



**13,123,360 Shares of Common Stock
Warrants to Purchase 13,123,360 Shares of Common Stock**

We are offering 13,123,360 shares of our common stock, par value \$0.01 per share (“Common Stock”) and Series B Warrants to purchase an aggregate of 13,123,360 shares of our Common Stock (the “Series B Warrants”). The shares of Common Stock will be sold for a purchase price equal to \$0.381 per share and Series B Warrant. For a description of our Common Stock and the Series B Warrants, see the section entitled “Description of Securities We Are Offering” beginning on page S-13 of this prospectus supplement.

In a concurrent private placement, we are selling to the purchasers of shares of our Common Stock in this offering Series A Warrants to purchase an aggregate of 13,123,360 shares of our Common Stock (the “Series A Warrants”) and Series C Warrants to purchase an aggregate of 13,123,360 shares of our Common Stock (the “Series C Warrants”, and, together with the Series A Warrants and the Series B Warrants, the “Warrants”). The Series A Warrants, the Series C Warrants and the shares of our Common Stock issuable upon the exercise of the such warrants are not being registered under the Securities Act of 1933, as amended (the “Securities Act”), are not being offered pursuant to this prospectus supplement and the accompanying prospectus and are being offered pursuant to the exemption provided in Section 4(a)(2) under the Securities Act and Rule 506(b) promulgated thereunder. See “Private Placement Transaction” beginning on page S-15 of this prospectus supplement for more information.

Our Common Stock is currently listed on The NASDAQ Capital Market under the symbol “AMDA.” On September 4, 2015, the last reported sales price of our Common Stock on The NASDAQ Capital Market was \$0.47 per share. The Series B Warrants offered hereby will not be listed for trading on a securities exchange.

As of July 27, 2015, the aggregate market value of our outstanding Common Stock held by non-affiliates, or the public float, was approximately \$50.2 million, which was calculated based on 65,196,131 shares of outstanding Common Stock held by non-affiliates and on a price per share of \$0.77, the closing price of our Common Stock on The NASDAQ Capital Market on July 27, 2015. During the prior 12 calendar month period that ends on, and includes, the date of this prospectus supplement, and including this offering, we have offered securities with an aggregate market value of \$15.1 million pursuant to General Instruction I.B.6 of Form S-3.

We have retained Ladenburg Thalmann & Co. Inc. as our exclusive placement agent in connection with this offering. The placement agent has no obligation to buy any of the securities from us or to arrange for the purchase or sale of any specific number or dollar amount of securities but will use reasonable best efforts to arrange for the sale of the Common Stock offered hereby. Therefore, we will enter into a securities purchase agreement (the “Securities Purchase Agreement”) directly with investors in connection with this offering and the private placement. See “Plan of Distribution” beginning on page S-19 of this prospectus supplement for more information regarding these arrangements.

You should read this prospectus supplement and the accompanying prospectus and the documents incorporated by reference in this prospectus supplement carefully before you invest.

We are an “emerging growth company” as that term is used in the Jumpstart Our Business Startups Act of 2012 and, as such, have elected to comply with certain reduced public company reporting requirements for this prospectus supplement, the accompanying prospectus and future filings with the Securities and Exchange Commission.

Investing in our securities involves risks. See “Risk Factors” beginning on page S-9 of this prospectus supplement and in the documents we incorporate by reference in this prospectus supplement.

	<u>Per Share</u>		<u>Total</u>
Public offering price	0.381	\$	5,000,000.16
Placement Agency Fees⁽¹⁾	0.030	\$	400,000.01
Proceeds, before expenses, to us	0.351	\$	4,600,000.15

(1) In addition, we have agreed to reimburse the placement agent’s actual out-of-pocket expenses up to \$60,000 and to issue the placement agent warrants exercisable for a number of shares of Common Stock equal to 5% of the number of shares of Common Stock sold in this offering. See “Plan of Distribution.”

We estimate the total expenses of this offering, excluding the placement agent’s fees, will be approximately \$200,000. The placement agent is not purchasing or selling any of our Common Stock pursuant to this prospectus supplement or the accompanying prospectus, nor are we requiring any minimum purchase or sale of any specific number of shares of Common Stock. Because there is no minimum offering amount required as a condition to the closing of this offering, the actual public offering amount, placement agent’s fees and proceeds to us may be substantially less than the maximum amounts set forth above.

We expect that delivery of the securities being offered pursuant to this prospectus supplement will be made to purchasers on or about September 11, 2015.

Neither the United States Securities and Exchange Commission, or the SEC, nor any state securities commission has approved or disapproved of the Common Stock that may be offered under this prospectus, nor have any of these regulatory authorities determined if this prospectus is truthful or complete. Any representation to the contrary is a criminal offense.

LADENBURG THALMANN

The date of this prospectus supplement is September 8, 2015.

TABLE OF CONTENTS
Prospectus Supplement

	Page
ABOUT THIS PROSPECTUS SUPPLEMENT	S-2
SPECIAL NOTE REGARDING FORWARD LOOKING STATEMENTS	S-3
SUMMARY	S-4
THE OFFERING	S-7
RISK FACTORS	S-9
USE OF PROCEEDS	S-11
DILUTION	S-12
DESCRIPTION OF SECURITIES WE ARE OFFERING	S-13
PRIVATE PLACEMENT TRANSACTION	S-16
PLAN OF DISTRIBUTION	S-20
WHERE YOU CAN FIND MORE INFORMATION	S-22
INCORPORATION OF DOCUMENTS BY REFERENCE	S-22
LEGAL MATERS	S-23
EXPERTS	S-23

Prospectus

ABOUT THIS PROSPECTUS	1
SUMMARY	2
RISK FACTORS	5
SPECIAL NOTE REGARDING FORWARD LOOKING STATEMENTS	5
USE OF PROCEEDS	5
DESCRIPTION OF CAPITAL STOCK	5
DESCRIPTION OF WARRANTS	9
DESCRIPTION OF UNITS	10
PLAN OF DISTRIBUTION	11
LEGAL MATTERS	13
EXPERTS	13
WHERE YOU CAN FIND MORE INFORMATION	14
INCORPORATION BY REFERENCE	

ABOUT THIS PROSPECTUS SUPPLEMENT

This document is in two parts. The first part is this prospectus supplement, which describes the specific terms of this offering and certain other matters. The second part, the accompanying prospectus, provides more general information about us and our Common Stock. Generally, when we refer to the prospectus, we are referring to both parts of this document combined. To the extent information in this prospectus supplement conflicts with information in the accompanying prospectus, you should rely on the information in this prospectus supplement. You should rely only on the information contained in, or incorporated by reference in, this prospectus supplement and the accompanying prospectus and any related “free writing prospectus.” None of the Company or the placement agent has authorized anyone to provide information different from that contained in, incorporated or deemed incorporated by reference into this prospectus supplement or the accompanying prospectus.

Before you invest, you should read the registration statement of which this document forms a part, this document, the accompanying prospectus and the documents incorporated by reference herein that are described under the headings “Where You Can Find More Information” and “Incorporation of Documents by Reference.”

The information in this document may only be accurate on the date of the document. You should assume that the information appearing in this prospectus supplement is accurate only as of the date on the front cover of this prospectus supplement. Our business, financial condition, results of operations and prospects may have changed since that date.

We are not making an offer of these securities in any jurisdiction where the offer is not permitted.

This prospectus supplement contains summaries of certain provisions contained in some of the documents described herein, but reference is made to the actual documents for complete information. All of the summaries are qualified 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 supplement is a part, and you may obtain copies of those documents as described below under the heading “Where You Can Find More Information.”

Unless the context requires otherwise, in this prospectus supplement and the accompanying prospectus the terms “Amedica,” “Amedica Corporation,” “we,” “us” and “our” refer to Amedica Corporation, a Delaware corporation.

SPECIAL NOTE REGARDING FORWARD LOOKING STATEMENTS

Information set forth in this prospectus supplement and the prospectus and the information they incorporate by reference may contain various “forward-looking statements” within the meaning of Section 27A of the Securities Act, and Section 21E of the Securities Exchange Act of 1934, as amended, or the Exchange Act.

All statements, other than statements of historical fact, included or incorporated by reference in this prospectus supplement and the prospectus regarding our business strategy, future operations, projected financial position, potential strategic transactions, proposed distribution channels, projected sales growth, proposed new products, estimated future revenues, cash flows and profitability, projected costs, potential sources of additional capital, future prospects, future economic conditions, the future of our industry and results that might be obtained by pursuing management’s current plans and objectives are forward-looking statements. The words “believe,” “anticipate,” “estimate,” “plan,” “expect,” “intend,” “may,” “could,” “should,” “potential,” “likely,” “projects,” “continue,” “will,” and “would” and similar expressions are intended to identify forward-looking statements, although not all forward-looking statements contain these identifying words. Forward-looking statements reflect our current views with respect to future events and are based on assumptions and are subject to risks and uncertainties. We cannot guarantee that we actually will achieve the plans, intentions or expectations expressed in our forward-looking statements and you should not place undue reliance on these statements. There are a number of important factors that could cause our actual results to differ materially from those indicated or implied by forward-looking statements. Examples of risks and uncertainties that could cause actual results to differ materially from historical performance and any forward-looking statements include, but are not limited to, the risks described under the heading “Risk Factors” beginning on page S-9 of this prospectus supplement, in our most recent Annual Report on Form 10-K, as well as any subsequent filings with the SEC. Given these risks, uncertainties and other factors, you should not place undue reliance on these forward-looking statements. Also, these forward-looking statements represent our estimates and assumptions only as of the date such forward-looking statements are made. You should read carefully this prospectus supplement, the prospectus, and any related free writing prospectuses that we have authorized for use in connection with this offering, together with the information incorporated herein or therein by reference as described under the heading “Where You Can Find More Information,” completely and with the understanding that our actual future results may be materially different from what we expect. We hereby qualify all of our forward-looking statements by these cautionary statements. Except as required by law, we assume no obligation to update these forward-looking statements publicly or to update the reasons actual results could differ materially from those anticipated in these forward-looking statements, even if new information becomes available in the future.

SUMMARY

This summary is not complete and does not contain all of the information you should consider before investing in the securities offered by this prospectus and prospectus supplement. You should read this summary together with the entire prospectus supplement and prospectus, including our financial statements, the notes to those financial statements, and the other documents identified under the headings “Where You Can Find More Information” and “Incorporation of Documents by Reference” in this prospectus supplement, before making an investment decision. See the Risk Factors section of this prospectus supplement on page S-9 for a discussion of the risks involved in investing in our securities.

Amedica Corporation

Our Company

We are a commercial biomaterial company focused on using our silicon nitride technology platform to develop, manufacture and sell a broad range of medical devices. We currently market spinal fusion products and are developing products for use in total hip and knee joint replacements. We believe our silicon nitride technology platform enables us to offer new and transformative products in the orthopedic and other medical device markets. We believe we are the first and only company to use silicon nitride in medical applications. Over 20,000 of our silicon nitride spine products have been implanted in patients.

Biomaterials come in a variety of synthetic or natural materials available in a variety of forms that are used in virtually every medical specialty. We believe our silicon nitride biomaterial has superior characteristics compared to commonly used biomaterials in the markets we are targeting, including polyetheretherketone, or PEEK, which is the most common biomaterial used for interbody spinal fusion products. Specifically, we believe our silicon nitride has the following key attributes: promotion of bone growth; hardness, strength and resistance to fracture; resistance to wear; non-corrosive; anti-infective properties; biocompatibility; and superior diagnostic imaging compatibility.

We currently market our *Valeo*® family of silicon nitride interbody spinal fusion devices in the United States and Europe for use in the cervical and thoracolumbar areas of the spine. We believe our *Valeo* devices have a number of advantages over existing products due to silicon nitride’s superior characteristics, resulting in faster and more effective fusion and reduced risk of infection.

In addition to our silicon nitride-based spinal fusion products, we market a line of non-silicon nitride spinal fusion products which allows us to provide surgeons and hospitals with a broader range of products. These additional products are complementary to our fusion products and are designed for the treatment of deformity and degenerative spinal procedures. Although our non-silicon nitride products have accounted for approximately 52% and 66% of our product revenues for the years ended December 31, 2014 and 2013, respectively, we believe the continued promotion and potential for adoption of our silicon nitride products and product candidates, if approved, provides us the greatest opportunity to grow our business in new and existing markets and achieve our goal to become a leading biomaterial company.

In addition to the markets into which we directly sell our products, we are utilizing our silicon nitride technology platform to expand our current penetration in the spinal fusion market through original equipment manufacturer (“OEM”) and private label partnerships. We also expect to do the same in other markets such as total hip and knee joint replacements, dental and sports medicine. We believe our biomaterial expertise, strong intellectual property and formulaic manufacturing process will allow us to transition currently available medical device products made of inferior biomaterials and manufacture them using silicon nitride and our technology platform to improve their characteristics.

We are also incorporating our silicon nitride technology into components for use in total hip and knee replacement product candidates that we plan on developing in collaboration with a strategic partner. We believe that our silicon nitride total hip and knee product candidates will provide competitive advantages over current products made with traditional biomaterials. We also believe our silicon nitride technology platform can be used for developing products in other markets and have developed prototypes for use in the dental, sports medicine and trauma markets. As a result of some of the key characteristics of our silicon nitride, we also believe our coating technology may be used to enhance our metal products as well as commercially available metal spinal fusion, joint replacement and other medical products.

We operate a 30,000 square foot manufacturing facility located at our corporate headquarters in Salt Lake City, Utah, and we are the only vertically integrated silicon nitride orthopedic medical device manufacturer in the world. We market and sell our products to surgeons and hospitals in the United States and select markets in Europe and South America through our established network of independent sales distributors who are managed by our in-house sales and marketing management team. We have also started entering into OEM and private label relationships with third parties to further the commercialization of our silicon nitride technology platform beyond our own direct marketing and selling efforts.

Our Silicon Nitride Technology Platform

We believe our silicon nitride, an advanced ceramic, is ideally suited for use in many medical applications and has the following characteristics that make it superior to other biomaterials, which do not possess all of these characteristics:

- *Promotes Bone Growth.* The biomaterials used in interbody spinal fusion devices should promote bone growth in and around the device to further support fusion and stability. Our silicon nitride has an inherent surface chemistry and topography which creates an ideal environment for the promotion of new bone growth.
- *Hard, Strong and Resistant to Fracture.* The biomaterials used in interbody spinal fusion devices and joint replacement implants should be strong and resistant to fracture during implantation of the device and withstand the static and dynamic forces exerted on the spine or to adequately bear the significant loads placed on joints during daily activities. Biomaterials used in joint replacements should also be resistant to deformation, which is referred to as hardness. We believe our silicon nitride is hard, strong and resistant to fracture.
- *Anti-Infective.* Infection is a serious problem in orthopedic surgery and treating device-related infection generally requires extensive repeat surgery, including replacement, or revision, surgery, which extends patient suffering and increases costs. We have demonstrated in *in vitro* and *in vivo* studies that our silicon nitride has inherent anti-infective properties, which reduce the risk of infection in and around our silicon nitride device. We demonstrated that live bacteria counts were between 8 to 30 times lower on silicon nitride than PEEK and up to 8 times lower on silicon nitride than titanium, another commonly used biomaterial.
- *Imaging Compatible.* In order to achieve accurate device placement and detect post-operative fusion, interbody devices should be visible through, and not inhibit the effective use of, common surgical and diagnostic imaging techniques, such as x-ray, CT and MRI. Our silicon nitride interbody spinal fusion devices are semi-radiolucent and clearly visible in x-rays, and produce no distortion under MRI and no scattering under CT. These characteristics enable an exact view of the device for precise intra-operative placement and post-operative bone fusion assessment in spinal fusion procedures. We believe these qualities provide surgeons with greater certainty of outcomes as compared with other biomaterials, such as PEEK and metals.
- *Resistant to Wear.* The biomaterials used in joint replacement procedures should have sufficient hardness and toughness, as well as extremely smooth surfaces, to effectively resist wear. Because the articulating implants move against each other, they are subject to friction and cyclic loading, which frequently lead to abrasive wear and fatigue failure. We believe joint implants incorporating our silicon nitride components will have comparable or higher resistance to wear than the two most commonly used combinations of biomaterials in total hip replacement implants.
- *Non-Corrosive.* Biomaterials should be non-corrosive and should not cause adverse patient reactions. Metal placed in the human body corrodes over time and also results in the release of metal ions that can cause serious adverse reactions and conditions. Our silicon nitride does not have the deficiencies associated with the corrosive nature of metal within the body nor does it result in the release of metal ions into the body.

We produce silicon nitride in four forms: (1) a fully dense, load-bearing solid, referred to as MC^2 ; (2) a porous bone-like cancellous structured form, referred to as C^SC ; (3) a composite incorporating both our solid MC^2 material and our porous C^SC material intended to promote an ideal environment for bone growth; and (4) a coating for application onto other biomaterials. This capability provides us with the ability to utilize our silicon nitride technology platform in distinct ways depending on its intended application, which, together with silicon nitride's key characteristics, distinguishes us from manufacturers of other biomaterials and from products using other biomaterials.

Our Competitive Strengths

We believe we can use our silicon nitride technology platform to become a leading biomaterial company and have the following principal strengths:

- *Sole Provider of Silicon Nitride Medical Devices.* We believe we are the only company that designs, develops, manufactures and sells medical grade silicon nitride-based products.
- *Vertically Integrated Manufacturing Capabilities.* We operate a 30,000 square foot manufacturing facility located at our corporate headquarters in Salt Lake City, Utah. This state-of-the-art facility allows us to rapidly design and produce silicon nitride products, while controlling the entire manufacturing process from raw material to finished goods. We have also entered to a manufacturing, development and supply agreement with Kyocera Industrial Ceramics Corporation, or Kyocera, under which Kyocera has become a second qualified manufacturer of our silicon nitride-based spinal fusion products and product candidates.

- *Established Commercial Infrastructure.* We market and sell our products to surgeons and hospitals in the United States and select markets in Europe and South America through our established network of independent sales distributors who are managed by our experienced in-house sales and marketing management team.
- *Portfolio of Non-Silicon Nitride Products.* We offer a full suite of spinal fusion products, which increases our access to surgeons and hospitals and allows us to more effectively market our silicon nitride spinal fusion products.
- *Highly Experienced Management and Surgeon Advisory Team.* Members of our management team have experience in product development, launching of new products into the orthopedics market and selling to hospitals through direct sales organizations, distributors, manufacturers and other orthopedic companies. We also collaborate with a network of leading surgeon advisors in the design, development and use of our silicon nitride products and product candidates.

Our Strategy

Our goal is to become a leading biomaterial company focused on using our silicon nitride technology platform to develop, manufacture and commercialize a broad range of medical devices. Key elements of our strategy to achieve this goal are the following:

- *Drive Further Adoption of our Silicon Nitride Interbody Spinal Fusion Devices.* We believe that increasing the awareness of our silicon nitride technology by educating surgeons about its key benefits, and the design improvements to our silicon nitride products and related instruments, will accelerate the adoption of our products and ultimately help improve patient outcomes. To drive further awareness of our products and the associated benefits offered by our silicon nitride technology, we will continue to educate surgeons through multiple channels, including industry conferences and meetings, media outlets and through our sales and marketing efforts.
- *Establish and Develop OEM Partnerships and Distribution Arrangements.* Because we believe silicon nitride is a superior platform and technology for application in the spine and total joint markets, we seek to establish partnerships with other orthopedic companies to replace their inferior materials and products with silicon nitride. If successful, we will duplicate their designs and characteristics and leverage their existing instrumentation by providing the market place with a superior solution at a competitive price.
- *Enhance our Commercial Infrastructure.* We expect to increase the productivity of our sales and marketing team by continuing to engage experienced independent sales distributors with strong orthopedic surgeon relationships. We may also establish distribution collaborations in the United States and abroad when access to large or well-established sales and marketing organizations may help us gain access to new markets, increase sales in our existing markets or accelerate market penetration for selected products.
- *Develop Silicon Nitride for Total Joint Components.* We are incorporating our silicon nitride technology into components for use in total hip and knee replacement product candidates that we plan to develop in collaboration with strategic partners. We have designs for these components and are working with the FDA to continue down the regulatory pathway required for development of these components.
- *Apply our Silicon Nitride Technology Platform to Other OEM Opportunities.* Our silicon nitride technology platform is adaptable and we believe it may be used to develop products to address other significant opportunities, such as in the dental, sports medicine, cardiovascular and trauma markets. We have manufactured prototypes of dental implants, sports medicine and trauma products, and we have developed a process to coat metals with our silicon nitride to enhance current medical devices and instruments. We plan to collaborate with other companies to develop and commercialize any future products in those areas or we may develop any one of them by ourselves should sufficient resources become available.

Corporate Information

Our principal executive offices are located at 1885 West 2100 South, Salt Lake City, Utah 84119, and our telephone number is (801) 839-3500. Our web site address is www.amedica.com. The information on, or that may be accessed through, our web-site is not incorporated by reference into this prospectus and should not be considered a part of this prospectus.

We were incorporated in Delaware in 1996 under the name Amedica Corp. and have since changed our name to Amedica Corporation. Effective September 20, 2010, we acquired all of the outstanding shares of US Spine, Inc. which then became our wholly-owned subsidiary, which is our only subsidiary.

THE OFFERING

Securities being offered:	13,123,360 shares of our Common Stock and Series B Warrants exercisable for 13,123,360 shares of our Common Stock.
Offering price:	\$0.381 per share and Series B Warrant
Common stock outstanding before this offering	65,813,013 shares
Common stock to be outstanding after the offering	78,936,373 shares
Use of proceeds:	<p>We intend to use the net proceeds from this offering for the following purposes: (i) approximately \$2.5 million to redeem certain senior convertible notes held by MG Partners II, Ltd., (ii) to support debt service under our existing senior secured credit facility with Hercules Technology Group, (iii) to support working capital needs and other general corporate purposes, (iv) to fund research and development and commercialization activities of our product candidates, and (v) to continue to build sales, marketing and distribution capabilities for our silicon nitride technology platform, including the costs of inventory and instruments.</p> <p>We intend to use the net proceeds from the exercise of the Series B Warrants for the following purposes: (i) approximately \$1.25 million to redeem certain senior convertible notes held by MG Partners II, Ltd., (ii) to support debt service under our existing senior secured credit facility with Hercules Technology Group, (iii) to support working capital needs and other general corporate purposes, (iv) to fund research and development and commercialization activities of our product candidates, and (v) to continue to build sales, marketing and distribution capabilities for our silicon nitride technology platform, including the costs of inventory and instruments.</p> <p>See “Use of Proceeds” beginning on page S-11.</p>
Risk factors:	<p>Investing in our securities involves a high degree of risk. See the “Risk Factors” section of this prospectus supplement on page S-9 and in the documents we incorporate by reference in this prospectus supplement for a discussion of factors you should consider carefully before deciding to invest in our securities.</p>

NASDAQ Capital Market symbol:

AMDA

Concurrent Private Placement

In a concurrent private placement (the “Private Placement Transaction”), we are selling to the purchasers of shares of our Common Stock in this offering Series A Warrants to initially purchase 13,123,360 shares of our Common Stock and Series C Warrants to initially purchase 13,123,360 shares of our Common Stock. The number of shares of our Common Stock issuable pursuant to the exercise of the Series A Warrants and Series C Warrants may be increased or decreased based on certain events. In addition, Series D Warrants may be issued to certain holders upon the fulfillment of certain conditions. See “Private Placement Transaction” elsewhere in this prospectus supplement.

The Series A Warrants, the Series C Warrants, the Series D Warrants (if issued) and the shares of our Common Stock issuable upon the exercise of such warrants are not being registered under the Securities Act of 1933, as amended (the “Securities Act”), are not being offered pursuant to this prospectus supplement and the accompanying prospectus and are being offered pursuant to the exemption provided in Section 4(a)(2) under the Securities Act and Rule 506(b) promulgated thereunder. See “Private Placement Transaction” beginning on page S-15 of this prospectus supplement for more information.

The number of shares of our Common Stock to be outstanding after this offering is based on 65,813,013 shares of Common Stock outstanding as of September 8, 2015, and excludes the following:

- 1,662,467 shares of Common Stock issuable upon the exercise of outstanding options to purchase Common Stock under the 2012 Employee, Director and Consultant Equity Incentive Plan (the “2012 Plan”), at a weighted-average exercise price of \$2.87 per share;
- 2,900,597 shares of Common Stock issuable upon the exercise of warrants for shares of our Common Stock outstanding, at a weighted-average exercise price of \$3.35 per share;
- 1,144,164 shares of Common Stock issuable upon the exercise of a unit option at an exercise price of \$1.43;
- 1,493,295 additional shares of Common Stock reserved for issuance under the 2012 Plan;
- 13,123,360 shares of Common Stock initially issuable upon the exercise of the Series B Warrants to be issued pursuant to this prospectus supplement; and
- The shares of Common Stock issuable upon the exercise of the Series A Warrants, the Series C Warrants and any Series D Warrants to be issued in connection with this offering as described below under “Private Placement Transaction.”

RISK FACTORS

An investment in our securities is speculative and involves a high degree of risk. You should carefully consider the risks under the heading “Risk Factors” beginning on page 26 of our Annual Report on Form 10-K for the fiscal year ended December 31 2014, filed with the SEC on March 24, 2015, our Quarterly Report on Form 10-Q for the fiscal quarter ended March 31, 2015, filed with the SEC on May 8, 2015, and our Quarterly Report on Form 10-Q for the fiscal quarter ended June 30, 2015, filed with the SEC on August 14, 2015, which information is incorporated by reference in this prospectus supplement, and the additional risks described below and other information in this prospectus supplement, the accompanying prospectus and the documents incorporated by reference before deciding to invest in our securities. If any of the risks described or incorporated by reference into this prospectus supplement actually occur, our business, results of operations, financial condition and cash flows could be materially adversely affected, the trading price of our Common Stock could decline significantly, and you might lose all or part of your investment. Additional risks and uncertainties that we are unaware of or that we believe are not material at this time could also materially adversely affect our business, financial condition or results of operations. In any case, the value of our securities could decline, and you could lose all or part of your investment, or our use of the offering proceeds may not yield a favorable return on your investment. You should also refer to our financial statements and the notes to those statements, which are incorporated by reference in this prospectus supplement.

Risks Relating to this Offering

Because our management will have broad discretion and flexibility in how the net proceeds from this offering are used, our management may use the net proceeds in ways with which you disagree or which may not prove effective.

We currently intend to use the net proceeds from this offering as discussed under “Use of Proceeds” in this prospectus supplement. Other than approximately \$2.5 million to redeem certain senior convertible notes held by MG Partners II, Ltd., we have not allocated specific amounts of the net proceeds from this offering for the other identified purposes. Accordingly, our management will have significant discretion and flexibility in applying the net proceeds of this offering. You will be relying on the judgment of our management with regard to the use of these net proceeds, and you will not have the opportunity, as part of your investment decision, to assess whether the net proceeds are being used appropriately. It is possible that the net proceeds will be invested in a way that does not yield a favorable, or any, return for us. The failure of our management to use such funds effectively could have a material adverse effect on our business, financial condition, operating results and cash flow.

You will experience immediate dilution in the book value per share of the Common Stock you purchase.

Because the price per share of our Common Stock being offered is substantially higher than the book value per share of our Common Stock, you will suffer substantial dilution in the net tangible book value of the Common Stock you purchase in this offering. After giving effect to the sale by us of shares of Common Stock in this offering, and based on a public offering price of \$0.381 per share and Series B Warrant and a pro forma net tangible book value per share of our Common Stock of (\$0.03) as of June 30, 2015, if you purchase securities in this offering, you will suffer immediate and substantial dilution of \$0.06 per share in the net tangible book value of the Common Stock purchased. See “Dilution” on page S-12 for a more detailed discussion of the dilution you will incur in connection with 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 in this offering. We may sell shares or other securities in any other offering at a price that is less than the price paid by investors in this offering, and investors purchasing shares or other securities in the future could have rights superior to existing shareholders. The price 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 paid by investors in this offering.

If we are unable to obtain shareholder approval for the Private Placement Transaction, purchasers may not be able to exercise the Series B Warrants Offered hereby, and the Series C Warrants to be issued in the Private Placement Transaction and any Series D Warrants that may be issued pursuant to the Private Placement Transaction may never be issued.

Pursuant to the Securities Purchase Agreement, we agreed to seek approval from our shareholders (“Shareholder Approval”) for the Private Placement Transaction. The issuance of Common Stock upon the exercise of the Series B Warrants offered hereby, the issuance of the Series C Warrants in the Private Placement Transaction and Common Stock upon the exercise of the Series C Warrants, the issuance of any Series D Warrants pursuant to the Private Placement Transaction and Common Stock upon the exercise of any Series D Warrants issued, are all contingent upon receiving Shareholder Approval. Accordingly, if we are unable to obtain Shareholder Approval, purchasers of Series B Warrants in this offering may not be able to exercise their Series B Warrants, and the Series C Warrants and Series D Warrants issuable pursuant to the Private Placement Transaction may never be issued.

USE OF PROCEEDS

We estimate that the net proceeds from the sale of the Common Stock and the Series B Warrants we are offering pursuant to this prospectus supplement will be approximately \$4.4 million, assuming that we sell all of the securities we are offering, after deducting the placement agent's fees and estimated offering expenses payable by us.

We intend to use the net proceeds from this offering for the following purposes: (i) approximately \$2.5 million to redeem certain senior convertible notes held by MG Partners II, Ltd., (ii) to support debt service under our existing senior secured credit facility with Hercules Technology Group, (iii) to support working capital needs and other general corporate purposes, (iv) to fund research and development and commercialization activities of our product candidates, and (v) to continue to build sales, marketing and distribution capabilities for our silicon nitride technology platform, including the costs of inventory and instruments.

We intend to use the net proceeds from the exercise of the Series B Warrants for the following purposes: (i) approximately \$1.25 million to redeem certain senior convertible notes held by MG Partners II, Ltd., (ii) to support debt service under our existing senior secured credit facility with Hercules Technology Group, (iii) to support working capital needs and other general corporate purposes, (iv) to fund research and development and commercialization activities of our product candidates, and (v) to continue to build sales, marketing and distribution capabilities for our silicon nitride technology platform, including the costs of inventory and instruments.

We cannot specify with certainty all of the particular uses for the net proceeds to be received upon the completion of the offering. The amount and timing of our actual expenditures may vary significantly depending upon numerous factors, including the impact of any debt amendments, the ultimate resolution of our FDA submissions for clearances or approvals of our product candidates, the specific clinical trial requirements imposed for market approval of our product candidates, our revenues, operating costs and capital expenditures and other factors described under "Risk Factors." We may find it necessary or advisable to use the net proceeds for other purposes, and our management will retain broad discretion in the allocation of the net proceeds from this offering.

Pending use of our net proceeds from this offering, we may invest the proceeds in a variety of capital preservation investments, including investment-grade, interest-bearing instruments. We cannot predict whether the net proceeds will yield a favorable return.

DILUTION

Our net tangible book value as of June 30, 2015, was approximately \$(1.94) million, or approximately \$(0.03) per share. Net tangible book value per share is equal to the amount of our total tangible assets, less total liabilities, divided by the aggregate number of shares of our Common Stock outstanding as of June 30, 2015. Dilution in net tangible book value per share represents the difference between the amount per common share paid by purchasers in this public offering and the net tangible book value per share of our Common Stock immediately after this offering. After giving effect to the sale of 13,123,360 shares of Common Stock in this offering at the public offering price of \$0.381 per common share, and after deducting the placement agent's fees and estimated offering expenses payable by us, our as adjusted net tangible book value as of June 30, 2015 would have been approximately \$2.46 million, or approximately \$0.03 per share. This represents an immediate dilution of \$0.35 per share to new investors purchasing shares of Common Stock in this offering. The following table illustrates this dilution.

Public offering price per share		\$ 0.38
Net tangible book value per share as of June 30, 2015	\$ (0.030)	
Increase in net tangible book value per share attributable to new investors in this offering	\$ 0.06	
As adjusted net tangible book value per share after giving effect to this offering		<u>\$ 0.03</u>
Dilution per share to investors in this offering		<u>\$ 0.35</u>

This information is based on 65,758,131 shares of Common Stock outstanding as of June 30, 2015 and excludes:

- 1,662,467 shares of Common Stock issuable upon the exercise of outstanding options to purchase Common Stock under the 2012 Plan, at a weighted-average exercise price of \$2.87 per share;
- 2,900,597 shares of Common Stock issuable upon the exercise of warrants for shares of our Common Stock outstanding, at a weighted-average exercise price of \$3.35 per share;
- 1,144,164 shares of Common Stock issuable upon the exercise of a unit option at an exercise price of \$1.43;
- 1,493,295 additional shares of Common Stock reserved for issuance under the 2012 Plan;
- 13,123,360 shares of Common Stock initially issuable upon the exercise of the Series B Warrants to be issued pursuant to this prospectus supplement; and
- The shares of Common Stock issuable upon the exercise of the Series A Warrants, the Series C Warrants and any Series D Warrants to be issued in connection with this offering as described below under "Private Placement Transaction."

To the extent these outstanding options or warrants are exercised and the convertible notes are converted, there will be further dilution to the new investors.

Furthermore, we may need to obtain additional capital which may be through the sale of equity or convertible debt securities to fund our current and future operating plans. To the extent we issue additional shares of Common Stock or other equity or convertible debt securities in the future, there will be further dilution to investors participating in this offering.

DESCRIPTION OF SECURITIES WE ARE OFFERING

Common Stock

A description of the Common Stock we are offering pursuant to this prospectus supplement is set forth under the heading “Description of Capital Stock—Common Stock” beginning on page 5 of the accompanying prospectus. As of September 8, 2015, we had 65,813,013 shares of Common Stock outstanding.

Series B Warrants.

If Shareholder Approval is obtained, the Series B Warrants will be exercisable after the Company receives Shareholder Approval at an exercise price of \$0.47 per share, subject to adjustment, and will remain exercisable until the Series B Termination Date. The “Series B Termination Date” means the later to occur of (i) the tenth (10th) trading day after the date the Company receives Shareholder Approval and (ii) the earlier to occur of (y) the date of Shareholder Approval and (z) December 30, 2015, provided that in the event that Shareholder Approval is not received, the Series B Warrants will terminate on the date of the failed shareholder vote.

Beneficial Ownership Limitation

Subject to limited exceptions, a holder of Series B Warrants will not have the right to exercise any portion of its warrants if the holder, together with its affiliates, would beneficially own in excess of 4.99% of the number of shares of our Common Stock outstanding immediately after giving effect to such exercise (the “Beneficial Ownership Limitation”); provided, however, that upon notice to the Company, the holder may increase or decrease the Beneficial Ownership Limitation, provided that in no event shall the Beneficial Ownership Limitation exceed 9.99% and any increase in the Beneficial Ownership Limitation will not be effective until 61 days following notice of such increase from the holder to us. However, the holder may elect at its sole option to receive a Series D Warrant to purchase Common Stock in lieu of all or a portion of the shares of Common Stock issuable upon exercise of the Series B Warrants. Such a Series D Warrant would provide the holder of such warrant the right to receive the number of shares of Common Stock that the holder would have received upon the exercise of the Series B Warrant if not for the Beneficial Ownership Limitation.

Automatic Exercise

On the fourth (4th) trading day after the date the Company obtains Shareholder Approval (the “Series B Trigger Date”), so long as (i) the average daily dollar trading volume (as reported on Bloomberg) of the Common Stock on the applicable trading market for each trading day during the ten (10) consecutive trading days immediately prior to the Series B Trigger Date exceeds \$250,000 per day (the “Volume Condition”) and (ii) the Company shall have satisfied certain Equity Conditions (as defined below) (or such conditions shall have been waived in writing by the holder), then the Series B Warrants shall be exercised automatically.

The Equity Conditions include:

- one or more registration statements must be effective and the prospectus contained therein available for the issuance to, or resale by, the holder of all of the shares issuable upon exercise of the Series B Warrants (and the Company is not aware of any fact that would cause such registration statement to not be effective or the prospectus to not be available) (the “Registration Condition”);
- the Common Stock is listed or designated for quotation (as applicable) on The Nasdaq Capital Market and shall not have been suspended from trading on The Nasdaq Capital Market (subject to certain exceptions as described in the Series B Warrants);
- on each day during the twenty (20) trading day period immediately prior to such applicable date of determination (the “Equity Conditions Measuring Period”), the Company shall have timely delivered securities upon exercise of the Series A Warrants, Series B Warrants, Series C Warrants and Series D Warrants (if any);
- any shares of Common Stock to be issued in connection with the event requiring determination may be issued in full (including through the issuance of Series D Warrants) without violating the Beneficial Ownership Limitation and the Company shall have obtained the approval of its stockholders to the issuance of such securities;
- any shares of Common Stock to be issued in connection with the event requiring determination may be issued in full without violating the rules or regulations of The Nasdaq Capital Market;
- on each day during the Equity Conditions Measuring Period, no public announcement of a pending, proposed or intended Fundamental Transaction (as defined in the Series B Warrants) shall have occurred which has not been abandoned, terminated or consummated;
- no holder is in possession of any material, non-public information provided to any of them by the Company, any of its affiliates or any of their respective employees, officers, representatives, agents or the like;

- on each day during the Equity Conditions Measuring Period, the Company otherwise shall have been in compliance with each, and shall not have breached any provision, covenant, representation or warranty of any Transaction Document (as defined in the Series B Warrants); and
- there is a sufficient number of authorized shares of Common Stock for issuance of all shares issuable upon exercise of the Series A Warrants, Series B Warrants, Series C Warrants and Series D Warrants (if any are issued).

On the second (2nd) trading day after the Series B Trigger Date, so long as the Volume Condition and the Equity Conditions remain satisfied (in each case, unless waived by the holder), then the holder shall be deemed to have exercised all, but not less than all, of the Series B Warrants for all of the then-remaining shares of Common Stock issuable thereunder (the “Series B Automatic Exercise”). Notwithstanding anything to the contrary above, if the Company fails to satisfy the Volume Conditions and Equity Conditions on each subsequent day through the fifth trading day after the Series B Trigger Date (the “Series B Automatic Exercise Date”), unless the holder waives such failure, such deemed exercise shall be withdrawn and no Series B Automatic Exercise shall occur.

Partial Automatic Exercise upon Failure of Registration Condition

If as of the date of the Series B Automatic Exercise less than all of the then-remaining shares of common stock issuable under the Series B Warrants are available to be issued to, or resold by, as applicable, the holder pursuant to one or more effective registration statements, then the holder may elect to waive the Registration Condition and receive such lesser number of shares.

Adjustment

The Series B Warrants are exercisable initially for 13,123,360 shares of Common Stock. Immediately following the close of business on the trading day immediately prior to the Series B Automatic Exercise (the “Series B Adjustment Time”), if the exercise price of the Series B Warrants then in effect is more than 75% of the Market Price (as defined below) then in effect (the “Series B Adjustment Price”), on such date the exercise price of the Series B Warrant will be adjusted downward to the Series B Adjustment Price and the number of shares of Common Stock issuable upon exercise of the Series B Warrants shall be increased such that the gross proceeds from exercise of the Series B Warrants shall equal \$5 million.

The term “Market Price” means the quotient of (i) the sum of the three (3) lowest closing consolidated bid prices (as used by The Nasdaq Stock Market) of the Common Stock for any trading day during the five (5) trading day period commencing and including the Series B Trigger Date and ending and including the trading day with a close of business ended immediately prior to the Series B Adjustment Time, divided by (ii) three (3).

Fundamental Transactions

If at any time while the Series B Warrant is outstanding, we engage in a Fundamental Transaction (as defined in the Series B Warrant), then, upon any subsequent exercise of the Series B Warrant, the holder will have the right to receive, for each share of Common Stock that would have been issuable upon such exercise immediately prior to the occurrence of such Fundamental Transaction, at the option of the holder, the number of shares of Common Stock of the successor or acquiring corporation or of the Company, if it is the surviving corporation, and any additional consideration receivable as a result of such Fundamental Transaction by a holder of the number of shares of Common Stock for which this Warrant is exercisable immediately prior to such Fundamental Transaction. Notwithstanding anything to the contrary, in the event of a Fundamental Transaction that is (i) an all cash transaction, (ii) a “Rule 13e-3 transaction” as defined in Rule 13e-3 under the Exchange Act, or (iii) a Fundamental Transaction involving a person or entity not traded on a national securities exchange and only if such Fundamental Transaction is within the Company's control, the Company or any Successor Entity (as defined in the Series B Warrant) shall, at the holder's option, exercisable at any time concurrently with, or within 30 days after, the consummation of the Fundamental Transaction, purchase the Series B Warrant from the holder by paying to the holder an amount of cash equal to the Black Scholes Value (as defined in the Series B Warrant) of the remaining unexercised portion of the Series B Warrant on the date of the consummation of such Fundamental Transaction; provided that if the Fundamental Transaction is not within the Company's control, including not approved by the Company's Board of Directors, the holder shall have not have the option to require the Company to purchase its Series B Warrant.

For the complete terms of the Series B Warrant, you should refer to the form Series B Warrant which is filed as exhibits to a Current Report on Form 8-K filed with the SEC in connection with this offering and is incorporated by reference into the registration statement of which this prospectus supplement is part.

Private Placement Agent Warrant

We have agreed to issue to the placement agent warrants to purchase 656,168 shares of our common stock, which is equal to an aggregate of 5% of the common stock issued in this offering (not including the common stock underlying the Series B Warrants). The material terms and provisions of this warrant are described under the heading “Plan of Distribution”.

PRIVATE PLACEMENT TRANSACTION

In a concurrent private placement (the “Private Placement Transaction”), we are selling to the purchasers of our Common Stock in this offering Series A Warrants to purchase one share of our Common Stock for each share of Common Stock purchased in this offering and Series C Warrants to purchase one share of our Common Stock for each share of Common Stock purchased in this offering. The number of shares issuable upon exercise of the Series A Warrants and the Series C Warrants may be increased under certain circumstances. In addition, under certain circumstances where the Beneficial Ownership Limitation applies, the Company may issue Series D Warrants to settle the exercise of the Series A Warrants and Series C Warrants.

The Series A Warrants, the Series C Warrants, the Series D Warrants (if any are issued) and the shares of our Common Stock issuable upon the exercise of such warrants are not being registered under the Securities Act, are not being offered pursuant to this prospectus supplement and the accompanying prospectus and are being offered pursuant to the exemption provided in Section 4(a)(2) under the Securities Act and Rule 506(b) promulgated thereunder. Accordingly, purchasers may only sell shares of Common Stock issued upon the exercise of the Warrants pursuant to an effective registration statement under the Securities Act covering the resale of those shares, an exemption under Rule 144 under the Securities Act or another applicable exemption under the Securities Act. For the complete terms of the registration rights relating to the Warrants, you should refer to the Registration Rights Agreement which is filed as an exhibit to a Current Report on Form 8-K filed with the SEC in connection with this offering and is incorporated by reference into the registration statement of which this prospectus supplement is part.

Description of Series A Warrants.

The Series A Warrants will be exercisable on the six month and one day anniversary of the date of issuance (the “Series A Initial Exercise Date”) at an exercise price of \$0.47 per share, subject to adjustment, and will remain exercisable until the close of business on the five and one-half year anniversary of the date of issuance, but not thereafter.

Beneficial Ownership Limitation

Subject to limited exceptions, a holder of Series A Warrants will not have the right to exercise any portion of its warrants if the holder, together with its affiliates, would breach the Beneficial Ownership Limitation; provided, however, that upon notice to the Company, the holder may increase or decrease the Beneficial Ownership Limitation, provided that in no event shall the Beneficial Ownership Limitation exceed 4.99% and any increase in the Beneficial Ownership Limitation will not be effective until 61 days following notice of such increase from the holder to us. However, the holder of Series A Warrants may elect at its sole option to receive a Series D Warrant to purchase Common Stock in lieu of all or a portion of the shares of Common Stock issuable upon exercise of the Series A Warrants. Such a Series D Warrant would provide the holder of such warrant to receive the number of shares of Common Stock that the holder would have received upon the exercise of the Series A Warrant if not for the beneficial ownership limitations described above.

Exercise Price Adjustments

The exercise price for the Series A Warrants is subject to adjustment in the event we issue warrants with an exercise price lower than the then-current exercise price or if we issue Common Stock or securities convertible into Common Stock (other than Common Stock issued pursuant to the forced exercise of either the Series B Warrants or the Series C Warrants) at a price lower than the then-current exercise price prior to December 30, 2015. The exercise price and number of the shares of our Common Stock issuable upon the exercise of the Series A Warrants will also be subject to adjustment in the event of any stock dividends and splits, reverse stock split, stock dividend, recapitalization, reorganization or similar transaction, as described in the Series A Warrants.

At each Series A Adjustment Time (as defined below), if the exercise price of the Series A Warrant then in effect is more than the closing consolidated bid price (as used by The Nasdaq Stock Market) of the Common Stock as reported on Bloomberg (the “Series A Adjustment Price”), on the trading day immediately prior to such Series A Adjustment Time, on such Series A Adjustment Time the exercise price of the Series A Warrants will be adjusted downward to such Series A Adjustment Price. For purposes of this paragraph, the term “Series A Adjustment Time” means each of (i) the Series B Adjustment Time, if any, (ii) the Series C Adjustment Time (as defined below), if any, and (iii) solely if Shareholder Approval has not been obtained prior to December 29, 2015, December 30, 2015.

Increase in Shares of Common Stock Underlying the Series A Warrants

The Series A Warrants are exercisable initially for 13,123,360 shares of Common Stock. However, upon any exercise of any Series B Warrant or Series C Warrant held by the holder of a Series A Warrant, the number of shares issuable upon exercise of the Series A Warrant will increase to match the number of shares of Common Stock issuable upon the full exercise of such holder’s Series B Warrant or Series C Warrant.

Cashless Exercise

If the underlying shares are not registered, the Series A Warrants are exercisable on a cashless basis, whereby the holder will be entitled to receive a number of shares of Common Stock equal to the quotient obtained by dividing [(A-B) (X)] by (A), where:

(A) = the volume weighted average price on the trading day immediately preceding the date on which Holder elects to exercise the Series A Warrant by means of a “cashless exercise,” as set forth in the applicable notice of exercise;

(B) = the exercise price of the Series A Warrant at the time of exercise; and

(X) = the number of shares of Common Stock that would be issuable upon exercise of the Series A Warrant in accordance with the terms of the Series A Warrant if such exercise were by means of a cash exercise rather than a cashless exercise.

Fundamental Transaction

If, at any time while the Series A Warrant is outstanding, the Company engages in a Fundamental Transaction (as defined in the Series A Warrant), then, upon any subsequent exercise of the Series A Warrant, the holder will have the right to receive, for each share of Common Stock that would have been issuable upon such exercise immediately prior to the occurrence of such Fundamental Transaction, at the option of the holder, the number of shares of Common Stock of the successor or acquiring corporation or of the Company, if it is the surviving corporation, and any additional consideration receivable as a result of such Fundamental Transaction by a holder of the number of shares of Common Stock for which this Warrant is exercisable immediately prior to such Fundamental Transaction. Notwithstanding anything to the contrary, in the event of a Fundamental Transaction that is (i) an all cash transaction, (ii) a “Rule 13e-3 transaction” as defined in Rule 13e-3 under the Exchange Act, or (iii) a Fundamental Transaction involving a person or entity not traded on a national securities exchange and only if such Fundamental Transaction is within the Company's control, the Company or any Successor Entity (as defined in the Series A Warrant) shall, at the holder's option, exercisable at any time concurrently with, or within 30 days after, the consummation of the Fundamental Transaction, purchase the Series A Warrant from the holder by paying to the holder an amount of cash equal to the Black Scholes Value (as defined in the Series A Warrant) of the remaining unexercised portion of the Series A Warrant on the date of the consummation of such Fundamental Transaction; provided that if the Fundamental Transaction is not within the Company's control, including not approved by the Company's Board of Directors, the holder shall not have the option to require the Company to purchase its Series A Warrant.

For the complete terms of the Series A Warrants, you should refer to the form Series A Warrant which is filed as an exhibit to a Current Report on Form 8-K filed with the SEC in connection with this offering and is incorporated by reference into the registration statement of which this prospectus supplement is part.

Description of Series C Warrants.

If Shareholder Approval is obtained, the Series C Warrants will be exercisable on the date the Company obtains Shareholder Approval at an exercise price of \$0.47 per share, subject to adjustment, and will remain exercisable until the later to occur of (i) the sixth (6th) trading day after the Series C Trigger Date (as defined below) and (ii) the earlier to occur of (y) the date of Shareholder Approval and (z) December 30, 2015. In the event that Shareholder Approval is not received, the Series C Warrants will terminate on the date of the failed shareholder vote. For purposes of this paragraph the “Series C Trigger Date” means the twenty-fifth (25th) trading day after the close of business on the trading day immediately prior to the Series B Automatic Exercise Date or, if after the Series B Trigger Date, the trading day immediately prior to such other date the Series B Warrant is exercised in full.

Beneficial Ownership Limitation

Subject to limited exceptions, a holder of Series C Warrants will not have the right to exercise any portion of its warrants if the holder, together with its affiliates, would beneficially own in excess of 4.99% of the number of shares of our Common Stock outstanding immediately after giving effect to such exercise; provided, however, that upon notice to the Company, the holder may increase or decrease the Beneficial Ownership Limitation, provided that in no event shall the Beneficial Ownership Limitation exceed 9.99% and any increase in the Beneficial Ownership Limitation will not be effective until 61 days following notice of such increase from the holder to us. However, the holder of Series C Warrants may elect at its sole option to receive a Series D Warrant to purchase Common Stock in lieu of all or a portion of the shares of Common Stock issuable upon exercise of the Series C Warrants. Such a Series D Warrant would provide the holder of such warrant to receive the number of shares of Common Stock that the holder would have received upon the exercise of the Series C Warrant if not for the beneficial ownership limitations described above.

Automatic Exercise

On the Series C Trigger Date, so long as the Volume Condition has been met and (ii) the Company shall have satisfied certain Equity Conditions (as defined above) (or such conditions shall have been waived in writing by the holder), then the Series C Warrants shall be exercised automatically.

On the second (2nd) trading day after the Series C Trigger Date, so long as the Volume Condition and Equity Conditions remain satisfied (in each case, unless waived by the holder), then the holder shall be deemed to have exercised all, but not less than all, of the Series C Warrants for all of the then-remaining shares of Common Stock issuable thereunder (the “Series C Automatic Exercise”). Notwithstanding anything to the contrary above, if the Company fails to satisfy the Volume Conditions and Equity Conditions on each subsequent day through the fifth (5th) trading day after the Series C Trigger Date, unless the holder waives such failure, such deemed exercise shall be withdrawn and no Series C Automatic Exercise shall occur.

Partial Automatic Exercise upon Failure of Registration Condition

If as of the date of the Series C Automatic Exercise less than all of the then-remaining shares of common stock issuable under the Series C Warrants are available to be issued to, or resold by, as applicable, the holder pursuant to one or more effective registration statements, then the holder may elect to waive the Registration Condition and receive such lesser number of shares.

Adjustment

The Series C Warrants are exercisable initially for 13,123,360 shares of Common Stock. Immediately following (i) the Series B Adjustment Time and (ii) the close of business on the trading day immediately prior to the Series C Automatic Exercise (the "Series C Adjustment Time"), if the exercise price of the Series C Warrants then in effect is more than 75% of the Market Price then in effect (the "Series C Adjustment Price"), on such date the exercise price of the Series C Warrant will be adjusted downward to the Series C Adjustment Price and the number of shares of Common Stock issuable upon exercise of the Series C Warrants shall be increased such that the gross proceeds from exercise of the Series C Warrants shall equal \$5 million..

Fundamental Transaction

If at any time while the Series C Warrant is outstanding, we engage in a Fundamental Transaction (as defined in the Series C Warrant), then, upon any subsequent exercise of the Series C Warrant, the holder will have the right to receive, for each share of Common Stock that would have been issuable upon such exercise immediately prior to the occurrence of such Fundamental Transaction, at the option of the holder, the number of shares of Common Stock of the successor or acquiring corporation or of the Company, if it is the surviving corporation, and any additional consideration receivable as a result of such Fundamental Transaction by a holder of the number of shares of Common Stock for which this Warrant is exercisable immediately prior to such Fundamental Transaction. Notwithstanding anything to the contrary, in the event of a Fundamental Transaction that is (i) an all cash transaction, (ii) a "Rule 13e-3 transaction" as defined in Rule 13e-3 under the Exchange Act, or (iii) a Fundamental Transaction involving a person or entity not traded on a national securities exchange and only if such Fundamental Transaction is within the Company's control, the Company or any Successor Entity (as defined in the Series C Warrant) shall, at the holder's option, exercisable at any time concurrently with, or within 30 days after, the consummation of the Fundamental Transaction, purchase the Series C Warrant from the holder by paying to the holder an amount of cash equal to the Black Scholes Value (as defined in the Series C Warrant) of the remaining unexercised portion of the Series C Warrant on the date of the consummation of such Fundamental Transaction; provided that if the Fundamental Transaction is not within the Company's control, including not approved by the Company's Board of Directors, the holder shall not have the option to require the Company to purchase its Series C Warrant.

For the complete terms of the Series C Warrants, you should refer to the form Series C Warrant which is filed as an exhibit to a Current Report on Form 8-K filed with the SEC in connection with this offering and is incorporated by reference into the registration statement of which this prospectus supplement is part.

Series D Warrants

In the event the holder of the Warrants is subject to the Beneficial Ownership Limitation, the holder may elect at its sole option to receive a prepaid Series D Warrant to purchase Common Stock in lieu of all or a portion of the shares of Common Stock issuable upon exercise of the Warrants. Such a Series D Warrant would provide the holder of such warrant the right to receive the number of shares of Common Stock that the holder would have received upon the exercise of the Warrants if not for the Beneficial Ownership Limitation without the payment of any additional consideration.

The Series D Warrants are exercisable at any time after their original issuance. The Series D Warrants will be exercisable, at the option of each holder, in whole or in part by delivering to us a duly executed exercise notice. No fractional shares of common stock will be issued in connection with the exercise of a Series D Warrant. The number of shares of Common Stock underlying the Series D Warrants is subject to adjustment due to stock dividends, splits, as well as subsequent dilutive issuances.

A holder will not have the right to exercise any portion of the Series D Warrant if the holder (together with its affiliates) would beneficially own in excess of 4.99% of the number of shares of our common stock outstanding immediately after giving effect to the exercise, as such percentage ownership is determined in accordance with the terms of the Series D Warrants. However, any holder may increase or decrease such percentage to any other percentage, but in no event above 9.99%, provided that any increase of such percentage will not be effective until 61 days after notice of such increase from the holder to us.

In the event of a fundamental transaction, as described in the Series D Warrants and generally including any reorganization, recapitalization or reclassification of our common stock, the sale, transfer or other disposition of all or substantially all of our properties or assets, our consolidation or merger with or into another person, the acquisition of more than 50% of our outstanding common stock, or any person or group becoming the beneficial owner of 50% of the voting power represented by our outstanding common stock, the holders of the Series D Warrants will be entitled to receive upon exercise of the Series D Warrants the kind and amount of securities, cash or other property that the holders would have received had they exercised the Series D Warrants immediately prior to such fundamental transaction.

Except by virtue of such holder's ownership of shares of our common stock, the holder of a Series D Warrant does not have the rights or privileges of a holder of our common stock, including any voting rights, until the holder exercises the Series D Warrant.

Registration Rights Agreement

We will be required to file a registration statement on Form S-3 (unless the Company is not then eligible to register for resale the securities on Form S-3, in which case such registration will be on another appropriate form) on or prior to the 30th calendar day following the closing of the Private Placement Transaction (the "Filing Date") for the resale of the shares of Common Stock issuable upon the exercise of the Warrants. We will be obligated to use our best efforts to cause such registration statement to be declared effective under the Securities Act as promptly as possible after the filing thereof, but in any event no later than the 60th calendar day following the Filing Date, subject to certain exceptions. We will be obligated to use our best efforts to keep such registration statement effective until all of the shares of Common Stock underlying the Warrants (i) have been sold thereunder or pursuant to Rule 144, or (ii) may be sold without volume or manner-of-sale restrictions pursuant to Rule 144 and without the requirement for the Company to be in compliance with the current public information requirement under Rule 144.

For the complete terms of the Registration Rights Agreement, you should refer to the Registration Rights Agreement which is filed as an exhibit to a Current Report on Form 8-K filed with the SEC in connection with this offering and is incorporated by reference into the registration statement of which this prospectus supplement is part.

Voting Agreement

In connection with the execution of the Securities Purchase Agreement, we will enter into a Voting Agreement, pursuant to which all of the officers, directors and stockholders holding more than 10% of the issued and outstanding shares of Common Stock on the date of the execution of the Securities Purchase Agreement (which holders amount to, in the aggregate, approximately 1% of the issued and outstanding Common Stock of the Company) to vote all Common Stock over which such persons have voting control as of the record date for the meeting of shareholders of the Company pursuant to which the Company will seek Shareholder Approval for the Private Placement Transaction.

For the complete terms of the Voting Agreement, you should refer to the form Voting Agreement which is filed as an exhibit to a Current Report on Form 8-K filed with the SEC in connection with this offering and is incorporated by reference into the registration statement of which this prospectus supplement is part.

PLAN OF DISTRIBUTION

Ladenburg Thalmann & Co. Inc. has agreed to act as placement agent in connection with this offering, subject to the terms and conditions of the investment banking agreement dated July 1, 2015 and Placement Agency Agreement dated September 7, 2015. The placement agent is not purchasing or selling any shares of Common Stock or Warrants offered by this prospectus, nor is it required to arrange the purchase or sale of any specific number or dollar amount of Common Stock or Warrants, but has agreed to use its best efforts to arrange for the sale of all of the shares of Common Stock and Series B Warrants offered hereby. Therefore, we will enter into the Securities Purchase Agreement directly with investors in connection with this offering and we may not sell the entire amount of shares of Common Stock and Series B Warrants offered pursuant to this prospectus.

We have agreed to pay the placement agent a placement agent's fee equal to 8% of the aggregate purchase price of (i) the shares of Common Stock and the Series B Warrants sold in this offering and (ii) the Series A Warrants and Series C Warrants sold in the Private Placement Transaction described above under "Private Placement Transaction." In addition, we have agreed to reimburse the placement agent's actual out-of-pocket expenses up to \$60,000, and we have agreed to issue the placement agent warrants to purchase 656,168 shares of Common Stock, which is equal to 5% of the number of shares of Common Stock sold in this offering (not including the Common Stock underlying the Series B Warrants). The shares of Common Stock issuable upon exercise of these warrants are identical to those offered by this prospectus. We are not registering the issuance of these warrants or the shares of Common Stock issuable upon exercise of the warrants. These warrants are exercisable for cash at per share exercise price equal to 125% of the per share equivalent paid in this offering or on a cashless basis, expiring five years from the date of this prospectus supplement. These warrants also include certain piggyback registration rights allowing for the holder to register these warrants and the underlying shares on another registration statement filed by the Company, subject to certain limitations. The number of warrants issuable to the placement agent shall be subject to reduction to whatever extent necessary to comply with FINRA Rule 5110.

The following table shows the per share and total placement agent's fees that we will pay to the placement agent in connection with the sale of the shares of Common Stock offered pursuant to this prospectus assuming the purchase of all of the shares offered hereby.

Per share placement agent's fees	\$ 0.03048
Maximum offering total	\$ 400,000.01

Because there is no minimum amount required as a condition to the closing in this offering, the actual total offering commissions, if any, are not presently determinable and may be substantially less than the maximum amount set forth above.

Our obligations to issue and sell Common Stock to the purchasers is subject to the conditions set forth in the Securities Purchase Agreement, which may be waived by us at our discretion. A purchaser's obligation to purchase Common Stock is subject to the conditions set forth in the Securities Purchase Agreement as well, which may also be waived.

We estimate the total offering expenses in this offering that will be payable by us, excluding the placement agent's fees, will be approximately \$200,000, which includes legal, accounting and printing costs and various other fees.

The foregoing does not purport to be a complete statement of the terms and conditions of the investment banking agreement and Placement Agency Agreement between the Company and the placement agent and the Securities Purchase Agreement. A copy of the investment banking agreement, the Placement Agency Agreement and the form of Securities Purchase Agreement with investors are included as exhibits to a Current Report on Form 8-K filed with the SEC in connection with this offering and is incorporated by reference into the registration statement of which this prospectus supplement is a part.

The placement agent may be deemed to be an underwriter within the meaning of Section 2(a)(11) of the Securities Act, and any commissions received by it and any profit realized on the resale of the Common Stock sold by it while acting as principal might be deemed to be underwriting discounts or commissions under the Securities Act. As an underwriter, the placement agent would be required to comply with the Securities Act and the Securities Exchange Act of 1934, as amended, or Exchange Act, including without limitation, Rule 10b-5 and Regulation M under the Exchange Act. These rules and regulations may limit the timing of purchases and sales of shares of Common Stock and warrants by the placement agent acting as principal. Under these rules and regulations, the placement agent:

- may not engage in any stabilization activity in connection with our securities;
- and

- may not bid for or purchase any of our securities or attempt to induce any person to purchase any of our securities, other than as permitted under the Exchange Act, until it has completed its participation in the distribution.

We have also agreed to indemnify the placement agent for certain liabilities under the Securities Act.

Transfer Agent and Registrar

The transfer agent and registrar for our Common Stock is American Stock Transfer and Trust Company. The transfer agent and the registrar's address is 10150 Mallard Creek Road, Suite 307, Charlotte, NC 28262.

WHERE YOU CAN FIND ADDITIONAL INFORMATION

We are a reporting company and file annual, quarterly and current reports, proxy statements and other information with the SEC. We have filed with the SEC a registration statement on Form S-3 under the Securities Act with respect to the securities we are offering under this prospectus. This prospectus does 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, we refer you to the registration statement and the exhibits and schedules filed as a part of the registration statement. You may read and copy the registration statement, as well as our reports, proxy statements and other information, at the SEC's Public Reference Room at 100 F Street, N.E., Washington, D.C. 20549. You can request copies of these documents by writing to the SEC and paying a fee for the copying cost. Please call the SEC at 1-800-SEC-0330 for more information about the operation of 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, where our SEC filings are also available. The address of the SEC's web site is "<http://www.sec.gov>." We maintain a website at www.amediacorp.com. Information contained in or accessible through our website does not constitute a part of this prospectus.

We have filed a registration statement, of which this prospectus supplement and the accompanying prospectus are a part, covering the securities offered hereby. As allowed by SEC rules, this prospectus supplement and the accompanying prospectus do not contain all of the information set forth in the registration statement and the exhibits, financial statements and schedules thereto. We refer you to the registration statement, filed with the SEC on July 8, 2015, the exhibits, financial statements and schedules thereto for further information. This prospectus supplement and the accompanying prospectus are qualified in their entirety by such other information.

INCORPORATION OF DOCUMENTS BY REFERENCE

The SEC allows us to "incorporate by reference" information that we file with it into this prospectus supplement, which means that we can disclose important information to you by referring you to those documents. The information incorporated by reference is an important part of this prospectus supplement. The information incorporated by reference is considered to be a part of this prospectus supplement, and information that we file later with the Commission will automatically update and supersede information contained in this prospectus supplement. We incorporate by reference the documents listed below that we have previously filed with the Commission:

- Our Annual Report on Form 10-K for the year ended December 31, 2014;
- Our Definitive Proxy Statement filed on Schedule 14A on April 13, 2015;
- Our Quarterly Reports on Form 10-Q for the quarters ended March 31, 2015 and June 30, 2015;
- Our Current Reports on Form 8-K filed on January 5, 2015, January 12, 2015, February 4, 2015, February 12, 2015, February 20, 2015, April 3, 2015, May 22, 2015, June 1, 2015, June 25, 2015, June 26, 2015, July 7, 2015, July 22, 2015, July 23, 2015, August 4, 2015, August 12, 2015, August 20, 2015, August 25, 2015, and September 8, 2015; and
- The description of our Common Stock, which is contained in the Registration Statement on Form 8-A, as filed with the SEC on February 7, 2014, including any amendment or report filed for the purpose of updating such description.

We also incorporate by reference into this prospectus supplement additional documents that we may file with the SEC under Sections 13(a), 13(c), 14 or 15(d) of the Exchange Act, excluding, in each case, information deemed furnished and not filed until we sell all of the securities we are offering or the termination of the offering. Any statements contained in a previously filed document incorporated by reference into this prospectus supplement is deemed to be modified or superseded for purposes of this prospectus supplement to the extent that a statement contained in this prospectus supplement, or in a subsequently filed document also incorporated by reference herein, modifies or supersedes that statement.

We will provide to each person, including any beneficial owner, to whom a prospectus is delivered, without charge upon written or oral request, a copy of any or all of the information that has been incorporated by reference into this prospectus supplement and accompanying prospectus but not delivered with the prospectus supplement, including exhibits that are specifically incorporated by reference into such documents. Requests should be directed to: Amedica Corporation, Attention: Investor Relations, 1885 West 2100 South, Salt Lake City, Utah 84119 and our telephone number is (801) 839-3500.

LEGAL MATTERS

The validity of the issuance of the securities offered by us in this offering will be passed upon for us by Dorsey & Whitney LLP, Salt Lake City, Utah. Ellenoff Grossman & Schole LLP, New York, New York is acting as counsel for the placement agent in connection with certain legal matters in connection with this offering.

EXPERTS

The consolidated financial statements of Amedica Corporation as of December 31, 2014 and for the year then ended appearing in Amedica Corporation's Annual Report (Form 10-K) for the year ended December 31, 2014 have been audited by Mantyla McReynolds, LLC, independent registered public accounting firm, as set forth in their report thereon (which contains an explanatory paragraph describing conditions that raise substantial doubt about the Company's ability to continue as a going concern as described in Note 1 to the consolidated financial statements), included therein, and incorporated herein by reference. Such consolidated financial statements are incorporated herein by reference in reliance upon such report given on the authority of such firm as experts in accounting and auditing.

The consolidated financial statements of Amedica Corporation as of December 31, 2013 and for the year then ended appearing in Amedica Corporation's Annual Report (Form 10-K) for the year ended December 31, 2014 have been audited by Ernst & Young LLP, independent registered public accounting firm, as set forth in their report thereon (which contains an explanatory paragraph describing conditions that raise substantial doubt about the Company's ability to continue as a going concern as described in Note 1 to the consolidated financial statements), included therein, and incorporated herein by reference. Such consolidated financial statements are incorporated herein by reference in reliance upon such report given on the authority of such firm as experts in accounting and auditing.

**13,123,360 Shares of Common Stock
Warrants to Purchase 13,123,360 Shares of Common Stock**



PROSPECTUS SUPPLEMENT

LADENBURG THALMANN

September 8, 2015

AMEDICA CORPORATION

\$35,000,000

**Common Stock, Preferred Stock,
Warrants and Units**

From time to time, we may offer and sell up to \$35,000,000 of any combination of the securities described in this prospectus, either individually or in combination. We may also offer common stock upon conversion of preferred stock, or common stock, or preferred stock upon the exercise of warrants.

This prospectus provides a general description of the securities we may offer. Each time we sell securities, we will provide specific terms of the securities offered in a supplement to this prospectus. We may also authorize one or more free writing prospectuses to be provided to you in connection with these offerings. The prospectus supplement and any related free writing prospectus may also add, update or change information contained in this prospectus. You should carefully read this prospectus, the applicable prospectus supplement and any related free writing prospectus, as well as any documents incorporated by reference in this prospectus before you invest in any securities. This prospectus may not be used to consummate a sale of securities unless accompanied by the applicable prospectus supplement.

Our common stock is traded on The NASDAQ Capital Market under the symbol "AMDA." As of June 30, 2015, the aggregate market value of our outstanding common stock held by non-affiliates, or the public float, was approximately \$37.3 million, which was calculated based on 65,195,631 shares of outstanding common stock held by non-affiliates and on a price per share of \$0.57, the closing price of our common stock on The NASDAQ Capital Market on June 30, 2015. We have not offered any securities pursuant to General Instruction I.B.6 of Form S-3 during the 12 calendar months prior to and including the date of this prospectus. Pursuant to General Instruction I.B.6 of Form S-3, in no event will we sell securities registered on this registration statement in a public primary offering with a value exceeding more than one-third of our public float (the market value of our common stock held by our non-affiliates) in any 12-month period so long as our public float remains below \$75.0 million. As of June 30, 2015, one-third of our public float is equal to approximately \$12.3 million.

INVESTING IN OUR SECURITIES INVOLVES RISKS. YOU SHOULD REVIEW CAREFULLY THE RISKS AND UNCERTAINTIES DESCRIBED UNDER THE HEADING "RISK FACTORS" ON PAGE 5 AND CONTAINED IN THE APPLICABLE PROSPECTUS SUPPLEMENT AND ANY RELATED FREE WRITING PROSPECTUS AND UNDER SIMILAR HEADINGS IN THE OTHER DOCUMENTS THAT ARE INCORPORATED BY REFERENCE INTO THIS PROSPECTUS.

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

NEITHER THE SECURITIES AND EXCHANGE COMMISSION NOR ANY STATE SECURITIES COMMISSION HAS APPROVED OR DISAPPROVED OF THESE SECURITIES OR DETERMINED IF THIS PROSPECTUS IS TRUTHFUL OR COMPLETE. ANY REPRESENTATION TO THE CONTRARY IS A CRIMINAL OFFENSE.

The date of this prospectus is July 20, 2015

TABLE OF CONTENTS

ABOUT THIS PROSPECTUS	1
SUMMARY	2
RISK FACTORS	5
SPECIAL NOTE REGARDING FORWARD-LOOKING STATEMENTS	5
USE OF PROCEEDS	6
DESCRIPTION OF CAPITAL STOCK	6
DESCRIPTION OF WARRANTS	11
DESCRIPTION OF UNITS	12
PLAN OF DISTRIBUTION	13
LEGAL MATTERS	16
EXPERTS	16
WHERE YOU CAN FIND MORE INFORMATION	16
INCORPORATION BY REFERENCE	17

ABOUT THIS PROSPECTUS

This prospectus is a part of a registration statement that we filed with the Securities and Exchange Commission, or SEC, utilizing a “shelf” registration process. Under this shelf registration process, we may sell any combination of the securities described in this prospectus in one or more offerings up to a total dollar amount of \$35,000,000. This prospectus provides you with a general description of the securities we may offer. Each time we sell securities under this shelf registration, we will provide a prospectus supplement that will contain specific information about the terms of that offering. 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 add, update or change information contained in this prospectus or in any documents that we have incorporated by reference into this prospectus. You should read this prospectus, any applicable prospectus supplement and any related free writing prospectus, together with the information incorporated herein by reference as described under the heading “Incorporation by Reference.”

You should rely only on the information that we have provided or incorporated by reference in this prospectus, any applicable prospectus supplement and any related free writing prospectus that we may authorize to be provided to you. We have not authorized any dealer, salesman or other person to give any information or to make any representation other than those contained or incorporated by reference 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 upon any information or representation not contained or incorporated by reference in this prospectus or the accompanying prospectus supplement. This prospectus and the accompanying supplement to this prospectus do not constitute an offer to sell or the solicitation of an offer to buy any securities other than the registered securities to which they relate, nor do this prospectus and the accompanying supplement to this prospectus constitute an offer to sell or the solicitation of an offer to buy securities in any jurisdiction to any person to whom it is unlawful to make such offer or solicitation in such jurisdiction. You should not assume that the information contained in this prospectus, any applicable prospectus supplement or any related free writing prospectus is accurate on any date subsequent to the date set forth on the front of the document or that any information we have incorporated by reference is correct on any date subsequent to the date of the document incorporated by reference, even though this prospectus, any applicable prospectus supplement or any related free writing prospectus is delivered or securities sold on a later date.

SUMMARY

Prospectus Summary

This summary highlights selected information from this prospectus and does not contain all of the information that you need to consider in making your investment decision. You should carefully read the entire prospectus, including the risks of investing discussed under “Risk Factors” beginning on page 5, the information incorporated by reference, including our financial statements, and the exhibits to the registration statement of which this prospectus is a part.

Throughout this prospectus, references to “Amedica,” the “Company,” “we,” “us,” and “our” refer to Amedica Corporation.

Our Company

We are a commercial biomaterial company focused on using our silicon nitride technology platform to develop, manufacture and sell a broad range of medical devices. We currently market spinal fusion products and are developing products for use in total hip and knee joint replacements. We believe our silicon nitride technology platform enables us to offer new and transformative products in the orthopedic and other medical device markets. We believe we are the first and only company to use silicon nitride in medical applications. Over 20,000 of our silicon nitride spine products have been implanted in patients.

Biomaterials come in a variety of synthetic or natural materials available in a variety of forms that are used in virtually every medical specialty. We believe our silicon nitride biomaterial has superior characteristics compared to commonly used biomaterials in the markets we are targeting, including polyetheretherketone, or PEEK, which is the most common biomaterial used for interbody spinal fusion products. Specifically, we believe our silicon nitride has the following key attributes: promotion of bone growth; hardness, strength and resistance to fracture; resistance to wear; non-corrosive; anti-infective properties; biocompatibility; and superior diagnostic imaging compatibility.

We currently market our Valeo® family of silicon nitride interbody spinal fusion devices in the United States and Europe for use in the cervical and thoracolumbar areas of the spine. We believe our Valeo devices have a number of advantages over existing products due to silicon nitride’s key characteristics, resulting in faster and more effective fusion and reduced risk of infection.

In addition to our silicon nitride-based spinal fusion products, we market a line of non-silicon nitride spinal fusion products which allows us to provide surgeons and hospitals with a broader range of products. These additional products are complementary to our fusion products and are designed for the treatment of deformity and degenerative spinal procedures. Although our non-silicon nitride products have accounted for approximately 56% and 43% of our product revenues for the quarters ended March 31, 2015 and 2014, respectively, we believe the continued promotion and potential for adoption of our silicon nitride products and product candidates, if approved, provides us the greatest opportunity to grow our business in new and existing markets and achieve our goal to become a leading biomaterial company.

In addition to the markets into which we directly sell our products, we are utilizing our silicon nitride technology platform to expand our current penetration in the spinal fusion market through original equipment manufacturer (“OEM”) and private label partnerships. We also expect to do the same in other markets such as total hip and knee joint replacements, dental and sports medicine. We believe our biomaterial expertise, strong intellectual property and formulaic manufacturing process will allow us to transition currently available medical device products made of inferior biomaterials and manufacture them using silicon nitride and our technology platform to improve their characteristics.

We are also incorporating our silicon nitride technology into components for use in total hip and knee replacement product candidates that we plan on developing in collaboration with a strategic partner. We believe that our silicon nitride total hip and knee product candidates will provide competitive advantages over current products made with traditional biomaterials. We also believe our silicon nitride technology platform can be used for developing products in other markets and have developed prototypes for use in the dental, sports medicine and trauma markets. As a result of some of the key characteristics of our

silicon nitride, we also believe our coating technology may be used to enhance our metal products as well as commercially available metal spinal fusion, joint replacement and other medical products.

We operate a 30,000 square foot manufacturing facility located at our corporate headquarters in Salt Lake City, Utah, and we are the only vertically integrated silicon nitride orthopedic medical device manufacturer in the world. We market and sell our products to surgeons and hospitals in the United States and select markets in Europe and South America through our established network of independent sales distributors who are managed by our experienced in-house sales and marketing management team. We have also started entering into OEM and private label relationships with third parties to further the commercialization of our silicon nitride technology platform beyond our own direct marketing and selling efforts.

Corporate Information

We were incorporated in Delaware in 1996 under the name Amedica Corp. and have since changed our name to Amedica Corporation. Effective September 20, 2010, we acquired all of the outstanding shares of US Spine, Inc., which then became our wholly-owned subsidiary, which is our only subsidiary. Our principal executive offices are located at 1885 West 2100 South, Salt Lake City, Utah 84119, and our telephone number is (801) 839-3500. Our web site address is www.amedicacorp.com. The information on, or that may be accessed through, our web site is not incorporated by reference into this prospectus and should not be considered a part of this prospectus.

Certain monetary amounts, percentages and other figures included in this prospectus have been subject to rounding adjustments. Accordingly, figures shown as totals in certain tables may not be the arithmetic aggregation of the figures that precede them, and figures expressed as percentages in the text may not total 100% or, as applicable, when aggregated may not be the arithmetic aggregation of the percentages that precede them.

“Amedica,” “CSC,” “MC2,” “Valeo” and “rethink what’s possible” are registered U.S. trademarks of Amedica Corporation. “US Spine” is a registered U.S. trademark of our subsidiary, US Spine, Inc. All other trademarks, trade names and service marks appearing in this prospectus are the property of their respective owners. Trademarks and trade names referred to in this prospectus, including logos, artwork and other visual displays, may appear without the ® or TM symbols for convenience. Such references are not intended to indicate, in any way, that we will not assert, to the fullest extent under applicable law, our rights or the rights of the applicable licensor to these trademarks and trade names. We do not intend our use or display of other companies’ trade names or trademarks to imply a relationship with, or endorsement or sponsorship of us by, any other companies.

The Securities We May Offer

We may offer shares of our common stock and preferred stock, and warrants to purchase any of such securities, either individually or in units, with a total value of up to \$35,000,000 from time to time under this prospectus, together with any applicable prospectus supplement and related free writing prospectus, at prices and on terms to be determined by market conditions at the time of offering. This prospectus provides you with a general description of the securities we may offer. Each time we offer a type or series of securities, we will provide a prospectus supplement that will describe the specific amounts, prices and other important terms of the securities, including, to the extent applicable:

- designation or classification;
- aggregate principal amount or aggregate offering price;
- maturity, if applicable;
- original issue discount, if any;
- rates and times of payment of interest or dividends, if any;
- redemption, conversion, exchange or sinking fund terms, if any;

- conversion or exchange prices or rates, if any, and, if applicable, any provisions for changes to or adjustments in the conversion or exchange prices or rates and in the securities or other property receivable upon conversion or exchange;
- ranking;
- restrictive covenants, if any;
- voting or other rights, if any; and
- important United States federal income tax considerations.

A prospectus supplement and any related free writing prospectus that we may authorize to be provided to you may also add, update or change information contained in this prospectus or in documents we have incorporated by reference. However, no prospectus supplement or free writing prospectus will offer a security that is not registered and described in this prospectus at the time of the effectiveness of the registration statement of which this prospectus is a part.

We may sell the securities directly to or through underwriters, dealers or agents. We, and our underwriters or agents, reserve the right to accept or reject all or part of any proposed purchase of securities. If we do offer securities through underwriters or agents, we will include in the applicable prospectus supplement:

- the names of those underwriters or agents;
- applicable fees, discounts and commissions to be paid to them;
- details regarding over-allotment options, if any; and
- the net proceeds to us.

Common Stock. We may offer shares of our common stock from time to time. Each outstanding share of common stock entitles the holder thereof to one vote per share on all matters. Our bylaws provide that any vacancy occurring in the board of directors may be filled by the affirmative vote of a majority of the remaining directors. Stockholders do not have preemptive rights to purchase shares in any future issuance of our common stock. In the event of our liquidation, dissolution or winding up, holders of our common stock are entitled to receive, ratably, the net assets available to stockholders after payment of all creditors. All of the issued and outstanding shares of our common stock are duly authorized, validly issued, fully paid and non-assessable. Our common stock is described in greater detail in this prospectus under “Description of Capital Stock - Common Stock.”

Preferred Stock. Our Board of directors has the authority under our amended and restated certificate of incorporation, without further action by our stockholders, to issue up to 130,000,000 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 rights, preferences, privileges and restrictions of the shares of each wholly unissued series, including dividend rights, conversion rights, voting rights, terms of redemption, liquidation preference and sinking fund terms, 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). Our Preferred Stock is described in greater detail in this prospectus under “Description of Capital Stock - Preferred Stock.”

We will fix the rights, preferences, privileges, qualifications and restrictions of the preferred stock of each series that we sell under this prospectus and applicable prospectus supplements in the certificate of designation relating to that series. We will incorporate by reference into the registration statement of which this prospectus is a part the form of any certificate of designation that describes the terms of the series of preferred stock we are offering before the issuance of the related series of preferred stock. We urge you to read the prospectus supplements and any free writing prospectus that we may authorize to be provided to you related to the series of preferred stock being offered, as well as the complete certificate of designation that contains the terms of the applicable series of preferred stock.

Warrants. We may offer warrants for the purchase of our common stock and/or preferred stock in one or more series, from time to time. We may issue warrants independently or together with common stock and/or preferred stock, and the warrants may be attached to or separate from those securities.

In this prospectus, we have summarized certain general features of the warrants under “Description of Warrants.” We urge you, however, to read the prospectus supplements and any free writing prospectus that we may authorize to be provided to you related to the particular warrants being offered, as well as the complete warrant document or agreement that contain the terms of the warrants. Specific warrant documents or agreements will contain additional important terms and provisions and will be filed as exhibits to the registration statement of which this prospectus is a part, or incorporated by reference from a current report on Form 8-K that we file with the SEC.

Units. We may offer units consisting of common stock, preferred stock, and/or warrants to purchase any of such securities in one or more series. In this prospectus, we have summarized certain general features of the units under “Description of Units.” We urge you, however, to read the prospectus supplements and any free writing prospectus that we may authorize to be provided to you related to the particular units being offered, as well as the unit agreements that contain the terms of the units. We will file as exhibits to the registration statement of which this prospectus is a part, or will incorporate by reference from a current report on Form 8-K that we file with the SEC, the form of unit agreement and any supplemental agreements that describe the terms of the units we are offering before the issuance of the related units.

THIS PROSPECTUS MAY NOT BE USED TO OFFER OR SELL ANY SECURITIES UNLESS ACCOMPANIED BY A PROSPECTUS SUPPLEMENT.

NASDAQ Capital Market Listing

Our common stock is listed on The NASDAQ Capital Market under the symbol “AMDA”. The applicable prospectus supplement will contain information, where applicable, as to other listings, if any, on The NASDAQ Capital Market or other securities exchange of the securities covered by the applicable prospectus supplement.

RISK FACTORS

An investment in our securities involves a high degree of risk. The prospectus supplement applicable to each offering of our securities will contain a discussion of the risks applicable to an investment in our securities. Prior to making a decision about investing in our securities, you should carefully consider the specific factors discussed under the heading “Risk Factors” in the applicable prospectus supplement, together with all of the other information contained or incorporated by reference in the prospectus supplement or appearing or incorporated by reference in this prospectus. You should also consider the risks, uncertainties and assumptions discussed under Item 1A, “Risk Factors,” in our Annual Report on Form 10-K for the fiscal year ended December 31, 2014 and our Quarterly Report on Form 10-Q for the quarterly period ended March 31, 2015, both of which are incorporated herein by reference, and may be amended, supplemented or superseded from time to time by other reports we file with the Securities and Exchange Commission in the future. The risks and uncertainties we have described are not the only ones we face. Additional risks and uncertainties not presently known to us or that we currently deem immaterial may also affect our operations.

SPECIAL NOTE REGARDING FORWARD-LOOKING STATEMENTS

This prospectus and our SEC filings that are incorporated by reference into this prospectus contain or incorporate by reference forward-looking statements within the meaning of Section 27A of the Securities Act and Section 21E of the Exchange Act. All statements, other than statements of historical fact, included or incorporated by reference in this prospectus regarding our business strategy, future operations, projected financial position, potential strategic transactions, proposed distribution channels, projected sales growth, proposed new products, estimated future revenues, cash flows and profitability, projected costs,

potential sources of additional capital, future prospects, future economic conditions, the future of our industry and results that might be obtained by pursuing management's current plans and objectives are forward-looking statements. The words "believe," "anticipate," "estimate," "plan," "expect," "intend," "may," "could," "should," "potential," "likely," "projects," "continue," "will," and "would" and similar expressions are intended to identify forward-looking statements, although not all forward-looking statements contain these identifying words. Forward-looking statements reflect our current views with respect to future events and are based on assumptions and are subject to risks and uncertainties. We cannot guarantee that we actually will achieve the plans, intentions or expectations expressed in our forward-looking statements and you should not place undue reliance on these statements. There are a number of important factors that could cause our actual results to differ materially from those indicated or implied by forward-looking statements. These important factors include those discussed under the heading "Risk Factors" contained or incorporated by reference in this prospectus and in the applicable prospectus supplement and any free writing prospectus we may authorize for use in connection with a specific offering. These factors and the other cautionary statements made in this prospectus should be read as being applicable to all related forward-looking statements whenever they appear in this prospectus. Except as required by law, we undertake no obligation to update publicly any forward-looking statements, whether as a result of new information, future events or otherwise.

Any forward-looking statement in this prospectus reflects our current views with respect to future events and is subject to these and other risks, uncertainties and assumptions relating to our operations, results of operations, industry and future growth. Except as required by law, we assume no obligation to publicly update or revise any forward-looking statements contained in this prospectus, whether as a result of new information, future events or otherwise.

USE OF PROCEEDS

Except as described in any applicable prospectus supplement and in any free writing prospectuses in connection with a specific offering, we currently intend to use the net proceeds from the sale of the securities offered hereby for operating costs, capital expenditures, repayment of debt and for general corporate purposes, including working capital. We may also use a portion of the net proceeds to invest in or acquire businesses, or assets that we believe are complementary to our own, although we have no current plans, commitments or agreements with respect to any acquisitions as of the date of this prospectus.

DESCRIPTION OF CAPITAL STOCK

As of the date of this prospectus, our certificate of incorporation authorizes us to issue 250,000,000 shares of common stock, par value \$0.01 per share, and 130,000,000 shares of preferred stock, par value \$0.01 per share. The following is a summary of the rights of our common and preferred stock and some of the provisions of our amended and restated certificate of incorporation and amended and restated bylaws, our outstanding warrants, our registration rights agreements and the Delaware General Corporation Law. Because it is only a summary, it does not contain all the information that may be important to you and is subject to and qualified in its entirety by our amended and restated certificate of incorporation and our amended and restated bylaws, a copy of each of which has been incorporated as an exhibit to the registration statement of which this prospectus forms a part.

Our amended and restated certificate of incorporation and our amended and restated bylaws contain certain provisions that are intended to enhance the likelihood of continuity and stability in the composition of the board of directors, which may have the effect of delaying, deferring or preventing a future takeover or change in control of Amedica unless such takeover or change in control is approved by our board of directors.

Common Stock

As of June 30, 2015 there were 65,758,131 shares of common stock outstanding. In addition, as of June 30, 2015 there were: (i) 1,572,752 shares of common stock subject to outstanding options; (ii) no shares of common stock subject to outstanding restricted stock units; and, (iii) 1,483,015 shares of common stock reserved for future issuance under our Amended and Restated 2012 Equity Incentive Plan. Each outstanding share of common stock entitles the holder thereof to one vote per share on all matters. Our bylaws provide that any vacancy occurring in the board of directors may be filled by the affirmative vote of a majority of the remaining directors. Stockholders do not have preemptive rights to purchase shares in any future issuance of our common stock. In the event of our liquidation, dissolution or winding up, holders of our common stock are entitled to receive, ratably, the net assets available to stockholders after payment of all creditors.

All outstanding shares of common stock are, and all shares of common stock to be outstanding upon the closing of this offering will be, fully paid and nonassessable.

Additional shares of authorized common stock may be issued, as authorized by our board of directors from time to time, without stockholder approval, except as may be required by applicable stock exchange requirements.

The transfer agent and registrar for our common stock is American Stock Transfer and Trust Company. The transfer agent and the registrar's address is 59 Maiden Lane, New York, New York 10038. Their telephone number is 1-800-937-5449. Our common stock is listed on The NASDAQ Capital Market under the symbol "AMDA".

Preferred Stock

Our Board of directors has the authority under our amended and restated certificate of incorporation, without further action by our stockholders, to issue up to 130,000,000 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 rights, preferences, privileges and restrictions of the shares of each wholly unissued series, including dividend rights, conversion rights, voting rights, terms of redemption, liquidation preference and sinking fund terms, 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).

Our board of directors may authorize the issuance of preferred stock with voting or conversion rights that could have the effect of restricting dividends on our common stock, diluting the voting power of our common stock, impairing the liquidation rights of our common stock or otherwise adversely affecting the rights of holders of our common stock. The issuance of preferred stock, while providing flexibility in connection with possible acquisitions and other corporate purposes, could, among other things, have the effect of delaying, deferring or preventing a change of control and may adversely affect the market price of our common stock. As of June 30, 2015, no shares of preferred stock were outstanding, and we have no current plans to issue any shares of preferred stock.

Future Preferred Stock. Our board of directors will fix the rights, preferences, privileges, qualifications and restrictions of the preferred stock of each series that we sell under this prospectus and applicable prospectus supplements 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 incorporate by reference into the registration statement of which this prospectus is a part the form of any certificate of designation that describes the terms of the series of preferred stock we are offering before the issuance of the related 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 per share;
- the dividend rate per share, dividend period and payment dates and method of calculation for dividends;

- whether dividends will be cumulative or non-cumulative and, if cumulative, the date from which dividends will accumulate;
- our right, if any, to defer payment of dividends and the maximum length of any such deferral period;
- 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 or other securities of ours, including warrants, and, if applicable, the conversion period, the conversion price, or how it will be calculated, and under what circumstances it may be adjusted;
- voting rights, if any, of the preferred stock;
- preemption rights, if any;
- restrictions on transfer, sale or other assignment, if any;
- a discussion of any material or special 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 issuances of any class or series of preferred stock ranking senior to or on a parity with the series of preferred stock being issued as to dividend rights and rights if we liquidate, dissolve or wind up our affairs; and
- any other specific terms, rights, preferences, privileges, qualifications or restrictions of the preferred stock.

When we issue shares of preferred stock under this prospectus, the shares will be fully paid and nonassessable and will not have, or be subject to, any preemptive or similar rights.

The General Corporation Law of the State of Delaware, the state of our incorporation, provides that the holders of preferred stock will have the right to vote separately as a class on any proposal involving fundamental changes in the rights of holders of that preferred stock. This right is in addition to any voting rights that may be provided for in the applicable certificate of designation.

Warrants

As of June 30, 2015, there were 1,899,799 common share purchase warrants outstanding, which expire between September 2015 and December 2022. Each of these warrants entitles the holder to purchase one common share at prices ranging between \$0.47 and \$56.70, as converted, per common share. Certain of these warrants has a net exercise provision under which its holder may, in lieu of payment of the exercise price in cash, surrender the warrant and receive a net amount of shares based on the fair market value of our common shares at the time of exercise of the warrant after deduction of the aggregate exercise price. Each of these warrants also contains provisions for the adjustment of the exercise price and the aggregate number of shares issuable upon the exercise of the warrant in the event of dividends, share splits, reorganizations and reclassifications and consolidations. Certain of these warrants contain a provision requiring a reduction to the exercise price in the event we issue common stock, or securities convertible into or exercisable for common stock, at a price per share lower than the warrant exercise price.

Underwriters' Unit Purchase Options

In connection with our November 2014 Public Offering of Units we issued to the underwriters in that offering Unit Purchase Options to purchase 572,082 units with an exercise price of \$1.425 per unit. Each unit consists of one share of our common

stock and one warrant to acquire one share of our common stock. The units may be exercised on a cashless basis. Each warrant to be issued upon the exercise of each unit has a net exercise provision under which its holder may, in lieu of payment of the exercise price in cash, surrender the warrant and receive a net amount of shares based on the fair market value of our common shares at the time of exercise of the warrant after deduction of the aggregate exercise price. These warrants also contain provisions for the adjustment of the exercise price and the aggregate number of shares issuable upon the exercise of these warrants in the event of dividends, share splits, reorganizations and reclassifications and consolidations.

Registration Rights

We have entered into various agreements with holders of shares of our common stock and warrants to acquire shares of our common stock that under certain circumstances require us to register with the SEC such common shares and the common shares issuable upon exercise of the warrants. These registration rights are generally subject to certain conditions and limitations, including our right to limit the number of shares included in any such registration under certain circumstances. We are generally required to pay all expenses incurred in connection with registrations effected in connection with the registration rights, excluding selling expenses such as broker commissions and underwriting discounts. The registration rights may be transferred to any transferee or assignee of the holder of such registrations rights who agrees to be bound by the terms of the registration rights agreement.

Furthermore, the terms of the agreements generally provide that we will not be required to maintain the effectiveness of any registration statement, or file another registration statement, with respect to any registrable securities that are not subject to the current public information requirement under Rule 144 and that are eligible for resale without volume or manner-of-sale restrictions.

Piggyback Rights. If, at any time there is not an effective registration statement covering the shares of common stock held by MG Partners II Ltd. (“Magna”) pursuant to the Registration Rights Agreement we entered into with Magna on June 30, 2014, we propose to register shares of our common stock under the Securities Act in connection with a public offering of common stock, we will, prior to such filing, give written notice to Magna of our intention to do so. If Magna so elects, we are required to cause all securities which we have been requested by Magna to register under the Securities Act to the extent not already registered pursuant to an effective registration statement all such shares. These piggyback registration rights do not apply to registrations of our securities that we initiate that are (i) issuable in connection with our acquisition of another entity or business or (ii) incidental to any of our equity compensation, employee stock purchase or other employee benefit plans or any sales agent/distributor equity incentive program that we may implement.

Pursuant to the terms of the warrant issued to Hercules Technology III, L.P. (“Hercules Technology”) on June 30, 2014 (the “Hercules Warrant”), if at any time while the Hercules Warrant is outstanding we file a registration statement under the Securities Act to register the sale of any of our securities, we will be required to include in such registration statement the shares of common stock underlying the Hercules Warrant. In connection with the filing of this registration statement, Hercules Technology granted us a waiver of these piggyback registration rights.

Pursuant to the terms of the warrant issued in connection with a bridge loan we secured in November 2014 (the “Closing Bridge Warrant”), for so long as the Closing Bridge Warrant is outstanding, and while all shares of common stock underlying the Closing Bridge Warrant are not able to be sold without restriction under Rule 144 of the Securities Act, we are required to include in any registration statement registering the sale of any of our securities filed under the Securities Act the shares of common stock underlying the Closing Bridge Warrant.

Generally, the foregoing piggyback registration rights do not apply to registrations of our securities that we initiate that are (i) issuable in connection with our acquisition of another entity or business or (ii) incidental to any of our equity compensation, employee stock purchase or other employee benefit plans or any sales agent/distributor equity incentive program that we may implement.

Effects of Anti-Takeover Provisions of Our Restated Certificate of Incorporation, Our Restated Bylaws and Delaware Law

The provisions of (1) Delaware law, (2) our restated certificate of incorporation and (3) our restated bylaws discussed below could discourage or make it more difficult to prevail in a proxy contest or effect other change in our management or the acquisition of control by a holder of a substantial amount of our voting stock. It is possible that these provisions could make it more difficult to accomplish, or could deter, transactions that stockholders may otherwise consider to be in their best interests or our best interests. These provisions are intended to enhance the likelihood of continuity and stability in the composition of our board of directors and in the policies formulated by the board of directors and to discourage certain types of transactions that may involve an actual or threatened change in control of our company. These provisions are designed to reduce our vulnerability to an unsolicited acquisition proposal. These provisions also are intended to discourage certain tactics that may be used in proxy fights. These provisions also may have the effect of preventing changes in our management.

Delaware Statutory Business Combinations Provision. We are subject to the anti-takeover provisions of Section 203 of the Delaware General Corporation Law. In general, Section 203 prohibits a publicly-held Delaware corporation from engaging in a “business combination” with an “interested stockholder” for a period of three years after the date of the transaction in which the person became an interested stockholder, unless the business combination is, or the transaction in which the person became an interested stockholder was, approved in a prescribed manner or another prescribed exception applies. For purposes of Section 203, a “business combination” is defined broadly to include a merger, asset sale or other transaction resulting in a financial benefit to the interested stockholder, and, subject to certain exceptions, an “interested stockholder” is a person who, together with his or her affiliates and associates, owns (or within three years prior, did own) 15% or more of the corporation’s voting stock.

Classified Board of Directors; Appointment of Directors to Fill Vacancies; Removal of Directors for Cause. Our restated certificate of incorporation provides that our board of directors will be divided into three classes as nearly equal in number as possible. Each year the stockholders will elect the members of one of the three classes to a three-year term of office. All directors elected to our classified board of directors will serve until the election and qualification of their respective successors or their earlier resignation or removal. The board of directors is authorized to create new directorships and to fill any positions so created and is permitted to specify the class to which any new position is assigned. The person filling any of these positions would serve for the term applicable to that class. The board of directors (or its remaining members, even if less than a quorum) is also empowered to fill vacancies on the board of directors occurring for any reason for the remainder of the term of the class of directors in which the vacancy occurred. Members of the board of directors may only be removed for cause and only by the affirmative vote of holders of at least 80% of our outstanding voting stock. These provisions are likely to increase the time required for stockholders to change the composition of the board of directors. For example, in general, at least two annual meetings will be necessary for stockholders to effect a change in a majority of the members of the board of directors.

Authorization of Blank Check Preferred Stock. Our restated certificate of incorporation provides that our board of directors is authorized to issue, without stockholder approval, blank check preferred stock. Blank check preferred stock can operate as a defensive measure known as a “poison pill” by diluting the stock ownership of a potential hostile acquirer to prevent an acquisition that is not approved by our board of directors.

Advance Notice Provisions for Stockholder Proposals and Stockholder Nominations of Directors. Our restated bylaws provide that, for nominations to the board of directors or for other business to be properly brought by a stockholder before a meeting of stockholders, the stockholder must first have given timely notice of the proposal in writing to our Secretary. For an annual meeting, a stockholder’s notice generally must be delivered not less than 90 days nor more than 120 days prior to the anniversary of the previous year’s annual meeting. For a special meeting, the notice must generally be delivered no less than 60 days nor more than 90 days prior to the special meeting or ten days following the day on which public announcement of the meeting is first made. Detailed requirements as to the form of the notice and information required in the notice are specified in our restated bylaws. If it is determined that business was not properly brought before a meeting in accordance with our bylaw provisions, this business will not be conducted at the meeting.

Special Meetings of Stockholders. Special meetings of the stockholders may be called only by our board of directors pursuant to a resolution adopted by a majority of the total number of directors.

No Stockholder Action by Written Consent. Our restated certificate of incorporation does not permit our stockholders to act by written consent. As a result, any action to be effected by our stockholders must be effected at a duly called annual or special meeting of the stockholders.

Super-Majority Stockholder Vote required for Certain Actions. The Delaware General Corporation Law provides generally that the affirmative vote of a majority of the shares entitled to vote on any matter is required to amend a corporation's certificate of incorporation or bylaws, unless the corporation's certificate of incorporation or bylaws, as the case may be, requires a greater percentage. Our restated certificate of incorporation requires the affirmative vote of the holders of at least 80% of our outstanding voting stock to amend or repeal any of the provisions discussed in this section of this prospectus entitled "Effect of Anti-Takeover Provisions of Our Restated Certificate of Incorporation, Our Restated Bylaws and Delaware Law" other than provisions related to the authorization of blank check preferred stock. This 80% stockholder vote would be in addition to any separate class vote that might in the future be required pursuant to the terms of any preferred stock that might then be outstanding. A 80% vote is also required for any amendment to, or repeal of, our restated bylaws by the stockholders. Our restated bylaws may be amended or repealed by a simple majority vote of the board of directors.

DESCRIPTION OF WARRANTS

The following description, together with the additional information we may include in any applicable prospectus supplements and free writing prospectuses, summarizes the material terms and provisions of the warrants that we may offer under this prospectus, which may consist of warrants to purchase common stock or preferred stock and may be issued in one or more series. This information does not relate to our outstanding warrants. Warrants may be offered independently or together with common stock or preferred stock offered by any prospectus supplement, and may be attached to or separate from those securities. While the terms we have summarized below will apply generally to any warrants that we may offer under this prospectus, we will describe the particular terms of any warrants that we may offer in more detail in the applicable prospectus supplement and any applicable free writing prospectus. The terms of any warrants offered under a prospectus supplement may differ from the terms described below. However, no prospectus supplement will fundamentally change the terms that are set forth in this prospectus or offer a security that is not registered and described in this prospectus at the time of its effectiveness.

We will file as exhibits to the registration statement of which this prospectus is a part, or will incorporate by reference from a current report on Form 8-K that we file with the SEC, the form of warrant document or agreement that describes the terms of the particular warrants we are offering before the issuance of the related warrants. The following summaries of material provisions of the warrants are subject to, and qualified in their entirety by reference to, all the provisions of the warrant document or agreement applicable to particular warrants. We urge you to read the applicable prospectus supplement and any applicable free writing prospectus related to the particular warrants that we sell under this prospectus, as well as the complete warrant document or agreement that contain the terms of the warrants.

General

We will describe in the applicable prospectus supplement the terms relating to the warrants, including, if applicable:

- the offering price and aggregate number of warrants offered;
- the currency for which the warrants may be purchased;
- 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 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;
- material 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 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. Unless we otherwise specify 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 in the warrant agreement or documents 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 documents properly completed and duly executed at the office of the warrant agent or any other office indicated in the applicable prospectus 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.

DESCRIPTION OF UNITS

The following description, together with the additional information we may include in any applicable prospectus supplements, summarizes the material terms and provisions of the units that we may offer under this prospectus. 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. However, no prospectus supplement will fundamentally change the terms that are set forth in this prospectus or offer a security that is not registered and described in this prospectus at the time of its effectiveness.

We will file as exhibits to the registration statement of which this prospectus is a part, or will incorporate by reference from a current report on Form 8-K that we file with the SEC, the form of unit agreement that describes the terms of the units we are offering, and any supplemental agreements, before the issuance of the related 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 particular units. We urge you to read the applicable prospectus supplements related to the particular units that we sell under this prospectus, as well as the complete unit agreement and any supplemental agreements that contain the terms of the units.

General

We may issue units comprised of one or more shares of common stock, shares of preferred stock and warrants in any combination. Each unit will be issued 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 a unit is issued 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 units, 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.

The provisions described in this section, as well as those described under “Description of Capital Stock,” and “Description of Warrants” will apply to each unit and to any common stock, preferred stock, or warrant included in each unit, respectively.

Issuance in Series

We may issue units in such amounts and in 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, the unit agents, 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.

PLAN OF DISTRIBUTION

We may sell the securities from time to time pursuant to underwritten public offerings, direct sales to the public, negotiated transactions, block trades or a combination of these methods. We may sell the securities to or through underwriters or dealers, through agents, directly to one or more purchasers, or through any combination of these methods. The distribution of the securities may be effected 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 the prevailing market prices or at negotiated prices.

A prospectus supplement or supplements (and any related free writing prospectus that we may authorize to be provided to you) will describe the terms of the offering of the securities, including, to the extent applicable:

- the name or names of any underwriters or dealers, if any;
- the purchase price of the securities and the proceeds we will receive from the sale;
- any over-allotment options under which underwriters may purchase additional securities from us;
- any agency fees or underwriting discounts and other items constituting agents' or underwriters' compensation;
- any public offering price;
- any discounts or concessions allowed or reallocated or paid to dealers; and
- any securities exchange or market on which the securities may be listed.

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

By Underwriters

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. Any public offering price and any discounts or concessions allowed or reallocated 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.

By Dealers

If a dealer is utilized in the sale of any securities offered by this prospectus, we will sell those securities to the dealer, as principal. The dealer may then resell the securities to the public at varying prices to be determined by the dealer at the time of resale. We will set forth the names of the dealers and the terms of the transaction in the applicable prospectus supplement.

By Agents

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.

By Direct Sales

We may also directly sell securities offered by this prospectus. In this case, no underwriters or agents would be involved. We will describe the terms of those sales in the applicable prospectus supplement.

General Information

Underwriters, dealers and agents that participate in the distribution of the securities offered by this prospectus may be deemed underwriters under the Securities Act, and any discounts or commissions they receive from us and any profit on their resale of the securities may be treated as underwriting discounts and commissions under the Securities Act.

We may authorize agents, dealers 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 related to this offering, 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.

Some or all of the securities we offer, other than common stock, will be new issues of securities with no established trading market. Any underwriters 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.

We may enter into derivative transactions with third parties, or sell securities not covered by this prospectus to third parties in privately negotiated transactions. If the applicable prospectus supplement indicates, in connection with those derivatives, the third parties may sell securities covered by this prospectus and the applicable prospectus supplement, including in short sale transactions. If so, the third parties may use securities pledged by us or borrowed from us or others to settle those sales or to close out any related open borrowings of stock, and may use securities received from us in settlement of those derivatives to close out any related open borrowings of stock. The third parties in such sale transactions will be identified in the applicable prospectus supplement.

One or more firms, referred to as “remarketing firms,” may also offer or sell the securities, if the prospectus supplement so indicates, in connection with a remarketing arrangement upon their purchase. Remarketing firms will act as principals for their own accounts or as agents for us. These remarketing firms will offer or sell the securities in accordance with the terms of the securities. The prospectus supplement will identify any remarketing firm and the terms of its agreement, if any, with us and will describe the remarketing firm’s compensation. Remarketing firms may be deemed to be underwriters in connection with the securities they remarket.

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. This short sales position may involve either “covered” short sales or “naked” short sales. Covered short sales are short sales made in an amount not greater than the underwriters’ over-allotment option to purchase additional securities in this offering described above. The underwriters may close out any covered short position either by exercising their over-allotment option or by purchasing securities in the open market. To determine how they will close the covered short position, the underwriters will consider, among other things, the price of securities available for purchase in the open market, as compared to the price at which they may purchase securities through the over-allotment option. Naked short sales are short sales in excess of the over-allotment option. The underwriters must close out any naked short position by purchasing securities in the open market. A naked short position is more likely to be created if the underwriters are concerned that, in the open market after pricing, there may be downward pressure on the price of the securities that could adversely affect investors who purchase securities in this offering. Stabilizing transactions permit bids to purchase the underlying security for the purpose of fixing the price of the security so long as the stabilizing bids do not exceed a specified maximum. 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 covering transaction to cover short positions.

Any underwriters who are qualified market makers on The NASDAQ Capital Market may engage in passive market making transactions in our common stock, preferred stock, and warrants, as applicable, on The NASDAQ Capital Market in accordance with Rule 103 of Regulation M, during the business day prior to the pricing of the offering, before the commencement of offers or sales of the securities. 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.

Similar to other purchase transactions, an underwriter’s purchase to cover the syndicate short sales or to stabilize the market price of our securities may have the effect of raising or maintaining the market price of our securities or preventing or mitigating a decline in the market price of our securities. As a result, the price of our securities may be higher than the price

that might otherwise exist in the open market. The imposition of a penalty bid might also have an effect on the price of the securities if it discourages resales of the securities.

Neither we nor the underwriters make any representation or prediction as to the effect that the transactions described above may have on the price of the securities. If such transactions are commenced, they may be discontinued without notice at any time.

Our common stock is listed on The NASDAQ Capital Market under the symbol "AMDA".

LEGAL MATTERS

Dorsey & Whitney LLP, Salt Lake City, Utah, will pass for us upon the validity of the securities being offered by this prospectus and applicable prospectus supplement, and counsel named in the applicable prospectus supplement will pass upon legal matters for any underwriters, dealers or agents.

EXPERTS

The consolidated financial statements of Amedica Corporation as of December 31, 2014 and for the year then ended appearing in Amedica Corporation's Annual Report (Form 10-K) for the year ended December 31, 2014 have been audited by Mantyla McReynolds, LLC, independent registered public accounting firm, as set forth in their report thereon (which contains an explanatory paragraph describing conditions that raise substantial doubt about the Company's ability to continue as a going concern as described in Note 1 to the consolidated financial statements), included therein, and incorporated herein by reference. Such consolidated financial statements are incorporated herein by reference in reliance upon such report given on the authority of such firm as experts in accounting and auditing.

The consolidated financial statements of Amedica Corporation as of December 31, 2013 and for the year then ended appearing in Amedica Corporation's Annual Report (Form 10-K) for the year ended December 31, 2014 have been audited by Ernst & Young LLP, independent registered public accounting firm, as set forth in their report thereon (which contains an explanatory paragraph describing conditions that raise substantial doubt about the Company's ability to continue as a going concern as described in Note 1 to the consolidated financial statements), included therein, and incorporated herein by reference. Such consolidated financial statements are incorporated herein by reference in reliance upon such report given on the authority of such firm as experts in accounting and auditing.

WHERE YOU CAN FIND MORE INFORMATION

We are a reporting company and file annual, quarterly and current reports, proxy statements and other information with the SEC. We have filed with the SEC a registration statement on Form S-3 under the Securities Act with respect to the securities we are offering under this prospectus. This prospectus does 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, we refer you to the registration statement and the exhibits and schedules filed as a part of the registration statement. You may read and copy the registration statement, as well as our reports, proxy statements and other information, at the SEC's Public Reference Room at 100 F Street, N.E., Washington, D.C. 20549. You can request copies of these documents by writing to the SEC and paying a fee for the copying cost. Please call the SEC at 1-800-SEC-0330 for more information about the operation of 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, where our SEC filings are also available. The address of the SEC's web site is "<http://www.sec.gov>." We maintain a website at www.amediacorp.com. Information contained in or accessible through our website does not constitute a part of this prospectus.

INCORPORATION BY REFERENCE

The SEC allows us to “incorporate by reference” information that we file with it into this prospectus, which means that we can disclose important information to you by referring you to those documents. The information incorporated by reference is an important part of this prospectus. The information incorporated by reference is considered to be a part of this prospectus, and information that we file later with the Commission will automatically update and supersede information contained in this prospectus and any accompanying prospectus supplement. We incorporate by reference the documents listed below that we have previously filed with the Commission:

- Our Annual Report on Form 10-K for the year ended December 31, 2014;
- Our Definitive Proxy Statement filed on Form 14A on April 13, 2015;
- Our Quarterly Report on Form 10-Q for the quarter ended March 31, 2015;
- Our Current Reports on Form 8-K filed on January 5, 2015, January 12, 2015, February 4, 2015, February 12, 2015, February 20, 2012, April 3, 2015, May 22, 2015, June 1, 2015, June 25, 2015, June 26, 2015 and July 7, 2015; and
- The description of our common stock, which is contained in the Registration Statement on Form 8-A, as filed with the SEC on February 7, 2014, including any amendment or report filed for the purpose of updating such description.

We also incorporate by reference into this prospectus additional documents that we may file with the SEC under Sections 13(a), 13(c), 14 or 15(d) of the Exchange Act, excluding, in each case, information deemed furnished and not filed until we sell all of the securities we are offering or the termination of the offering. Any statements contained in a previously filed document incorporated by reference into this prospectus is deemed to be modified or superseded for purposes of this prospectus to the extent that a statement contained in this prospectus, or in a subsequently filed document also incorporated by reference herein, modifies or supersedes that statement.

We will provide to each person, including any beneficial owner, to whom a prospectus is delivered, without charge upon written or oral request, a copy of any or all of the information that has been incorporated by reference into this prospectus but not delivered with the prospectus, including exhibits that are specifically incorporated by reference into such documents. Requests should be directed to: Amedica Corporation, Attention: Investor Relations, 1885 West 2100 South, Salt Lake City, Utah 84119 and our telephone number is (801) 839-3500.

Amedica Corporation

\$35,000,000

Common Stock, Preferred Stock,

Warrants and Units

PROSPECTUS

July 20, 2015