INOVIO PHARMACEUTICALS, INC.
Form 424B5
July 20, 2017
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Filed pursuant to Rule 424(b)(5)
Registration Statement No. 333-204420

PROSPECTUS SUPPLEMENT

(To Prospectus dated June 5, 2015)

12,500,000 Shares

Inovio Pharmaceuticals, Inc.

Common Stock

$6.00 per share

We are offering 12,500,000 shares of our common stock.

We have granted the underwriters an option to purchase up to an additional 1,875,000 shares of our common stock.

Our common stock is listed on The NASDAQ Global Select Market under the symbol INO. On July 19, 2017, the closing price of our common stock on The NASDAQ Global Select Market was $6.78 per share.

Investing in our common stock involves risks. See Risk Factors beginning on page S-8 of this prospectus supplement and in the documents incorporated by reference into this prospectus supplement.

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

	Per Share	Total
Public Offering Price	$ 6.00	$ 75,000,000
Underwriting Discounts and Commissions[(1)]	$ 0.36	$ 4,500,000
Proceeds to Inovio (before expenses)	$ 5.64	$ 70,500,000

(1) See Underwriting for additional disclosure regarding underwriting compensation.

The underwriters expect to deliver the shares on or about July 25, 2017 through the book-entry facilities of The Depository Trust Company.

Joint Book-Running Managers

Citigroup **Piper Jaffray** **RBC Capital Markets**

Co-Managers

H.C. Wainwright & Co. **Maxim Group LLC** **Aegis Capital Corp.** **National Securities Corporation**

July 19, 2017

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ABOUT THIS PROSPECTUS SUPPLEMENT

This prospectus supplement and the accompanying prospectus relate to an offering of our common stock. Before buying any of the common stock that we are offering, we urge you to carefully read this prospectus supplement and the accompanying prospectus, together with the information incorporated by reference as described under the headings Where You Can Find More Information and Incorporation by Reference in this prospectus supplement. These documents contain important information that you should consider when making your investment decision.

Unless otherwise specified or required by context, references in this prospectus supplement to Inovio Pharmaceuticals, Inovio, we, us and our refer to Inovio Pharmaceuticals, Inc., and its subsidiaries on a consolidated basis.

This document is in two parts. The first part is this prospectus supplement, which describes the terms of this offering of common stock and also adds to, updates and changes information contained in the accompanying prospectus and the documents incorporated by reference. The second part is the accompanying prospectus, which gives more general information. To the extent the information contained in this prospectus supplement differs from or conflicts with the information contained in the accompanying prospectus or any document incorporated by reference, the information in this prospectus supplement will control. If any statement in one of these documents is inconsistent with a statement in another document having a later date for example, a document incorporated by reference into the accompanying prospectus the statement in the document having the later date modifies or supersedes the earlier statement.

We have not, and the underwriters have not, authorized anyone to provide you with information different from that which is contained in or incorporated by reference in this prospectus supplement, the accompanying prospectus and in any free writing prospectus that we have authorized for use in connection with this offering. No one is making offers to sell or seeking offers to buy these securities in any jurisdiction where the offer or sale is not permitted. You should assume that the information contained in this prospectus supplement is accurate as of the date on the front cover of this prospectus supplement only and that any information we have incorporated by reference or included in the accompanying prospectus is accurate only as of the date given in the document incorporated by reference or as of the date of the prospectus, as applicable, regardless of the time of delivery of this prospectus supplement, the accompanying prospectus, any related free writing prospectus, or any sale of our common stock. Our business, financial condition, results of operations and prospects may have changed since that date.

We further note that the representations, warranties and covenants made by us in any agreement that is filed as an exhibit to any document that is incorporated by reference into this prospectus supplement or the accompanying prospectus were made solely for the benefit of the parties to such agreement, including, in some cases, for the purpose of allocating risk among the parties to such agreements, and should not be deemed to be a representation, warranty or covenant to you. Moreover, such representations, warranties or covenants were accurate only as of the date when made. Accordingly, such representations, warranties and covenants should not be relied on as accurately representing the current state of our affairs.

This prospectus supplement, the accompanying prospectus and the information incorporated herein and therein by reference may include trademarks, service marks and trade names owned by us or other companies. All trademarks, service marks and trade names included or incorporated by reference into this prospectus supplement or the accompanying prospectus are the property of their respective owners.

Information contained on, or that can be accessed through, our website does not constitute part of this prospectus supplement, the accompanying prospectus or any related free writing prospectus.

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PROSPECTUS SUPPLEMENT SUMMARY

This summary highlights selected information contained elsewhere or incorporated by reference in this prospectus supplement and the accompanying prospectus. This summary does not contain all the information you should consider before investing in our common stock. You should read and consider carefully the more detailed information in this prospectus supplement and the accompanying prospectus, including the factors described under the heading Risk Factors in this prospectus supplement and the financial and other information incorporated by reference in this prospectus supplement and the accompanying prospectus, as well as the information included in any free writing prospectus that we have authorized for use in connection with this offering, before making an investment decision.

Overview

Inovio is developing active DNA immunotherapies and vaccines focused on treating and preventing cancers and infectious diseases. Our DNA-based immunotherapies, in combination with our proprietary electroporation delivery devices, are intended to generate robust immune responses, in particular T cells, to fight target diseases. In 2014 we reported that in a controlled Phase 2 clinical study we generated significant, functional antigen-specific T cells, correlated to clinically relevant efficacy against HPV-associated cervical dysplasia (pre-cancer). Our data was published in The Lancet in September 2015. In June 2017 we began a Phase 3 study for VGX-3100 for the treatment of cervical dysplasia.

Our novel SynCon immunotherapy design has shown the ability in early clinical trials to help break the immune system s tolerance of cancerous cells. Our SynCon product design approach is also intended to facilitate cross-strain protection against known and new unmatched strains of pathogens such as influenza. Given the recognized role of CD8+ killer T cells in eliminating cancerous or infected cells from the body and our published Phase 2 results, our scientists believe our active immunotherapies may play an important role in helping fight multiple cancers and infectious diseases. Human data to date have shown a favorable safety profile of our DNA immunotherapies delivered using electroporation.

We or our collaborators are currently conducting or planning clinical studies of our proprietary SynCon® immunotherapies for HPV-caused pre-cancers (including cervical, anal and vulvar neoplasia), HPV-caused cancers (head and neck and cervical), prostate cancer, breast/lung/pancreatic cancer, hepatitis C virus, or HCV, hepatitis B virus, or HBV, HIV, Ebola, Middle East Respiratory Syndrome, or MERS, and Zika virus.

Our corporate strategy is to advance and protect our differentiated immunotherapy platform and use its unique capabilities to design and develop an array of cancer and infectious disease immunotherapy and vaccine products. We aim to advance products through to commercialization. We continue to leverage third party resources through collaborations and partnerships including product license agreements. Our partners and collaborators include MedImmune, LLC, The Wistar Institute, University of Pennsylvania, GeneOne Life Science Inc., ApolloBio Corporation, Plumbline Life Sciences, Inc., Drexel University, National Microbiology Laboratory of the Public Health Agency of Canada, 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 Defense Advanced Research Projects Agency.

Inovio s Differentiated Immunotherapy Platform

The idea of stimulating the immune system to prevent or treat infections and cancers has been and continues to be a compelling concept. Today the opportunity for immune activating technologies with the potential to fight cancers and chronic infectious diseases has never appeared more

promising, with notable technology advancements such as checkpoint inhibitors leading the way in oncology. Yet, while yielding promising results, there remains a significant need and opportunity for further advancements.

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Our immunotherapy platform comprising our DNA-based immunotherapy and electroporation delivery technologies has an important fundamental capability with a multitude of possible disease/product opportunities. The basic goal of our platform is to enable in vivo, or in the body, generation of useful immune responses to achieve desired therapeutic and preventive outcomes. We have historically been primarily focused on in vivo generation of disease-specific antigens in the body in order to stimulate prophylactic or therapeutic immune responses. More recently we have embarked on an additional new application: in vivo generation of monoclonal antibodies to achieve preventive and therapeutic outcomes that are complementary to our antigen-generating immunotherapies.

The essence of our platform is that we encode a DNA plasmid for the genetic sequence of an antigen or monoclonal antibody specific to a targeted disease. We can combine multiple such plasmids into a product, inject the plasmids into tissue of the body, use electroporation to facilitate significant cellular uptake of the plasmids, and then enhance the ability of the intracellular machinery that usually produces useful proteins for the functioning of the body to temporarily produce the target antigen or monoclonal antibody. An antigen produced in this manner will then induce the immune system to generate polyclonal antibodies or T cells with the ability to perform their preventive or therapeutic functions. Similarly, monoclonal antibodies generated in this manner can then also potentially trigger the desired immune system functions.

With our core technologies we have developed a rich pipeline of pre-clinical and clinical stage products that have generated, in vivo immune responses, in particular CD8+ T cells fundamental to eliminating cancerous or infected cells. These cells are showing their potential to be used against potentially any targeted cancer or infectious disease. Our lead investigational immunotherapy, for treating HPV-associated pre-cancer, met its primary and secondary endpoints in a controlled Phase 2 clinical study, achieving statistically significant and clinically relevant efficacy in association with robust T cell activation. This data was published in The Lancet in a paper entitled, Safety, efficacy, and immunogenicity of VGX-3100, a therapeutic synthetic DNA vaccine targeting human papillomavirus 16 and 18 E6 and E7 proteins for cervical intraepithelial neoplasia 2/3: a randomized, double-blind, placebo-controlled Phase 2b trial. These results were achieved without serious adverse events. The only statistically significant adverse event was temporary injection site pain and redness.

Our immunotherapies are non-live and non-replicating, and therefore cannot cause the disease. Compared to other technologies our immunotherapies are designed to work naturally with the immune system and within its controls to reduce or minimize the risk of unwanted inflammatory responses.

These results suggest significant market potential not only for our lead product but for our existing and emerging cancer products as well as the broad spectrum of infectious disease products that may be created based on our technology platform.

The Next Generation of Cancer and Infectious Disease Treatment: Inovio s SynCon Immunotherapies

Our SynCon immunotherapies are designed to treat an existing disease (therapeutic) or prevent a disease (prophylactic) by activating and magnifying an immune response to one or more disease-specific antigens (proteins associated with a cancer or infectious disease that the body will recognize as foreign or not normal). Without the quality control and manufacturing challenges and costs of medicines involving ex vivo processes, we direct the patient s immune system to fight specific organisms or cells in a highly targeted and robust fashion. We do this simply by introducing the genetic code for a target antigen(s) into cells of the body that will serve as a temporary antigen production facility.

Our immunotherapies consist of one or more DNA plasmids (circular string of DNA) encoding one or more selected antigens. Our approach uniquely enables dramatic uptake of the DNA plasmids by cells in localized

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tissue (typically muscle in the arm for immunotherapies or in the skin for vaccines). After the DNA code for the targeted antigen(s) is introduced to cells, the cells natural machinery for producing proteins necessary for the body s many functions temporarily produce the selected antigen(s) encoded by the DNA sequences. The antigenic proteins manufactured through this process are then presented to the immune system and trigger one or both of two arms of the immune system: the production of preventive antibodies, known as a humoral immune response, and/or the activation of therapeutic CD8+ T-cells, known as a cellular or cell-mediated immune response. These responses then neutralize or eliminate infectious agents (e.g. viruses, bacteria, and other microorganisms) or abnormal cells (e.g. malignant tumor or infected cells). T cells can be immediately trafficked to parts of the body where cells are displaying the target antigen. Memory cells are also created for durable effects.

Our SynCon DNA immunotherapies are designed to generate antigen-specific antibody and T cell responses. First we identify one or more antigens that we believe are the best targets to direct the immune system toward a particular cancer or infectious disease. We then apply our SynCon design process, which uses the genetic make-up of the selected antigens from multiple variants of a cancer or strains of a virus.

For each antigen we synthetically create a new genetic sequence that represents a consensus of the slightly different DNA from multiple variants or strains of the targeted antigen. We can synthetically create a differentiated SynCon variant to help the immune system better recognize a cancer self-antigen (a cell and antigen grown in the body), i.e. to break tolerance. Alternatively we have proof of principle in human studies that we can generate immune responses with SynCon immunotherapies not matched to different strains of an infectious disease, e.g. influenza, creating potentially more universal protective capabilities against unmatched strains of a circulating virus. These SynCon constructs may provide a solution to broadly cover the genetic shift and drift that is typical of many infectious diseases. This new synthetically engineered sequence is similar to the originating sequences but does not match any. It does not exist in nature and is patentable.

The SynCon sequence is inserted into a circular DNA plasmid. The plasmid is optimized at the DNA level for codon usage, improved mRNA stability, and provided with enhanced leader sequences for ribosome loading; it is optimized at the genetic level to enable high expression in human cells. We believe these design capabilities allow us to better target appropriate immune system mechanisms and produce a higher level of the coded antigen to enhance the overall ability of the immunotherapy to induce the desired immune response.

The plasmids are manufactured in a bacterial fermentation process using proven scalable technology. These DNA-based immunotherapies can be stable under normal environmental conditions for extended periods of time.

Inovio s immunotherapies are injected in a local area of selected tissue (muscle or skin) and then electroporated (see next section) to facilitate significant cellular uptake of the plasmid and expression (production) of the encoded DNA. The resulting immune response to the produced antigens results in significant production of antibodies or T cells.

Preparedness countermeasures against bioterrorism and/or emerging pandemic agents.

Another critical attribute of Inovio s product development platform is the speed of design, pre-clinical testing, cGMP manufacturing, and regulatory approval for translation into clinical development of its vaccine and immunotherapy products. This is an important feature, particularly as it relates to developing a rapid response to globally emerging infectious diseases.

Indeed Inovio led the way in being globally the first entity in 2016 to move a Zika vaccine into human clinical studies a mere 4.5 months after WHO declared the emerging Zika infections to be a Pandemic Health

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Emergency of International Concern. Prior to that Inovio led the development of the first MERS vaccine to enter into human clinical studies. As such, Inovio s rapid development platform is well positioned to support global health agencies in order to develop preparedness countermeasures against bioterrorism and emerging pandemic agents.

Published human data from three different SynCon DNA immunotherapies two for treating HPV-caused pre-cancers and cancers as well as one for treating HIV infection have generated T cell responses with magnitude, durability, and/or killing effect, providing evidence of their potential to provide preventive and therapeutic capabilities against cancers and infectious diseases. This T cell generation has also been correlated to efficacy (as referenced above).

Electroporation Delivery Technology

Despite how compelling the idea of delivering DNA encoding an antigen has been, delivering the DNA or nucleic acids directly into a cell through the cell s protective membrane has been a significant challenge to the broad field of DNA and RNA vaccines. Our immunotherapies are delivered into cells of the body in a small local area of tissue using our highly efficient, proprietary electroporation (EP) DNA delivery technology. EP uses brief, locally applied electric fields to create temporary and reversible permeability, or pores, in the cell membrane. Using this method increases the cellular uptake of the DNA plasmids by a thousand-fold or more compared to delivering naked DNA alone. This extent of cellular uptake has proven to enable the immune responses that we have reported, along with the efficacy results generated by these immune responses.

Alternative delivery approaches based on the use of viruses, bacteria, and lipids are complex and expensive and have in the past created concerns regarding safety. Because the vector itself possesses many additional antigens specific to the vector it can attract unwanted immune responses against itself (believed to compromise such vectors ability to deliver their DNA payload and provide protection). In contrast, DNA vectors possess no antigens of its own: the plasmid results in production of only the target antigen.

We have published data showing superior immune responses generated by our SynCon immunotherapies delivered using our CELLECTRA electroporation technology compared to a leading viral vector (Adenovirus type 5) based approach. We have not seen any published data indicating the capability of alternative technologies focused on using genetic code to generate preventive or therapeutic antigens to exceed Inovio s immune response data obtained to date, nor match the efficacy and immune responses data generated in our controlled Phase 2 study based on in vivo production of such immune responses.

We believe electroporation provides a relatively straightforward, cost effective method for delivering DNA and RNA into cells with high efficiency, minimal complications, and importantly the ability to enable what we believe to be clinically relevant levels of gene expression, immune responses, and efficacy.

Inovio s Immunotherapy Products and Product Development

Inovio s primary focus is, independently and in partnerships, to advance the products developed from its integrated platform consisting of its SynCon immunotherapy and CELLECTRA electroporation technologies. We are currently developing a number of DNA-based immunotherapies for the prevention or treatment of cancer and chronic infectious diseases.

Recent Developments

Agreements with ApolloBio

On February 13, 2017, we announced that we had entered into a collaboration and license agreement, or the ApolloBio License Agreement, providing ApolloBio Corporation, or ApolloBio, with the exclusive right to

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develop and commercialize VGX-3100, our DNA immunotherapy product designed to treat pre-cancers caused by human papillomavirus, or HPV, and HPV-driven dysplasia within China, Hong Kong, Macao and Taiwan. The ApolloBio License Agreement provides for the potential inclusion of the Republic of Korea three years following the effective date. Under the ApolloBio License Agreement, ApolloBio will fund all clinical development costs within the licensed territory, and will pay the Company up to $20.0 million based upon the achievement of certain regulatory milestones in the United States, China and Korea, and double digit royalties on net sales of VGX-3100. Under a separate common stock purchase agreement, or the ApolloBio Equity Agreement, ApolloBio will invest in our common stock upon the satisfaction of the closing conditions contained in the ApolloBio Equity Agreement.

Upon satisfaction of closing conditions for each of the ApolloBio License Agreement and the ApolloBio Equity Agreement, we will receive the following from ApolloBio:

- $15.0 million in upfront payments under the ApolloBio License Agreement; and
- up to $35.0 million under the ApolloBio Equity Agreement as payment for shares of our common stock at a price per share of $8.20.

The closing conditions for each of the ApolloBio License Agreement and the ApolloBio Equity Agreement include the final approval of each agreement by ApolloBio s board of directors and stockholders, as well as regulatory and currency approvals required in connection with each agreement by the People s Republic of China. While ApolloBio has submitted much of the required information to the relevant regulatory bodies, it has not yet received regulatory or currency approval. Additionally, the ApolloBio License Agreement was contingent upon the U.S. Food and Drug Administration, or FDA, lifting its clinical hold in the Phase 3 clinical trial of VGX-3100 in the United States, which occurred on June 6, 2017. The price per share of $8.20 represents the 30-day volume weighted average price encompassing the trading period prior to and following the lifting of the clinical hold, subject to a weighted average adjustment for any issuances prior to the consummation of the sale under the ApolloBio Equity Agreement. The aggregate investment, which is anticipated to be completed in the second half of 2017, will not exceed $35.0 million and may be a lower amount such that ApolloBio will not be our largest shareholder. Upon the satisfaction of all of the closing conditions, including corporate approvals by ApolloBio, the ApolloBio License Agreement and the ApolloBio Equity Agreement will become effective.

Pursuant to a registration rights agreement with ApolloBio, or the ApolloBio Registration Rights Agreement, we have also agreed to file a registration statement on Form S-3 with the Securities and Exchange Commission, or the SEC, covering the resale of all of the shares of common stock purchased by ApolloBio within ten business days of the closing of the ApolloBio Equity Agreement. The ApolloBio Registration Rights Agreement becomes effective simultaneously with the ApolloBio Equity Agreement and the ApolloBio License Agreement.

At-The-Market Facility Sales

Pursuant to our At-The-Market Equity Offering Sales Agreement with Stifel, Nicolaus & Company, Incorporated, dated June 17, 2016, or the 2016 Sales Agreement, we sold an aggregate of 2,937,406 shares of common stock since March 31, 2017, resulting in net proceeds of approximately $24.2 million.

Certain Preliminary Financial Results

As of June 30, 2017, we had approximately $92.0 million of cash and cash equivalents and short-term investments. This amount is unaudited and preliminary, is subject to completion of financial closing procedures that could result in changes to the amount, and does not present all information necessary for an understanding of our financial condition as of June 30, 2017.

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Corporate Information

We were incorporated in the state of Delaware in June 2001. Our principal executive offices are located in the United States at 660 W. Germantown Pike, Suite 110, Plymouth Meeting, Pennsylvania 19462, our telephone number is (267) 440-4200 and our website is www.inovio.com. The information contained in, and that can be accessed through, our website is not incorporated into and does not form a part of this prospectus supplement, the accompanying prospectus or any of the documents incorporated by reference herein.

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The Offering

Common stock to be offered by us	12,500,000 shares
Option to purchase additional shares from us	We have granted the underwriters an option for 30 days from the date of this prospectus supplement to purchase up to an aggregate of 1,875,000 additional shares of our common stock.
Common stock to be outstanding after this offering	90,133,816 shares (or 92,008,816 shares if the underwriters exercise in full their option to purchase additional shares)
Use of proceeds	We intend to use the net proceeds from this offering for general corporate purposes, including clinical trial expenses, research and development expenses, general and administrative expenses, manufacturing expenses and other business development activities. See the section entitled Use of Proceeds.
Risk factors	You should read the section entitled Risk Factors beginning on page S-8 for a discussion of factors to consider carefully before deciding to invest in shares of our common stock.
NASDAQ Global Select Market symbol	INO

The number of shares of common stock outstanding immediately following this offering set forth above is based on 77,633,816 shares of common stock outstanding as of June 30, 2017 and excludes, as of that date:

- 7,888,763 shares of common stock issuable upon the exercise of outstanding stock options at a weighted-average exercise price of $6.78 per share;
- 4,074,919 shares of common stock available for future issuance under our 2016 Omnibus Incentive Plan;
- 1,335,744 shares of common stock issuable pursuant to restricted stock units;
- 8,456 shares of common stock issuable upon conversion of outstanding preferred stock, having a conversion price of $27.20 per share; and
- 284,091 shares of common stock issuable upon the exercise of warrants to purchase common stock at a weighted-average exercise price of $3.17 per share.

Unless otherwise indicated, all information in this prospectus supplement assumes no exercise of the underwriters option to purchase additional shares and no issuance of any shares to ApolloBio. See the section entitled Recent Developments Agreements with ApolloBio.

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RISK FACTORS

Investing in our common stock involves a high degree of risk. Our business, prospects, financial condition or operating results could be materially adversely affected by the risks identified below, as well as other risks or uncertainties not currently known to us or that we currently consider immaterial. The trading price of our common stock could decline due to any of these risks, and you may lose all or part of your investment. Before deciding whether to invest in our common stock, you should consider carefully the risk factors discussed below and those contained in the section entitled Risk Factors contained in our Annual Report on Form 10-K for the year ended December 31, 2016 and our Quarterly Report on Form 10-Q for the quarterly period ended March 31, 2017, as filed with the SEC, which are incorporated herein by reference in their entirety, as well as any amendment or update to our risk factors reflected in subsequent filings with the SEC.

Risks Related to this Offering

Management will have broad discretion as to the use of the net proceeds from this offering, and may not use the proceeds effectively.

Because we have not designated the amount of net proceeds from this offering to be used for any particular purpose, our management will have broad discretion as to the application of the net proceeds from this offering and could use them for purposes other than those contemplated at the time of the offering. Our management may use the net proceeds for corporate purposes that may not improve our financial condition or market value.

You may experience immediate and substantial dilution in the book value per share of the common stock you purchase in this offering.

Since the price per share of our common stock being offered in this offering is substantially higher than the net tangible book value per share of our common stock, you will suffer substantial dilution with respect to the net tangible book value of the common stock you purchase in this offering. Based on the public offering price of $6.00 per share and our net tangible book value as of March 31, 2017, if you purchase shares of common stock in this offering, you will suffer immediate and substantial dilution of $3.97 per share with respect to the net tangible book value of the common stock. The exercise of outstanding stock options and the settlement of restricted stock units may result in further dilution of your investment. See the section entitled Dilution for a more detailed discussion of the dilution you will incur if you purchase common stock in this offering.

You may experience future dilution as a result of future equity offerings.

In order to raise additional capital, we may in the future offer additional shares of our common stock or other securities convertible into or exchangeable for our common stock at prices that may not be the same as the price per share in this offering. We may sell shares or other securities in any other offering at a price per share that is less than the price per share paid by investors in this offering, and investors purchasing shares or other securities in the future could have rights superior to existing stockholders. The price per share at which we sell additional shares of our common stock, or securities convertible or exchangeable into common stock, in future transactions may be higher or lower than the price per share paid by investors in this offering.

Because we do not intend to declare cash dividends on our shares of common stock in the foreseeable future, stockholders must rely on appreciation of the value of our common stock for any return on their investment and may not receive any funds without selling their shares.

We have never declared or paid cash dividends on our common stock and do not anticipate declaring or paying any cash dividends in the foreseeable future. In addition, the terms of any existing or future debt agreements may preclude us from paying dividends. As a result, we expect that only appreciation of the price of our common stock, if any, will provide a return to investors in this offering for the foreseeable future. In addition, because we do not pay cash dividends, if our stockholders want to receive funds in respect of our common stock, they must sell their shares to do so.

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Risks Related to our Equity Agreement and Collaboration and License Agreement with ApolloBio

Any sale of our common stock to ApolloBio under the ApolloBio Equity Agreement will cause dilution and the sale of the shares of common stock acquired by ApolloBio thereunder could cause the price of our common stock to decline.

We have entered into the ApolloBio Equity Agreement to sell up to $35.0 million of our common stock to ApolloBio. If the closing conditions under the ApolloBio Equity Agreement are satisfied, the resulting sale of shares of our common stock thereunder will result in immediate dilution to the holders of shares of our common stock. Under the ApolloBio Equity Agreement, ApolloBio will purchase shares of our common stock at a price per share of $8.20. If this transaction is consummated at a time when the price of our common stock is greater than $8.20 per share, the holders of shares of our common stock could experience additional dilution due to the discounted sale of such shares under the ApolloBio Equity Agreement. In addition, any sales of shares of common stock by ApolloBio could cause the market price of our common stock to decline

We have entered into the ApolloBio Registration Rights Agreement requiring us to register all the shares purchased by ApolloBio within ten business days of the closing of the ApolloBio Equity Agreement

In connection with the ApolloBio Equity Agreement, we entered into the ApolloBio Registration Rights Agreement pursuant to which we agreed to file a registration statement with the SEC covering the offer and resale of all of the shares of common stock purchased by ApolloBio pursuant to the ApolloBio Equity Agreement. All shares acquired by ApolloBio and resold pursuant to an effective registration statement covering such shares, will be freely tradable. ApolloBio may sell none, some, or all of the shares of common stock purchased from us at any time under such registration statement. Depending upon market liquidity at the time, a sale of such shares at any given time could cause the trading price of our common stock to decline. The sale of a substantial number of shares of our common stock, or anticipation of such sales, could make it more difficult for us to sell equity or equity-related securities in the future at a time and at a price that we might otherwise wish to effect sales.

Consummation of the ApolloBio License Agreement and the ApolloBio Equity Agreement is contingent upon the satisfaction of several closing conditions that may not occur. If these closing conditions do not occur, we would not be able to license these products in China, Hong Kong, Macau, Taiwan and potentially South Korea without a new licensing partner and we would not receive the proceeds and royalties expected from the agreements.

Satisfaction of the closing conditions for the ApolloBio License Agreement and the ApolloBio Equity Agreement requires corporate approval from various ApolloBio entities and PRC currency and regulatory approvals. Although ApolloBio has submitted much of the required information to the relevant regulatory bodies, it has not yet received currency or regulatory approval, nor has it attained corporate approval for the transactions. If ApolloBio is not able to secure such corporate or PRC currency and regulatory approvals, the transactions contemplated by the ApolloBio License Agreement and the ApolloBio Equity Agreement will not be consummated, in which case, we will not be entitled to receive the $15.0 million in upfront payments or the up to $20.0 million in milestone payments under the ApolloBio License Agreement or the up to $35.0 million in proceeds from the sale of our common stock under the ApolloBio Equity Agreement. The failure to receive such payments could harm our business prospects or require us to raise additional capital through other means. Additionally, if the closing conditions for the ApolloBio License Agreement and the ApolloBio Equity Agreement are not satisfied, we may not be able to market VGX-3100 in China, Hong Kong, Macau, Taiwan or South Korea without finding a new licensing partner, which may be costly and time-consuming.

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SPECIAL NOTE REGARDING FORWARD-LOOKING STATEMENTS

This prospectus supplement and the accompanying prospectus, including the documents that we incorporate by reference herein and therein, contain forward-looking statements within the meaning of Section 27A of the Securities Act of 1933, as amended, or the Securities Act, and Section 21E of the Securities Exchange Act of 1934, as amended, or the Exchange Act. These forward-looking statements can generally be identified as such because the context of the statement may include words such as may, will, should , intend, plan, believe, anticipate, estimate, predict, potential, continue, likely, unlikely or opportunity, the negative of these words or words of similar import, though no forward-looking statement contain these identifying words. Similarly, statements that describe our future plans, strategies, intentions, expectations, objectives, goals or prospects are also forward-looking statements. Discussions containing these forward-looking statements may be found, among other places, in the Business and Management s Discussion and Analysis of Financial Condition and Results of Operations sections incorporated by reference from our most recent Annual Report on Form 10-K, as well as any amendments thereto reflected in subsequent filings with the SEC. These forward-looking statements are based largely on our expectations and projections about future events and future trends affecting our business, and are subject to risks and uncertainties that could cause actual results to differ materially from those anticipated in the forward-looking statements. The risks and uncertainties include, among others, 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. You should also consider the risks and uncertainties noted in Risk Factors above and those included in the documents that we incorporate by reference herein.

In addition, past financial and/or operating performance is not necessarily a reliable indicator of future performance and you should not use our historical performance to anticipate results or future period trends. We can give no assurances that any of the events anticipated by the forward-looking statements will occur or, if any of them do, what impact they will have on our results of operations and financial condition. Except as required by law, we undertake no obligation to publicly revise our forward-looking statements to reflect events or circumstances that arise after the filing of this prospectus supplement or the filing of the accompanying prospectus or documents incorporated by reference herein and therein that include forward-looking statements.

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USE OF PROCEEDS

We estimate the net proceeds to us from this offering will be approximately $70.2 million (or $80.8 million if the underwriters exercise in full their option to purchase additional shares), after payment of the estimated underwriting discounts and commissions and estimated offering expenses payable by us.

We intend to use the net proceeds from this offering for general corporate purposes, including clinical trial expenses, research and development expenses, general and administrative expenses, manufacturing expenses and other business development activities.

The timing and amount of our actual expenditures will be based on many factors, including the timing and success of our preclinical and clinical trials, our current and any future collaborations for our research and development programs, whether we choose to curtail some of our research or development activities and whether we achieve regulatory approval of any new product candidates. We will retain broad discretion in determining how we will allocate the net proceeds from this offering. Pending the use of the net proceeds from this offering, we intend to invest the net proceeds in investment-grade, interest-bearing instruments.

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DILUTION

Our net tangible book value as of March 31, 2017 was approximately $88.2 million, or $1.18 per share. Net tangible book value per share is determined by dividing our total tangible assets, less total liabilities, by the number of shares of our common stock outstanding as of March 31, 2017.

After giving effect to (i) the issuance and sale of 2,937,406 shares of our common stock by us pursuant to the 2016 Sales Agreement after March 31, 2017, or the Sales Agreement Shares, at an average price per share of $8.24 per share and (ii) the sale of 12,500,000 shares of our common stock in this offering at the public offering price of $6.00 per share and after deducting the estimated underwriting discounts and commissions and estimated offering expenses payable by us, our as adjusted net tangible book value as of March 31, 2017 would have been approximately $182.7 million, or $2.03 per share. This represents an immediate increase in net tangible book value of $0.58 per share to existing stockholders and immediate dilution in net tangible book value of $3.97 per share to investors purchasing common stock in this offering.

The following table illustrates this dilution on a per share basis:

Public offering price per share		$ 6.00
Net tangible book value per share as of March 31, 2017	$ 1.18	
Increase per share attributable to Sales Agreement Shares	0.27	
Increase in net tangible book value per share attributable to this offering	0.58	
Pro forma as adjusted net tangible book value per share as of March 31, 2017, after giving effect to this offering and the sale of the Sales Agreement Shares		$ 2.03
Dilution per share to new investors purchasing shares in this offering		$ 3.97

If the underwriters exercise in full their option to purchase up to 1,875,000 additional shares of common stock at the public offering price of $6.00 per share, the as adjusted net tangible book value after this offering would be $2.10 per share, representing an increase in net tangible book value of $0.65 per share to existing stockholders and immediate dilution in net tangible book value of $3.90 per share to investors purchasing our common stock in this offering.

The above discussion and table are based on 74,627,013 shares of our common stock issued and outstanding as of March 31, 2017 and exclude as of that date:

- 7,841,669 shares of common stock issuable upon the exercise of outstanding stock options at a weighted-average exercise price of $6.78 per share;
- 4,291,563 shares of common stock available for future issuance under our 2016 Omnibus Incentive Plan;
- 1,376,893 shares of common stock issuable pursuant to restricted stock units;

8,456 shares of common stock issuable upon conversion of outstanding preferred stock, having a conversion price of $27.20 per share; and

284,091 shares of common stock issuable upon the exercise of warrants to purchase common stock at a weighted-average exercise price of $3.17 per share.

To the extent that outstanding options are exercised or outstanding restricted stock units are settled, you may experience further dilution. We may choose to raise additional capital due to market conditions or strategic considerations even if at that time we believe we have sufficient funds for our current or future operating plans. To the extent that additional capital is raised through the sale of equity or convertible debt securities, the issuance of these securities could result in further dilution to our stockholders.

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UNDERWRITING

Citigroup Global Markets Inc., Piper Jaffray & Co. and RBC Capital Markets, LLC are acting as joint book-running managers of this offering. Citigroup Global Markets Inc. and Piper Jaffray & Co. are also acting as representatives of the underwriters named below. Subject to the terms and conditions stated in the underwriting agreement dated the date of this prospectus supplement, each underwriter named below has severally agreed to purchase, and we have agreed to sell to that underwriter, the number of shares set forth opposite the underwriter s name in the following table.

Underwriter	Number of Shares
Citigroup Global Markets Inc.	5,000,000
Piper Jaffray & Co.	3,750,000
RBC Capital Markets, LLC	2,250,000
H.C. Wainwright & Co., LLC	875,000
Maxim Group LLC	375,000
Aegis Capital Corp.	125,000
National Securities Corporation	125,000
Total	12,500,000

The underwriting agreement provides that the obligations of the underwriters to purchase the shares included in this offering are subject to approval of legal matters by counsel and to other conditions. The underwriters are obligated to purchase all the shares (other than those covered by the underwriters option to purchase additional shares described below) if they purchase any of the shares.

Shares sold by the underwriters to the public will initially be offered at the public offering price set forth on the cover of this prospectus supplement. Any shares sold by the underwriters to securities dealers may be sold at a discount from the public offering price not to exceed $0.216 per share. If all the shares are not sold at the initial offering price, the underwriters may change the offering price and the other selling terms.

If the underwriters sell more shares than the total number set forth in the table above, we have granted to the underwriters an option, exercisable for 30 days from the date of this prospectus supplement, to purchase up to an additional $1,875,000 shares at the public offering price less the underwriting discount. To the extent the option is exercised, each underwriter must purchase a number of additional shares approximately proportionate to that underwriter s initial purchase commitment. Any shares issued or sold under the option will be issued and sold on the same terms and conditions as the other shares that are the subject of this offering.

We and our executive officers and directors have agreed that, subject to specified limited exceptions, for a period of 90 days from the date of this prospectus supplement, we and they will not, without the prior written consent of Citigroup Global Markets Inc. and Piper Jaffray & Co., dispose of or hedge any shares or any securities convertible into or exchangeable for our common stock. Citigroup Global Markets Inc. and Piper Jaffray & Co., in their sole discretion, may release any of the securities subject to these lock-up agreements at any time.

The shares are listed on The NASDAQ Global Select Market under the symbol INO.

The following table shows the underwriting discounts and commissions that we are to pay to the underwriters in connection with this offering. These amounts are shown assuming both no exercise and full exercise of the underwriters option to purchase additional shares.

	Paid by Inovio	
	No Exercise	**Full Exercise**
Per share	$ 0.36	$ 0.36
Total	$ 4,500,000	$ 5,175,000

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We estimate that our total expenses for this offering will be $260,000. We have also agreed to reimburse the underwriters for certain FINRA-related expenses and other expenses incurred by them in connection with this offering in an amount up to $10,000.

In connection with the offering, the underwriters may purchase and sell shares in the open market. Purchases and sales in the open market may include short sales, purchases to cover short positions, which may include purchases pursuant to the underwriters option to purchase additional shares, and stabilizing purchases.

Short sales involve secondary market sales by the underwriters of a greater number of shares than they are required to purchase in the offering.

Covered short sales are sales of shares in an amount up to the number of shares represented by the underwriters option to purchase additional shares.

Naked short sales are sales of shares in an amount in excess of the number of shares represented by the underwriters option to purchase additional shares.

Covering transactions involve purchases of shares either pursuant to the underwriters option to purchase additional shares or in the open market in order to cover short positions.

To close a naked short position, the underwriters must purchase shares in the open market. A naked short position is more likely to be created if the underwriters are concerned that there may be downward pressure on the price of the shares in the open market after pricing that could adversely affect investors who purchase in the offering.

To close a covered short position, the underwriters must purchase shares in the open market or must exercise the option to purchase additional shares. In determining the source of shares to close the covered short position, the underwriters will consider, among other things, the price of shares available for purchase in the open market as compared to the price at which they may purchase shares through the underwriters option to purchase additional shares.

Stabilizing transactions involve bids to purchase shares so long as the stabilizing bids do not exceed a specified maximum.

Purchases to cover short positions and stabilizing purchases, as well as other purchases by the underwriters for their own accounts, may have the effect of preventing or retarding a decline in the market price of the shares. They may also cause the price of the shares to be higher than the price that would otherwise exist in the open market in the absence of these transactions. The underwriters may conduct these transactions on The NASDAQ Global Select Market, in the over-the-counter market or otherwise. If the underwriters commence any of these transactions, they may discontinue them at any time.

Conflicts of Interest

The underwriters are full service financial institutions engaged in various activities, which may include securities trading, commercial and investment banking, financial advisory, investment management, principal investment, hedging, financing and brokerage activities. The underwriters and their respective affiliates have in the past performed commercial banking, investment banking and advisory services for us

from time to time for which they have received no more than customary fees and reimbursement of expenses and may, from time to time, engage in transactions with and perform services for us in the ordinary course of their business for which they may receive customary fees and reimbursement of expenses. In the ordinary course of their various business activities, the underwriters and their respective affiliates may make or hold a broad array of investments and actively trade debt and equity securities (or related derivative securities) and financial instruments (which may include bank loans and/or credit default swaps) for their own account and for the accounts of their customers and may at any time hold long and short positions in such securities and instruments. Such investments and securities activities may involve securities and/or instruments of ours or our affiliates. The underwriters and their affiliates

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may also make investment recommendations and/or publish or express independent research views in respect of such securities or financial instruments and may hold, or recommend to clients that they acquire, long and/or short positions in such securities and instruments.

We have agreed to indemnify the underwriters against certain liabilities, including liabilities under the Securities Act, or to contribute to payments the underwriters may be required to make because of any of those liabilities.

Notice to Prospective Investors in the European Economic Area

In relation to each member state of the European Economic Area that has implemented the Prospectus Directive (each, a relevant member state), with effect from and including the date on which the Prospectus Directive is implemented in that relevant member state (the relevant implementation date), an offer of shares described in this prospectus supplement may not be made to the public in that relevant member state other than:

to any legal entity which is a qualified investor as defined in the Prospectus Directive;

to fewer than 100 or, if the relevant member state has implemented the relevant provision of the 2010 PD Amending Directive, 150 natural or legal persons (other than qualified investors as defined in the Prospectus Directive), as permitted under the Prospectus Directive, subject to obtaining the prior consent of the relevant Dealer or Dealers nominated by us for any such offer; or

in any other circumstances falling within Article 3(2) of the Prospectus Directive,

provided that no such offer of shares shall require us or any underwriter to publish a prospectus pursuant to Article 3 of the Prospectus Directive.

For purposes of this provision, the expression an offer of securities to the public in any relevant member state means the communication in any form and by any means of sufficient information on the terms of the offer and the shares to be offered so as to enable an investor to decide to purchase or subscribe for the shares, as the expression may be varied in that member state by any measure implementing the Prospectus Directive in that member state, and the expression Prospectus Directive means Directive 2003/71/EC (and amendments thereto, including the 2010 PD Amending Directive, to the extent implemented in the relevant member state) and includes any relevant implementing measure in the relevant member state. The expression 2010 PD Amending Directive means Directive 2010/73/EU.

The sellers of the shares have not authorized and do not authorize the making of any offer of shares through any financial intermediary on their behalf, other than offers made by the underwriters with a view to the final placement of the shares as contemplated in this prospectus supplement. Accordingly, no purchaser of the shares, other than the underwriters, is authorized to make any further offer of the shares on behalf of the sellers or the underwriters.

Notice to Prospective Investors in the United Kingdom

This prospectus supplement and the accompanying prospectus are only being distributed to, and is only directed at, persons in the United Kingdom that are qualified investors within the meaning of Article 2(1)(e) of the Prospectus Directive that are also (i) investment professionals falling within Article 19(5) of the Financial Services and Markets Act 2000 (Financial Promotion) Order 2005, or the Order, or (ii) high net worth entities, and other persons to whom it may lawfully be communicated, falling within Article 49(2)(a) to (d) of the Order (each such person being referred to as a relevant person). This prospectus supplement and its contents are confidential and should not be distributed, published or reproduced (in whole or in part) or disclosed by recipients to any other persons in the United Kingdom. Any person in the United Kingdom that is not a relevant person should not act or rely on this document or any of its contents.

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Notice to Prospective Investors in France

Neither this prospectus supplement nor any other offering material relating to the shares described in this prospectus supplement has been submitted to the clearance procedures of the *Autorité des Marchés Financiers* or of the competent authority of another member state of the European Economic Area and notified to the *Autorité des Marchés Financiers.* The shares have not been offered or sold and will not be offered or sold, directly or indirectly, to the public in France. Neither this prospectus supplement nor any other offering material relating to the shares has been or will be:

released, issued, distributed or caused to be released, issued or distributed to the public in France; or

used in connection with any offer for subscription or sale of the shares to the public in France.

Such offers, sales and distributions will be made in France only:

to qualified investors (investisseurs qualifiés) and/or to a restricted circle of investors (cercle restreint d investisseurs), in each case investing for their own account, all as defined in, and in accordance with articles L.411-2, D.411-1, D.411-2, D.734-1, D.744-1, D.754-1 and D.764-1 of the French Code monétaire et financier;

to investment services providers authorized to engage in portfolio management on behalf of third parties; or

in a transaction that, in accordance with article L.411-2-II-1° -or-2° -or 3° of the French Code monétaire et financier and article 211-2 of the General Regulations (Règlement Général) of the Autorité des Marchés Financiers, does not constitute a public offer (appel public à l épargne).

The shares may be resold directly or indirectly, only in compliance with articles L.411-1, L.411-2, L.412-1 and L.621-8 through L.621-8-3 of the French *Code monétaire et financier*.

Notice to Prospective Investors in Hong Kong

The shares may not be offered or sold in Hong Kong by means of any document other than (i) in circumstances which do not constitute an offer to the public within the meaning of the Companies Ordinance (Cap. 32, Laws of Hong Kong), or (ii) to professional investors within the meaning of the Securities and Futures Ordinance (Cap. 571, Laws of Hong Kong) and any rules made thereunder, or (iii) in other circumstances which do not result in the document being a prospectus within the meaning of the Companies Ordinance (Cap. 32, Laws of Hong Kong) and no advertisement, invitation or document relating to the shares may be issued or may be in the possession of any person for the purpose of issue (in each case whether in Hong Kong or elsewhere), which is directed at, or the contents of which are likely to be accessed or read by, the public in Hong Kong (except if permitted to do so under the laws of Hong Kong) other than with respect to shares which are or are intended to be disposed of only to persons outside Hong Kong or only to professional investors within the meaning of the Securities and Futures Ordinance (Cap. 571, Laws of Hong Kong) and any rules made thereunder.

Notice to Prospective Investors in Japan

The shares offered in this prospectus supplement have not been and will not be registered under the Financial Instruments and Exchange Law of Japan. The shares have not been offered or sold and will not be offered or sold, directly or indirectly, in Japan or to or for the account of any resident of Japan (including any corporation or other entity organized under the laws of Japan), except (i) pursuant to an exemption from the registration requirements of the Financial Instruments and Exchange Law and (ii) in compliance with any other applicable requirements of Japanese law.

Notice to Prospective Investors in Singapore

This prospectus supplement has not been registered as a prospectus with the Monetary Authority of Singapore. Accordingly, this prospectus supplement and any other document or material in connection with the

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offer or sale, or invitation for subscription or purchase, of the shares may not be circulated or distributed, nor may the shares be offered or sold, or be made the subject of an invitation for subscription or purchase, whether directly or indirectly, to persons in Singapore other than (i) to an institutional investor under Section 274 of the Securities and Futures Act, Chapter 289 of Singapore (the SFA), (ii) to a relevant person pursuant to Section 275(1), or any person pursuant to Section 275(1A), and in accordance with the conditions specified in Section 275 of the SFA or (iii) otherwise pursuant to, and in accordance with the conditions of, any other applicable provision of the SFA, in each case subject to compliance with conditions set forth in the SFA.

Where the shares are subscribed or purchased under Section 275 of the SFA by a relevant person which is:

- a corporation (which is not an accredited investor (as defined in Section 4A of the SFA)) the sole business of which is to hold investments and the entire share capital of which is owned by one or more individuals, each of whom is an accredited investor; or

- a trust (where the trustee is not an accredited investor) whose sole purpose is to hold investments and each beneficiary of the trust is an individual who is an accredited investor,

shares, debentures and units of shares and debentures of that corporation or the beneficiaries rights and interest (howsoever described) in that trust shall not be transferred within six months after that corporation or that trust has acquired the shares pursuant to an offer made under Section 275 of the SFA except:

- to an institutional investor (for corporations, under Section 274 of the SFA) or to a relevant person defined in Section 275(2) of the SFA, or to any person pursuant to an offer that is made on terms that such shares, debentures and units of shares and debentures of that corporation or such rights and interest in that trust are acquired at a consideration of not less than $200,000 (or its equivalent in a foreign currency) for each transaction, whether such amount is to be paid for in cash or by exchange of securities or other assets, and further for corporations, in accordance with the conditions specified in Section 275 of the SFA;

- where no consideration is or will be given for the transfer; or

- where the transfer is by operation of law.

Notice to Prospective Investors in Australia

No prospectus or other disclosure document (as defined in the Corporations Act 2001 (Cth) of Australia, or the Corporations Act) in relation to the common stock has been or will be lodged with the Australian Securities & Investments Commission, or ASIC. This document has not been lodged with ASIC and is only directed to certain categories of exempt persons. Accordingly, if you receive this document in Australia, you confirm and warrant that you are either:

- a sophisticated investor under section 708(8)(a) or (b) of the Corporations Act;

a sophisticated investor under section 708(8)(c) or (d) of the Corporations Act and that you have provided an accountant s certificate to us which complies with the requirements of section 708(8)(c)(i) or (ii) of the Corporations Act and related regulations before the offer has been made;

a person associated with the company under section 708(12) of the Corporations Act; or

a professional investor within the meaning of section 708(11)(a) or (b) of the Corporations Act, and to the extent that you are unable to confirm or warrant that you are an exempt sophisticated investor, associated person or professional investor under the Corporations Act any offer made to you under this document is void and incapable of acceptance; and

you warrant and agree that you will not offer any of the common stock for resale in Australia within 12 months of that common stock being issued unless any such resale offer is exempt from the requirement to issue a disclosure document under section 708 of the Corporations Act.

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Notice to Prospective Investors in Canada

The shares offered in this prospectus supplement may be sold only to purchasers purchasing, or deemed to be purchasing, as principal that are accredited investors, as defined in National Instrument 45-106 Prospectus exemptions or subsection 73.3(1) of the Securities Act (Ontario), and are permitted clients, as defined in National Instrument 31-103 Registration Requirements, Exemptions and Ongoing Registrant Obligations. Any resale of the shares must be made in accordance with an exemption from, or in a transaction not subject to, the prospectus requirements of applicable securities laws.

Securities legislation in certain provinces or territories of Canada may provide a purchaser with remedies for rescission or damages if this prospectus supplement (including any amendment thereto) contains a misrepresentation, provided that the remedies for rescission or damages are exercised by the purchaser within the time limit prescribed by the securities legislation of the purchaser s province or territory. The purchaser should refer to any applicable provisions of the securities legislation of the purchaser s province or territory for particulars of these rights or consult with a legal advisor. Pursuant to section 3A.3 of National Instrument 33-105 Underwriting Conflicts (NI 33-105), the underwriters are not required to comply with the disclosure requirements of NI 33-105 regarding underwriter conflicts of interest in connection with this offering.

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LEGAL MATTERS

Cooley LLP, New York, New York, will pass upon the validity of the issuance of the shares being sold in this offering. Certain legal matters relating to this offering will be passed upon for the underwriters by Dechert LLP, New York, New York.

EXPERTS

The consolidated financial statements of Inovio Pharmaceuticals, Inc. and its subsidiaries as of December 31, 2016 and 2015 and for each of the years in the three-year period ended December 31, 2016, and management s assessment of the effectiveness of internal control over financial reporting as of December 31, 2016, have been incorporated by reference herein and in the registration statement in reliance upon the reports of Ernst & Young LLP, independent registered public accounting firm, incorporated by reference herein, and upon the authority of said firm as experts in accounting and auditing.

WHERE YOU CAN FIND MORE INFORMATION

We have filed with the SEC a registration statement on Form S-3 under the Securities Act with respect to the shares of common stock we are offering under this prospectus supplement. This prospectus supplement and the accompanying prospectus do not contain all of the information set forth in the registration statement and the exhibits to the registration statement. For further information with respect to us and the securities we are offering under this prospectus supplement, we refer you to the registration statement and the exhibits and schedules filed as a part of the registration statement. We file annual, quarterly and current reports, proxy statements and other information with the SEC. You may read and copy the registration statement, as well as any other material we file with the SEC, at the SEC s Public Reference Room at 100 F Street, NE, Washington, D.C. 20549. Please call the SEC at 1.800.SEC.0330 for more information on the Public Reference Room. The SEC maintains an Internet site that contains reports, proxy and information statements, and other information regarding issuers that file electronically with the SEC, including Inovio. The SEC s Internet site can be found at www.sec.gov.

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INCORPORATION BY REFERENCE

The SEC allows us to incorporate by reference the information we file with it, which means that we can disclose important information to you by referring you to those documents. Information incorporated by reference is part of this prospectus supplement and the accompanying prospectus. Later information filed with the SEC will update and supersede this information. The SEC s Internet site can be found at http://www.sec.gov.

We incorporate by reference the documents listed below and any future filings made with the SEC under Sections 13(a), 13(c), 14 or 15(d) of the Exchange Act after the date of this prospectus supplement until the termination of the offering of the shares covered by this prospectus supplement (other than portions of Current Reports furnished under Item 2.02 or Item 7.01 of Form 8-K and exhibits filed on such form that are related to such items):

- our Annual Report on Form 10-K for the year ended December 31, 2016, filed with the SEC on March 15, 2017;
- the information specifically incorporated by reference into our Annual Report on Form 10-K for the year ended December 31, 2016 from our Definitive Proxy Statement on Schedule 14A for our 2017 Annual Meeting of Stockholders, filed with the SEC on March 29, 2017;
- our Quarterly Report on Form 10-Q for the quarterly period ended March 31, 2017, filed with the SEC on May 10, 2017;
- our Current Reports on Form 8-K (other than information furnished rather than filed) filed with the SEC on February 13, 2017, March 9, 2017, March 24, 2017, May 16, 2017, June 12, 2017, July 14, 2017 and July 18, 2017; and
- the description of our common stock contained in our registration statement on Form 8-A filed with the SEC on September 12, 2014, including any amendments or reports filed for the purposes of updating this description.

You may request a copy of these filings, at no cost, by writing or telephoning us at the following address or telephone number:

Inovio Pharmaceuticals, Inc.

660 W. Germantown Pike, Suite 110

Plymouth Meeting, Pennsylvania 19462

Attn: Investor Relations

Phone: (877) 446-6846

In accordance with Rule 412 of the Securities Act, any statement contained in a document incorporated by reference herein shall be deemed modified or superseded to the extent that a statement contained herein or in any other subsequently filed document which also is or is deemed to

be incorporated by reference herein modifies or supersedes such statement.

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INOVIO PHARMACEUTICALS, INC.

$250,000,000

Common Stock

Preferred Stock

Debt Securities

Warrants

Units

From time to time, we may offer up to $250,000,000 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 NASDAQ Global Select Market under the symbol INO. On May 20, 2015, the last reported sale price of our common stock on the NASDAQ Global Select Market was $8.21. The applicable prospectus supplement will contain information, where applicable, as to any other listing, if any, on the NASDAQ Global Select Market or any securities market or other exchange of the securities covered by the applicable prospectus supplement.

On May 20, 2015, the aggregate market value of our outstanding common stock our non-affiliates held was approximately $558.6 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 June 5, 2015.

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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 it 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 $250,000,000. 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, 2014 we filed with the SEC on March 16, 2015;

- Our quarterly report on Form 10-Q for the quarter ended March 31, 2015 we filed with the SEC on May 11, 2015;

- Our current reports on Form 8-K we filed on March 10, 2015, April 30, 2015, May 5, 2015 and May 12, 2015, 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, 2015 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 developing active DNA immunotherapies and vaccines focused on treating and preventing cancers and infectious diseases. Our DNA-based immunotherapies, in combination with our proprietary electroporation delivery devices, are intended to generate robust immune responses, in particular T cells, to fight such diseases. In 2014 we reported that in a large, controlled phase II clinical study we achieved clinically relevant efficacy against a targeted disease (HPV-associated cervical dysplasia) by generating antigen-specific T cells. Our novel SynCon® immunotherapy design has shown the ability to help break the immune system s tolerance of cancerous cells. Alternatively, our SynCon® product design is also intended to facilitate cross-strain protection against known as well as new unmatched strains of pathogens such as influenza. Given the recognized role of killer T cells in eliminating cancerous or infected cells from the body, our scientists believe that our active immunotherapies may play an important role in helping fight such diseases. Human data to date have shown a favorable safety profile of our DNA immunotherapies delivered using electroporation. We have completed, current or planned clinical programs of our proprietary SynCon® immunotherapies for HPV-caused pre-cancers and cancers, prostate cancer, breast/lung/pancreatic cancer, hepatitis C virus (HCV), hepatitis B virus (HBV), HIV, influenza, and Ebola. Our partners and collaborators include F. Hoffmann-La Roche Ltd and Hoffmann-La Roche Inc., University of Pennsylvania, Drexel University, National Microbiology Laboratory of the Public Health Agency of Canada, , 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, Defense Advanced Research Projects Agency and MedImmune, LLC.

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

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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.

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, 2010, 2011, 2012, 2013, 2014 and the three months ended March 31, 2015[(1)].

	Years Ended December 31,					Three Months Ended March 31,
	2010	2011	2012	2013	2014	2015
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, 2010, 2011, 2012, 2013, 2014 and the three months ended March 31, 2015 and would have needed to generate additional income of $17,638,746, $15,304,095, $19,712,980, $66,083,532, $36,140,133 and $10,582,871, respectively, to cover our fixed charges of $261,425, $141,900, $146,520, $298,980, $411,510 and $102,300, 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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SELECTED FINANCIAL DATA

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, 2014	Year Ended December 31, 2013	Year Ended December 31, 2012	Year Ended December 31, 2011	Year Ended December 31, 2010	Three Months Ended March 31, 2015	Three Months Ended March 31, 2014
erations Data:							
venue under laborative earch and velopment angements, luding from iliated entity	$ 7,896,032	$ 9,664,547	$ 660,003	$ 567,856	$ 527,222	$ 4,358,071	$ 1,552,69
ants and scellaneous enue	2,560,734	3,802,799	3,458,649	9,227,401	5,617,483	808,566	804,95
tal revenues	10,456,766	13,467,346	4,118,652	9,795,257	6,144,705	5,166,637	2,357,64
ss from erations	(39,495,961)	(19,544,332)	(23,493,532)	(21,638,540)	(19,220,162)	(8,367,611)	(10,000,05
erest and other ome, net	331,461	132,214	166,113	34,285	147,406	138,276	52,07
ange in fair ue of common ck warrants	348,143	(45,632,669)	1,982,620	8,690,658	2,403,924	(1,227)	(505,92
oss) Gain on estment in iliated entity	2,676,224	(1,038,745)	1,631,819	(2,390,498)	(969,914)	(2,352,309)	(376,96
t loss	(36,140,133)	(66,083,532)	(19,712,980)	(15,304,095)	(17,638,746)	(10,582,871)	(10,830,86
t loss ributable to n-controlling erest	18,420	55,084	44,025	51,150	24,950	1,092	9,40
t loss ributable to ovio armaceuticals, .	$ (36,121,713)	$ (66,028,448)	$ (19,668,955)	$ (15,252,945)	$ (17,613,796)	$ (10,581,779)	$ (10,821,46
t loss per mmon share ributable to							

ovio armaceuticals, . stockholders:							
sic	$ (0.61)	$ (1.43)	$ (0.58)	$ (0.48)	$ (0.68)	$ (0.17)	$ (0.2
uted	$ (0.64)	$ (1.43)	$ (0.58)	$ (0.48)	$ (0.68)	$ (0.18)	$ (0.2
ighted average nber of mmon shares standing used per share culations:							
sic	59,127,349	46,087,773	34,127,312	31,559,834	25,800,470	60,741,082	55,159,00
uted	59,408,252	46,087,773	34,127,312	31,559,834	25,800,970	60,913,423	55,159,00
lance Sheet ta:							
sh and cash uivalents	$ 40,543,982	$ 33,719,796	$ 5,646,021	$ 17,350,116	$ 19,998,489	$ 26,145,723	$ 98,770,90
ort-term estments	53,075,974	18,905,608	8,034,001	12,863,420	1,849,271	54,866,570	18,011,49
tal assets	131,785,097	88,287,207	45,138,754	61,106,561	56,067,391	117,855,197	151,657,64
rrent liabilities	14,023,752	28,966,456	8,376,577	11,043,021	6,436,708	8,158,888	15,641,07
cumulated ficit	(331,910,290)	(295,788,577)	(229,760,129)	(210,091,174)	(194,838,229)	(342,492,069)	(306,610,03
tal ckholders uity	111,537,594	52,902,683	34,857,405	47,861,662	47,100,911	103,426,046	129,179,90

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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 depositaries, 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 depositary, 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 May 20, 2015, there were:

- 71,810,186 shares of common stock outstanding; and
- 23 shares of Series C Cumulative Convertible Preferred Stock outstanding.

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 NASDAQ Stock Market 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 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.

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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, Restricted Stock Units and Convertible Preferred Stock

As of May 20, 2015, we have reserved 9,144,700 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 6,204,865 shares for issuance upon exercise of outstanding options and restricted stock units that we previously granted under our stock option plans, 2,019,319 shares for issuance upon exercise of options that we may grant in the future under our stock option plans, 912,060 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 depositary 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 depositary. Unless we specify otherwise in the applicable prospectus supplement, The Depository Trust Company, New York, New York, known as DTC, will be the depositary 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 depositary, its nominee or a successor depositary, 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 depositary, 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 depositary 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 depositary, 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 depositary 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 depositary 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 depositary notifies us that it is unwilling, unable or no longer qualified to continue as depositary for that global security and we do not appoint another institution to act as depositary 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 depositary, 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 reallowed 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 reallowed 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 NASDAQ Stock Market may engage in passive market making transactions in the common stock on the NASDAQ Stock Market 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, 2014, and the effectiveness of Inovio Pharmaceuticals, Inc. s internal control over financial reporting as of December 31, 2014 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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12,500,000 Shares

Inovio Pharmaceuticals, Inc.

Common Stock

PRELIMINARY PROSPECTUS SUPPLEMENT

July 19, 2017

Joint Book-Running Managers

Citigroup

Piper Jaffray

RBC Capital Markets

Co-Managers

H.C. Wainwright & Co.

Maxim Group LLC

Aegis Capital Corp.

National Securities Corporation