant to which the number of shares of our common stock or our other securities that the holders of the series of debt securities receive would be subject to adjustment.

Consolidation, Merger or Sale

Unless we provide otherwise in the prospectus supplement applicable to a particular series of debt securities, the indentures will not contain any covenant that restricts our ability to merge or consolidate, or sell, convey, transfer or otherwise dispose of all or substantially all of our assets. However, any successor to or acquirer of such assets must assume all of our obligations under the indentures or the debt securities, as appropriate. If the debt securities are convertible into or exchangeable for our other securities or securities of other entities, the person with whom we consolidate or merge or to whom we sell all of our property must make provisions for the conversion of the debt securities into securities that the holders of the debt securities would have received if they had converted the debt securities before the consolidation, merger or sale.

Events of Default Under the Indenture

Unless we provide otherwise in the prospectus supplement applicable to a particular series of debt securities, the following are events of default under the indentures with respect to any series of debt securities that we may issue:

if we fail to pay interest when due and payable and our failure continues for 90 days and the time for payment has not been extended or deferred;

if we fail to pay the principal, premium or sinking fund payment, if any, when due and payable and the time for payment has not been extended or delayed;

if we fail to observe or perform any other covenant contained in the debt securities or the indentures, other than a covenant specifically relating to another series of debt securities, and our failure continues for 90 days after we receive notice from the debenture trustee or holders of at least 25% in aggregate principal amount of the outstanding debt securities of the applicable series; and

if specified events of bankruptcy, insolvency or reorganization occur.

If an event of default with respect to debt securities of any series occurs and is continuing, other than an event of default specified in the last bullet point above, the debenture trustee or the holders of at least 25% in aggregate principal amount of the outstanding debt securities of that series, by notice to us in writing, and to the

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debenture trustee if notice is given by such holders, may declare the unpaid principal of, premium, if any, and accrued interest, if any, due and payable immediately. If an event of default specified in the last bullet point above occurs with respect to us, the principal amount of and accrued interest, if any, of each issue of debt securities then outstanding shall be due and payable without any notice or other action on the part of the debenture trustee or any holder.

The holders of a majority in principal amount of the outstanding debt securities of an affected series may waive any default or event of default with respect to the series and its consequences, except defaults or events of default regarding payment of principal, premium, if any, or interest, unless we have cured the default or event of default in accordance with the indenture. Any waiver shall cure the default or event of default.

Subject to the terms of the indentures, if an event of default under an indenture shall occur and be continuing, the debenture trustee will be under no obligation to exercise any of its rights or powers under such indenture at the request or direction of any of the holders of the applicable series of debt securities, unless such holders have offered the debenture trustee reasonable indemnity. The holders of a majority in principal amount of the outstanding debt securities of any series will have the right to direct the time, method and place of conducting any proceeding for any remedy available to the debenture trustee, or exercising any trust or power conferred on the debenture trustee, with respect to the debt securities of that series, provided that:

the direction so given by the holder is not in conflict with any law or the applicable indenture; and

subject to its duties under the Trust Indenture Act of 1939, the debenture trustee need not take any action that might involve it in personal liability or might be unduly prejudicial to the holders not involved in the proceeding.

A holder of the debt securities of any series will have the right to institute a proceeding under the indentures or to appoint a receiver or trustee, or to seek other remedies only if:

the holder has given written notice to the debenture trustee of a continuing event of default with respect to that series;

the holders of at least 25% in aggregate principal amount of the outstanding debt securities of that series have made written request, and such holders have offered reasonable indemnity to the debenture trustee to institute the proceeding as trustee; and

the debenture trustee does not institute the proceeding, and does not receive from the holders of a majority in aggregate principal amount of the outstanding debt securities of that series other conflicting directions within 90 days after the notice, request and offer.

These limitations do not apply to a suit instituted by a holder of debt securities if we default in the payment of the principal, premium, if any, or interest on, the debt securities.

We will periodically file statements with the debenture trustee regarding our compliance with specified covenants in the indentures.

Modification of Indenture; Waiver

We and the debenture trustee may change an indenture without the consent of any holders with respect to specific matters:

to fix any ambiguity, defect or inconsistency in the indenture;

to comply with the provisions described above under Description of Debt Securities Consolidation, Merger or Sale;

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to comply with any requirements of the SEC in connection with the qualification of any indenture under the Trust Indenture Act of 1939;

to add to, delete from or revise the conditions, limitations, and restrictions on the authorized amount, terms, or purposes of issue, authentication and delivery of debt securities, as set forth in the indenture;

to provide for the issuance of and establish the form and terms and conditions of the debt securities of any series as provided under Description of Debt Securities General to establish the form of any certifications required to be furnished pursuant to the terms of the indenture or any series of debt securities, or to add to the rights of the holders of any series of debt securities;

to evidence and provide for the acceptance of appointment hereunder by a successor trustee;

to provide for uncertificated debt securities in addition to or in place of certificated debt securities and to make all appropriate changes for such purpose;

to add to our covenants such new covenants, restrictions, conditions or provisions for the protection of the holders, and to make the occurrence, or the occurrence and the continuance, of a default in any such additional covenants, restrictions, conditions or provisions an event of default; or

to change anything that does not materially adversely affect the interests of any holder of debt securities of any series.

In addition, under the indentures, the rights of holders of a series of debt securities may be changed by us and the debenture trustee with the written consent of the holders of at least a majority in aggregate principal amount of the outstanding debt securities of each series that is affected. However, unless we provide otherwise in the prospectus supplement applicable to a particular series of debt securities, we and the debenture trustee may make the following changes only with the consent of each holder of any outstanding debt securities affected:

extending the fixed maturity of the series of debt securities;

reducing the principal amount, reducing the rate of or extending the time of payment of interest, or reducing any premium payable upon the redemption of any debt securities; or

reducing the percentage of debt securities, the holders of which are required to consent to any amendment, supplement, modification or waiver.

Discharge

Each indenture provides that we can elect to be discharged from our obligations with respect to one or more series of debt securities, except for specified obligations, including obligations to:

register the transfer or exchange of debt securities of the series;

replace stolen, lost or mutilated debt securities of the series;

maintain paying agencies;

hold monies for payment in trust;

recover excess money held by the debenture trustee;

compensate and indemnify the debenture trustee; and

appoint any successor trustee.

In order to exercise our rights to be discharged, we must deposit with the debenture trustee money or government obligations sufficient to pay all the principal of, any premium, if any, and interest on, the debt securities of the series on the dates payments are due.

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Form, Exchange and Transfer

We will issue the debt securities of each series only in fully registered form without coupons and, unless we provide otherwise in the applicable prospectus supplement, in denominations of \$1,000 and any integral multiple thereof. The indentures provide that we may issue debt securities of a series in temporary or permanent global form and as book-entry securities that will be deposited with, or on behalf of, The Depository Trust Company or another depository named by us and identified in a prospectus supplement with respect to that series. See **Legal Ownership of Securities** for a further description of the terms relating to any book-entry securities.

At the option of the holder, subject to the terms of the indentures and the limitations applicable to global securities described in the applicable prospectus supplement, the holder of the debt securities of any series can exchange the debt securities for other debt securities of the same series, in any authorized denomination and of like tenor and aggregate principal amount.

Subject to the terms of the indentures and the limitations applicable to global securities set forth in the applicable prospectus supplement, holders of the debt securities may present the debt securities for exchange or for registration of transfer, duly endorsed or with the form of transfer endorsed thereon duly executed if so required by us or the security registrar, at the office of the security registrar or at the office of any transfer agent designated by us for this purpose. Unless otherwise provided in the debt securities that the holder presents for transfer or exchange, we will impose no service charge for any registration of transfer or exchange, but we may require payment of any taxes or other governmental charges.

We will name in the applicable prospectus supplement the security registrar, and any transfer agent in addition to the security registrar, that we initially designate for any debt securities. We may at any time designate additional transfer agents or rescind the designation of any transfer agent or approve a change in the office through which any transfer agent acts, except that we will be required to maintain a transfer agent in each place of payment for the debt securities of each series.

If we elect to redeem the debt securities of any series, we will not be required to:

issue, register the transfer of, or exchange any debt securities of that series during a period beginning at the opening of business 15 days before the day of mailing of a notice of redemption of any debt securities that may be selected for redemption and ending at the close of business on the day of the mailing; or

register the transfer of or exchange any debt securities so selected for redemption, in whole or in part, except the unredeemed portion of any debt securities we are redeeming in part.

Information Concerning the Debenture Trustee

The debenture trustee, other than during the occurrence and continuance of an event of default under an indenture, undertakes to perform only those duties as are specifically set forth in the applicable indenture. Upon an event of default under an indenture, the debenture trustee must use the same degree of care as a prudent person would exercise or use in the conduct of his or her own affairs. Subject to this provision, the debenture trustee is under no obligation to exercise any of the powers given it by the indentures at the request of any holder of debt securities unless it is offered reasonable security and indemnity against the costs, expenses and liabilities that it might incur.

Payment and Paying Agents

Unless we otherwise indicate in the applicable prospectus supplement, we will make payment of the interest on any debt securities on any interest payment date to the person in whose name the debt securities, or one or more predecessor securities, are registered at the close of business on the regular record date for the interest.

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We will pay principal of and any premium and interest on the debt securities of a particular series at the office of the paying agents designated by us, except that unless we otherwise indicate in the applicable prospectus supplement, we will make interest payments by check that we will mail to the holder or by wire transfer to certain holders. Unless we otherwise indicate in the applicable prospectus supplement, we will designate the corporate trust office of the debenture trustee in the City of New York as our sole paying agent for payments with respect to debt securities of each series. We will name in the applicable prospectus supplement any other paying agents that we initially designate for the debt securities of a particular series. We will maintain a paying agent in each place of payment for the debt securities of a particular series.

All money we pay to a paying agent or the debenture trustee for the payment of the principal of or any premium or interest on any debt securities that remains unclaimed at the end of two years after such principal, premium or interest has become due and payable will be repaid to us, and the holder of the debt security thereafter may look only to us for payment thereof.

Governing Law

The indentures and the debt securities will be governed by and construed in accordance with the laws of the State of New York, except to the extent that the Trust Indenture Act of 1939 is applicable.

Subordination of Subordinated Debt Securities

The subordinated debt securities will be unsecured and will be subordinate and junior in priority of payment to certain of our other indebtedness to the extent described in a prospectus supplement. The subordinated indenture does not limit the amount of subordinated debt securities that we may issue, nor does it limit us from issuing any other secured or unsecured debt.

DESCRIPTION OF WARRANTS

We may issue warrants for the purchase of common stock, preferred stock and/or debt securities in one or more series. We may issue warrants independently or together with common stock, preferred stock and/or debt securities, and the warrants may be attached to or separate from these securities. While the terms summarized below will apply generally to any warrants that we may offer, we will describe the particular terms of any series of warrants in more detail in the applicable prospectus supplement. The terms of any warrants offered under a prospectus supplement may differ from the terms described below.

We will file as exhibits to the registration statement of which this prospectus is a part, or will incorporate by reference from reports that we file with the SEC, the form of warrant agreement, including a form of warrant certificate, that describes the terms of the particular series of warrants we are offering before the issuance of the related series of warrants. The following summaries of material provisions of the warrants and the warrant agreements are subject to, and qualified in their entirety by reference to, all the provisions of the warrant agreement and warrant certificate applicable to the particular series of warrants that we may offer under this prospectus. We urge you to read the applicable prospectus supplements related to the particular series of warrants that we may offer under this prospectus, as well as any related free writing prospectuses, and the complete warrant agreements and warrant certificates that contain the terms of the warrants.

General

We will describe in the applicable prospectus supplement the terms of the series of warrants being offered, including:

the offering price and aggregate number of warrants offered;

the currency for which the warrants may be purchased;

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if applicable, the designation and terms of the securities with which the warrants are issued and the number of warrants issued with each such security or each principal amount of such security;

if applicable, the date on and after which the warrants and the related securities will be separately transferable;

in the case of warrants to purchase debt securities, the principal amount of debt securities purchasable upon exercise of one warrant and the price at, and currency in which, this principal amount of debt securities may be purchased upon such exercise;

in the case of warrants to purchase common stock or preferred stock, the number of shares of common stock or preferred stock, as the case may be, purchasable upon the exercise of one warrant and the price at which these shares may be purchased upon such exercise;

the effect of any merger, consolidation, sale or other disposition of our business on the warrant agreements and the warrants;

the terms of any rights to redeem or call the warrants;

any provisions for changes to or adjustments in the exercise price or number of securities issuable upon exercise of the warrants;

the dates on which the right to exercise the warrants will commence and expire;

the manner in which the warrant agreements and warrants may be modified;

a discussion of any material or special United States federal income tax consequences of holding or exercising the warrants;

the terms of the securities issuable upon exercise of the warrants; and

any other specific terms, preferences, rights or limitations of or restrictions on the warrants.

Before exercising their warrants, holders of warrants will not have any of the rights of holders of the securities purchasable upon such exercise, including:

in the case of warrants to purchase debt securities, the right to receive payments of principal of, or premium, if any, or interest on, the debt securities purchasable upon exercise or to enforce covenants in the applicable indenture; or

in the case of warrants to purchase common stock or preferred stock, the right to receive dividends, if any, or payments upon our liquidation, dissolution or winding up or to exercise voting rights, if any.

Exercise of Warrants

Each warrant will entitle the holder to purchase the securities that we specify in the applicable prospectus supplement at the exercise price that we describe in the applicable prospectus supplement. Holders of the warrants may exercise the warrants at any time up to the specified time on the expiration date that we set forth in the applicable prospectus supplement. After the close of business on the expiration date, unexercised warrants will become void.

Holders of the warrants may exercise the warrants by delivering the warrant certificate representing the warrants to be exercised together with specified information, and paying the required amount to the warrant agent in immediately available funds, as provided in the applicable prospectus supplement. We will set forth on the reverse side of the warrant certificate and in the applicable prospectus supplement the information that the holder of the warrant will be required to deliver to the warrant agent.

Upon receipt of the required payment and the warrant certificate properly completed and duly executed at the corporate trust office of the warrant agent or any other office indicated in the applicable prospectus

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supplement, we will issue and deliver the securities purchasable upon such exercise. If fewer than all of the warrants represented by the warrant certificate are exercised, then we will issue a new warrant certificate for the remaining amount of warrants. If we so indicate in the applicable prospectus supplement, holders of the warrants may surrender securities as all or part of the exercise price for warrants.

Governing Law

Unless we provide otherwise in the applicable prospectus supplement, the warrants and warrant agreements will be governed by and construed in accordance with the laws of the State of New York.

Enforceability of Rights by Holders of Warrants

Each warrant agent will act solely as our agent under the applicable warrant agreement and will not assume any obligation or relationship of agency or trust with any holder of any warrant. A single bank or trust company may act as warrant agent for more than one issue of warrants. A warrant agent will have no duty or responsibility in case of any default by us under the applicable warrant agreement or warrant, including any duty or responsibility to initiate any proceedings at law or otherwise, or to make any demand upon us. Any holder of a warrant may, without the consent of the related warrant agent or the holder of any other warrant, enforce by appropriate legal action its right to exercise, and receive the securities purchasable upon exercise of, its warrants.

DESCRIPTION OF UNITS

We may issue, in one more series, units consisting of common stock, preferred stock, debt securities and/or warrants for the purchase of common stock, preferred stock and/or debt securities in any combination. While the terms we have summarized below will apply generally to any units that we may offer under this prospectus, we will describe the particular terms of any series of units in more detail in the applicable prospectus supplement. The terms of any units offered under a prospectus supplement may differ from the terms described below.

We will file as exhibits to the registration statement of which this prospectus is a part, or will incorporate by reference from reports that we file with the SEC, the form of unit agreement that describes the terms of the series of units we are offering, and any supplemental agreements, before the issuance of the related series of units. The following summaries of material terms and provisions of the units are subject to, and qualified in their entirety by reference to, all the provisions of the unit agreement and any supplemental agreements applicable to a particular series of units. We urge you to read the applicable prospectus supplements related to the particular series of units that we may offer under this prospectus, as well as any related free writing prospectuses and the complete unit agreement and any supplemental agreements that contain the terms of the units.

General

We will issue each unit so that the holder of the unit is also the holder of each security included in the unit. Thus, the holder of a unit will have the rights and obligations of a holder of each included security. The unit agreement under which we issue a unit may provide that the securities included in the unit may not be held or transferred separately, at any time or at any time before a specified date.

We will describe in the applicable prospectus supplement the terms of the series of units being offered, including:

the designation and terms of the units and of the securities comprising the units, including whether and under what circumstances those securities may be held or transferred separately;

any provisions of the governing unit agreement that differ from those described below; and

any provisions for the issuance, payment, settlement, transfer or exchange of the units or of the securities comprising the units.

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The provisions described in this section, as well as those described under [Description of Capital Stock](#), [Description of Debt Securities](#) and [Description of Warrants](#) will apply to each unit and to any common stock, preferred stock, debt security or warrant included in each unit, respectively.

Issuance in Series

We may issue units in such amounts and in such numerous distinct series as we determine.

Enforceability of Rights by Holders of Units

Each unit agent will act solely as our agent under the applicable unit agreement and will not assume any obligation or relationship of agency or trust with any holder of any unit. A single bank or trust company may act as unit agent for more than one series of units. A unit agent will have no duty or responsibility in case of any default by us under the applicable unit agreement or unit, including any duty or responsibility to initiate any proceedings at law or otherwise, or to make any demand upon us. Any holder of a unit may, without the consent of the related unit agent or the holder of any other unit, enforce by appropriate legal action its rights as holder under any security included in the unit.

We, and any unit agent and any of their agents, may treat the registered holder of any unit certificate as an absolute owner of the units evidenced by that certificate for any purpose and as the person entitled to exercise the rights attaching to the units so requested, despite any notice to the contrary. See [Legal Ownership of Securities](#) below.

LEGAL OWNERSHIP OF SECURITIES

We can issue securities in registered form or in the form of one or more global securities. We describe global securities in greater detail below. We refer to those persons who have securities registered in their own names on the books that we or any applicable trustee, depositary or warrant agent maintain for this purpose as the [holders](#) of those securities. These persons are the legal holders of the securities. We refer to those persons who, indirectly through others, own beneficial interests in securities that are not registered in their own names, as [indirect holders](#) of those securities. As we discuss below, indirect holders are not legal holders, and investors in securities issued in book-entry form or in street name will be indirect holders.

Book-Entry Holders

We may issue securities in book-entry form only, as we will specify in the applicable prospectus supplement. This means securities may be represented by one or more global securities registered in the name of a financial institution that holds them as depositary on behalf of other financial institutions that participate in the depositary's book-entry system. These participating institutions, which are referred to as participants, in turn, hold beneficial interests in the securities on behalf of themselves or their customers.

Only the person in whose name a security is registered is recognized as the holder of that security. Securities issued in global form will be registered in the name of the depositary or its participants. Consequently, for securities issued in global form, we will recognize only the depositary as the holder of the securities, and we will make all payments on the securities to the depositary. The depositary passes along the payments it receives to its participants, which in turn pass the payments along to their customers who are the beneficial owners. The depositary and its participants do so under agreements they have made with one another or with their customers; they are not obligated to do so under the terms of the securities.

As a result, investors in a book-entry security will not own securities directly. Instead, they will own beneficial interests in a global security, through a bank, broker or other financial institution that participates in the depositary's book-entry system or holds an interest through a participant. As long as the securities are issued in global form, investors will be indirect holders, and not holders, of the securities.

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Street Name Holders

We may terminate a global security or issue securities in non-global form. In these cases, investors may choose to hold their securities in their own names or in street name. Securities held by an investor in street name would be registered in the name of a bank, broker or other financial institution that the investor chooses, and the investor would hold only a beneficial interest in those securities through an account he or she maintains at that institution.

For securities held in street name, we will recognize only the intermediary banks, brokers and other financial institutions in whose names the securities are registered as the holders of those securities, and we will make all payments on those securities to them. These institutions pass along the payments they receive to their customers who are the beneficial owners, but only because they agree to do so in their customer agreements or because they are legally required to do so. Investors who hold securities in street name will be indirect holders, not holders, of those securities.

Legal Holders

Our obligations, as well as the obligations of any applicable trustee and of any third parties employed by us or a trustee, run only to the legal holders of the securities. We do not have obligations to investors who hold beneficial interests in global securities, in street name or by any other indirect means. This will be the case whether an investor chooses to be an indirect holder of a security or has no choice because we are issuing the securities only in global form.

For example, once we make a payment or give a notice to the holder, we have no further responsibility for the payment or notice even if that holder is required, under agreements with depositary participants or customers or by law, to pass it along to the indirect holders but does not do so. Similarly, we may want to obtain the approval of the holders to amend an indenture, to relieve us of the consequences of a default or of our obligation to comply with a particular provision of the indenture or for other purposes. In such an event, we would seek approval only from the holders, and not the indirect holders, of the securities. Whether and how the holders contact the indirect holders is up to the holders.

Special Considerations For Indirect Holders

If you hold securities through a bank, broker or other financial institution, either in book-entry form or in street name, you should check with your own institution to find out:

how it handles securities payments and notices;

whether it imposes fees or charges;

how it would handle a request for the holders' consent, if ever required;

whether and how you can instruct it to send you securities registered in your own name so you can be a holder, if that is permitted in the future;

how it would exercise rights under the securities if there were a default or other event triggering the need for holders to act to protect their interests; and

if the securities are in book-entry form, how the depositary's rules and procedures will affect these matters.

Global Securities

A global security is a security that represents one or any other number of individual securities held by a depositary. Generally, all securities represented by the same global securities will have the same terms.

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Each security issued in book-entry form will be represented by a global security that we deposit with and register in the name of a financial institution or its nominee that we select. The financial institution that we select for this purpose is called the depository. Unless we specify otherwise in the applicable prospectus supplement, The Depository Trust Company, New York, New York, known as DTC, will be the depository for all securities issued in book-entry form.

A global security may not be transferred to or registered in the name of anyone other than the depository, its nominee or a successor depository, unless special termination situations arise. We describe those situations below under **Special Situations When a Global Security Will Be Terminated**. As a result of these arrangements, the depository, or its nominee, will be the sole registered owner and holder of all securities represented by a global security, and investors will be permitted to own only beneficial interests in a global security. Beneficial interests must be held by means of an account with a broker, bank or other financial institution that in turn has an account with the depository or with another institution that does. Thus, an investor whose security is represented by a global security will not be a holder of the security, but only an indirect holder of a beneficial interest in the global security.

If the prospectus supplement for a particular security indicates that the security will be issued in global form only, then the security will be represented by a global security at all times unless and until the global security is terminated. If termination occurs, we may issue the securities through another book-entry clearing system or decide that the securities may no longer be held through any book-entry clearing system.

Special Considerations For Global Securities

The rights of an indirect holder relating to a global security will be governed by the account rules of the investor's financial institution and of the depository, as well as general laws relating to securities transfers. We do not recognize an indirect holder as a holder of securities and instead deal only with the depository that holds the global security.

If securities are issued only in the form of a global security, an investor should be aware of the following:

an investor cannot cause the securities to be registered in his or her name, and cannot obtain non-global certificates for his or her interest in the securities, except in the special situations we describe below;

an investor will be an indirect holder and must look to his or her own bank or broker for payments on the securities and protection of his or her legal rights relating to the securities, as we describe above;

an investor may not be able to sell interests in the securities to some insurance companies and to other institutions that are required by law to own their securities in non-book-entry form;

an investor may not be able to pledge his or her interest in a global security in circumstances where certificates representing the securities must be delivered to the lender or other beneficiary of the pledge in order for the pledge to be effective;

the depository's policies, which may change from time to time, will govern payments, transfers, exchanges and other matters relating to an investor's interest in a global security;

we and any applicable trustee have no responsibility for any aspect of the depositary's actions or for its records of ownership interests in a global security, nor do we or any applicable trustee supervise the depositary in any way;

the depositary may, and we understand that DTC will, require that those who purchase and sell interests in a global security within its book-entry system use immediately available funds, and your broker or bank may require you to do so as well; and

financial institutions that participate in the depositary's book-entry system, and through which an investor holds its interest in a global security, may also have their own policies affecting payments, notices and other matters relating to the securities.

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There may be more than one financial intermediary in the chain of ownership for an investor. We do not monitor and are not responsible for the actions of any of those intermediaries.

Special Situations When a Global Security Will Be Terminated

In a few special situations described below, the global security will terminate and interests in it will be exchanged for physical certificates representing those interests. After that exchange, the choice of whether to hold securities directly or in street name will be up to the investor. Investors must consult their own banks or brokers to find out how to have their interests in securities transferred to their own name, so that they will be direct holders. We have described the rights of holders and street name investors above.

Unless we provide otherwise in the applicable prospectus supplement, the global security will terminate when the following special situations occur:

if the depository notifies us that it is unwilling, unable or no longer qualified to continue as depository for that global security and we do not appoint another institution to act as depository within 90 days;

if we notify any applicable trustee that we wish to terminate that global security; or

if an event of default has occurred with regard to securities represented by that global security and has not been cured or waived.

The prospectus supplement may also list additional situations for terminating a global security that would apply only to the particular series of securities covered by the applicable prospectus supplement. When a global security terminates, the depository, and not we or any applicable trustee, is responsible for deciding the names of the institutions that will be the initial direct holders.

PLAN OF DISTRIBUTION

We may sell the securities from time to time pursuant to underwritten public offerings, negotiated transactions, block trades or a combination of these methods. We may sell the securities to or through underwriters or dealers, through agents, or directly to one or more purchasers. We may distribute securities from time to time in one or more transactions:

at a fixed price or prices, which may be changed;

at market prices prevailing at the time of sale;

at prices related to such prevailing market prices; or

at negotiated prices.

A prospectus supplement or supplements will describe the terms of the offering of the securities, including:

the name or names of the underwriters, if any;

the purchase price of the securities and the proceeds we will receive from the sale;

any over-allotment options under which underwriters may purchase additional securities from us;

any agency fees or underwriting discounts and other items constituting agents or underwriters compensation;

any public offering price;

any discounts or concessions allowed or reallocated or paid to dealers; and

any securities exchange or market on which the securities may be listed.

Only underwriters named in the prospectus supplement will be underwriters of the securities offered by the prospectus supplement.

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If underwriters are used in the sale, they will acquire the securities for their own account and may resell the securities from time to time in one or more transactions at a fixed public offering price or at varying prices determined at the time of sale. The obligations of the underwriters to purchase the securities will be subject to the conditions set forth in the applicable underwriting agreement. We may offer the securities to the public through underwriting syndicates represented by managing underwriters or by underwriters without a syndicate. Subject to certain conditions, the underwriters will be obligated to purchase all of the securities offered by the prospectus supplement, other than securities covered by any over-allotment option. Any public offering price and any discounts or concessions allowed or reallocated or paid to dealers may change from time to time. We may use underwriters with whom we have a material relationship. We will describe in the prospectus supplement, naming the underwriter, the nature of any such relationship.

We may sell securities directly or through agents we designate from time to time. We will name any agent involved in the offering and sale of securities and we will describe any commissions we will pay the agent in the prospectus supplement. Unless the prospectus supplement states otherwise, our agent will act on a best-efforts basis for the period of its appointment.

We may authorize agents or underwriters to solicit offers by certain types of institutional investors to purchase securities from us at the public offering price set forth in the prospectus supplement pursuant to delayed delivery contracts providing for payment and delivery on a specified date in the future. We will describe the conditions to these contracts and the commissions we must pay for solicitation of these contracts in the prospectus supplement.

We may provide agents and underwriters with indemnification against civil liabilities, including liabilities under the Securities Act, or contribution with respect to payments that the agents or underwriters may make with respect to these liabilities. Agents and underwriters may engage in transactions with, or perform services for, us in the ordinary course of business.

All securities we may offer, other than common stock, will be new issues of securities with no established trading market. Any underwriter may make a market in these securities, but will not be obligated to do so and may discontinue any market making at any time without notice. We cannot guarantee the liquidity of the trading markets for any securities.

Any underwriter may engage in over-allotment, stabilizing transactions, short-covering transactions and penalty bids in accordance with Regulation M under the Exchange Act. Over-allotment involves sales in excess of the offering size, which create a short position. Stabilizing transactions permit bids to purchase the underlying security so long as the stabilizing bids do not exceed a specified maximum price. Syndicate-covering or other short-covering transactions involve purchases of the securities, either through exercise of the over-allotment option or in the open market after the distribution is completed, to cover short positions. Penalty bids permit the underwriters to reclaim a selling concession from a dealer when the securities originally sold by the dealer are purchased in a stabilizing or covering transaction to cover short positions. Those activities may cause the price of the securities to be higher than it would otherwise be. If commenced, the underwriters may discontinue any of the activities at any time.

Any underwriters that are qualified market makers on the NYSE MKT may engage in passive market making transactions in the common stock on the NYSE MKT in accordance with Regulation M under the Exchange Act, during the business day prior to the pricing of the offering, before the commencement of offers or sales of the common stock. Passive market makers must comply with applicable volume and price limitations and must be identified as passive market makers. In general, a passive market maker must display its bid at a price not in excess of the highest independent bid for such security; if all independent bids are lowered below the passive market maker's bid, however, the passive market maker's bid must then be lowered when certain purchase limits are exceeded. Passive

market making may stabilize the market price of the securities at a level above that which might otherwise prevail in the open market and, if commenced, may be discontinued at any time.

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In compliance with guidelines of the Financial Industry Regulatory Authority, or FINRA, the maximum consideration or discount to be received by any FINRA member or independent broker dealer may not exceed 8% of the aggregate amount of the securities offered pursuant to this prospectus and any applicable prospectus supplement.

VALIDITY OF SECURITIES

Unless otherwise indicated in the applicable prospectus supplement, Duane Morris LLP, Philadelphia, Pennsylvania, will pass upon the validity of the securities offered by this prospectus.

EXPERTS

The consolidated financial statements of Inovio Pharmaceuticals, Inc. appearing in Inovio Pharmaceuticals, Inc.'s Annual Report (Form 10-K) for the year ended December 31, 2013, and the effectiveness of Inovio Pharmaceuticals, Inc.'s internal control over financial reporting as of December 31, 2013 have been audited by Ernst & Young LLP, independent registered public accounting firm, as set forth in their reports thereon, included therein, and incorporated herein by reference. Such consolidated financial statements are incorporated herein by reference in reliance upon such reports given on the authority of such firm as experts in accounting and auditing.

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PART II

INFORMATION NOT REQUIRED IN PROSPECTUS

Item 14. Other Expenses of Issuance and Distribution.

The estimated expenses in connection with this registration statement, other than underwriting discounts and commissions, are as follows:

| | |
|-------------------------------|---------------|
| SEC registration fee | \$ 14,586.81 |
| Trustee fees | (1) |
| Printing expenses | (1) |
| Legal and accounting expenses | (1) |
| Rating agency fees | (1) |
| Miscellaneous | (1) |
| TOTAL | \$ (1) |

- (1) These fees will depend on the type of securities offered and the number of offerings and, therefore, we cannot estimate such fees at this time. We will provide additional information regarding estimated fees and expenses at the time we include information as to any securities in a prospectus supplement in accordance with Rule 430B.

Item 15. Indemnification of Directors and Officers.

Under Section 145 of the Delaware General Corporation Law (the "DGCL"), a corporation has the power to indemnify its directors and officers under certain prescribed circumstances and, subject to certain limitations, against certain costs and expenses, including attorneys' fees, judgments, fines and amounts paid in settlement, actually and reasonably incurred in connection with any threatened, pending or completed action, suit or proceeding, whether criminal, civil, administrative or investigative, to which any of them is a party by reason of his being a director or officer of the corporation if it is determined that he acted in accordance with the applicable standard of conduct set forth in such statutory provision. Our Amended and Restated Certificate of Incorporation provides that, pursuant to the DGCL, our directors shall not be liable for monetary damages for breach of the directors' fiduciary duty of care to us and our stockholders. This provision in the Amended and Restated Certificate of Incorporation does not eliminate the duty of care, and in appropriate circumstances equitable remedies such as injunctive or other forms of non-monetary relief will remain available under Delaware law. In addition, each director will continue to be subject to liability for breach of the director's duty of loyalty, for acts or omissions not in good faith or involving intentional misconduct or knowing violations of the law, for actions leading to improper personal benefit to the director, and for payment of dividends or approval of stock repurchases or redemptions that are unlawful under Delaware law. The provision also does not affect a director's responsibilities under any other law, such as the federal securities laws or state or federal environmental laws.

Our bylaws provide that we will indemnify, to the fullest extent authorized by the DGCL, each person who was or is made a party or is threatened to be made a party to or is involved in any action, suit or proceeding, whether civil, criminal, administrative or investigative, by reason of the fact that he or she is or was a director or officer of our company, whether the basis of such proceeding is alleged action in an official capacity as a director or officer or in

any other capacity while serving as a director or officer against all expenses, liability and loss reasonably incurred or suffered by such person in connection therewith. We also have directors and officers liability insurance.

The underwriting agreement that we might enter into will provide for indemnification by any underwriters of us, our directors, our officers who sign the registration statement and our controlling persons for some liabilities, including liabilities arising under the Securities Act of 1933.

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Item 16. Exhibits.

| No. | Description |
|------|---|
| 1.1 | Form of Underwriting Agreement relating to Common Stock* |
| 1.2 | Form of Underwriting Agreement relating to Preferred Stock* |
| 1.3 | Form of Underwriting Agreement relating to Debt Securities* |
| 1.4 | Form of Underwriting Agreement relating to Warrants* |
| 1.5 | Form of Underwriting Agreement relating to Units* |
| 3.1 | Certificate of Incorporation with all amendments (filed herewith) |
| 3.3 | Amended and Restated By-laws dated as of August 10, 2011 (incorporated by reference to Exhibit 3.2 to our Current Report on Form 8-K filed on August 12, 2011). |
| 4.1 | Form of Senior Debt Indenture (filed herewith) |
| 4.2 | Form of Senior Debt Security* |
| 4.3 | Form of Subordinated Debt Indenture (filed herewith) |
| 4.4 | Form of Subordinated Debt Security* |
| 4.5 | Form of Preferred Stock Certificate of Designation* |
| 4.6 | Specimen Certificate for Shares of Preferred Stock* |
| 4.7 | Form of Warrant Agreement* |
| 4.8 | Form of Warrant (to be included in Exhibit 4.7)* |
| 4.9 | Form of Unit Agreement* |
| 5.1 | Opinion of Duane Morris LLP (filed herewith) |
| 12.1 | Statement of Computation of Ratios (filed herewith) |
| 23.1 | Consent of Duane Morris LLP (included in Exhibit 5.1) |
| 23.2 | Consent of Independent Registered Public Accounting Firm (filed herewith) |
| 24.1 | Powers of Attorney (included in signature pages) |
| 25.1 | Statement of Eligibility and Qualification on Form T-1 of Trustee to Act as Trustee under the Senior Indenture* |
| 25.2 | Statement of Eligibility and Qualification on Form T-1 of Trustee Act as Trustee under the Subordinated Indenture* |

* To be filed by amendment or pursuant to a Current Report on Form 8-K.

Item 17. Undertakings.

We hereby undertake:

(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;

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(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 this 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 percent 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 this registration statement or any material change to such information in this registration statement;

provided, however, that paragraphs (i), (ii) and (iii) above do not apply if the information required to be included in a post-effective amendment by those clauses is contained in reports filed with or furnished to the SEC by us pursuant to Section 13 or Section 15(d) of the Securities Exchange Act of 1934, as amended, that are incorporated by reference in this registration statement, or is contained in a form of prospectus filed pursuant to Rule 424(b) that is part of the registration statement.

(2) That, for the purpose of determining any liability under the Securities Act, 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 under the Securities Act, to any purchaser:

(i) Each prospectus filed by us pursuant to Rule 424(b)(3) shall be deemed to be part of the registration statement as of the date the filed prospectus was deemed part of and included in the registration statement; and

(ii) Each prospectus required to be filed pursuant to Rule 424(b)(2), (b)(5) or (b)(7) as part of a registration statement in reliance on Rule 430B relating to an offering made pursuant to Rule 415(a)(1)(i), (vii) or (x) for the purpose of providing the information required by Section 10(a) of the Securities Act shall be deemed to be part of and included in the registration statement as of the earlier of the date such form of prospectus is first used after effectiveness or the date of the first contract of sale of securities in the offering described in the prospectus. As provided in Rule 430B, for liability purposes of the issuer and any person that is at that date an underwriter, such date shall be deemed to be a new effective date of the registration statement relating to the securities in the registration statement to which the prospectus relates, and the offering of such securities at that time shall be deemed to be the initial bona fide offering thereof. Provided, however, that no statement made in a registration statement or prospectus that is part of the registration statement or made in a document incorporated or deemed incorporated by reference into the registration statement or prospectus that is part of the registration statement will, as to a purchaser with a time of contract of sale prior to such effective date, supersede or modify any statement that was made in the registration statement or prospectus that was part of the registration statement or made in any such document immediately prior to such effective date.

(5) That, for the purpose of determining our liability under the Securities Act, to any purchaser in the initial distribution of the securities, we undertake that in a primary offering of our securities 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, we 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 ours relating to the offering required to be filed pursuant to Rule 424;

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- (ii) Any free writing prospectus relating to the offering prepared by or on behalf of us or used or referred to by us;
 - (iii) The portion of any other free writing prospectus relating to the offering containing material information about us or our securities provided by or on behalf of us; and
 - (iv) Any other communication that is an offer in the offering made by us to the purchaser.
- (6) That, for purposes of determining any liability under the Securities Act, each filing of our annual report pursuant to Section 13(a) or Section 15(d) of the Exchange Act (and, where applicable, each filing of an employee benefit plan's annual report pursuant to Section 15(d) of the Exchange Act) 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.
- (7) To file an application for the purpose of determining the eligibility of the trustee to act under subsection (a) of Section 310 of the Trust Indenture Act in accordance with the rules and regulations prescribed by the SEC under Section 305(b)(2) of the Trust Indenture Act.

Insofar as indemnification for liabilities arising under the Securities Act may be permitted to our directors, officers and controlling persons pursuant to the provisions described in Item 15 above, or otherwise, we have been advised that in the opinion of the SEC such indemnification is against public policy as expressed in the Securities Act and is, therefore, unenforceable. In the event that a claim for indemnification against such liabilities, other than the payment by us of expenses incurred or paid by a director, officer or controlling person of us 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, that we 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 Securities Act and will be governed by the final adjudication of such issue.

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SIGNATURES

Pursuant to the requirements of the Securities Act of 1933, the registrant certifies that it has reasonable grounds to believe that it meets all of the requirements for filing on Form S-3 and has duly caused this registration statement to be signed on its behalf by the undersigned, thereunto duly authorized, in the City of Plymouth Meeting, Commonwealth of Pennsylvania, on July 23, 2014.

INOVIO PHARMACEUTICALS, INC.

By: /s/ J. Joseph Kim
J. Joseph Kim

President and Chief Executive Officer

Know all men by these present, that each person whose signature appears below constitutes and appoints J. Joseph Kim and Peter Kies, and each or either of them, as such person's true and lawful attorneys-in-fact and agents, with full power of substitution, for such person, and in such person's name, place and stead, in any and all capacities to sign any or all amendments or post-effective amendments to this Registration Statement, and to file the same, with all exhibits thereto and other documents in connection therewith, with the Securities and Exchange Commission, granting unto said attorneys-in-fact and agents full power and authority to do and perform each and every act and thing requisite and necessary to be done in and about the premises, as fully to all intents and purposes as such person might or could do in person, hereby ratifying and confirming all that said attorneys-in-fact and agents, or any of them or their substitutes, may lawfully do or cause to be done by virtue hereof.

Pursuant to the requirements of the Securities Act of 1933, the registration statement has been signed by the following persons in the capacities and on the dates indicated.

| Signature | Title | Date |
|---------------------|--|---------------|
| /s/ J. Joseph Kim | President, Chief Executive Officer and Director (Principal Executive Officer) | July 23, 2014 |
| J. Joseph Kim | | |
| /s/ Peter Kies | Chief Financial Officer (Principal Financial and Accounting Officer) | July 23, 2014 |
| Peter Kies | | |
| /s/ Avtar Dhillon | Chairman of the Board of Directors | July 23, 2014 |
| Avtar Dhillon | | |
| /s/ Simon X. Benito | Director | July 23, 2014 |
| Simon X. Benito | | |

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| | | |
|--------------------|----------|---------------|
| /s/ Angel Cabrera | Director | July 23, 2014 |
| Angel Cabrera | | |
| /s/ Morton Collins | Director | July 23, 2014 |
| Morton Collins | | |
| /s/ Adel Mahmoud | Director | July 23, 2014 |
| Adel Mahmoud | | |

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