PROSPECTUS

AMEDICA CORPORATION

29,527,560 Shares of Common Stock

This prospectus relates to the sale, transfer or distribution of up to 29,527,560 shares of our common stock, par value \$0.01 per share, of Amedica Corporation by the selling stockholders described herein. The price at which the selling stockholders may sell the shares will be determined by the prevailing market price for the shares or in negotiated transactions.

Our common stock is listed on The NASDAQ Capital Market under the symbol "AMDA". On October 1, 2015, the closing price of our common stock was \$0.31 per share.

All of the shares of common stock offered hereby are issuable with respect to warrants issued in connection with a private placement by us consummated on September 11, 2015, including Series A Warrants and Series C Warrants (collectively, the "Warrants"). Because the number of shares underlying each of the Series A Warrants and the Series C Warrants may be adjusted in connection with an adjustment of such warrants exercise price, the number of shares that will actually be issued pursuant to the exercise of such warrants may be more or less than the number of shares being offered pursuant to this prospectus. The shares of common stock being offered for resale by the selling stockholders pursuant to this prospectus include (i) 13,123,360 shares of common stock issuable upon the exercise of the Series A Warrants and (ii) 125% of 13,123,360 shares of common stock issuable upon the exercise of the Series C Warrants. This amount represents a good faith estimate of the maximum number of shares issuable pursuant to the exercise of the Warrants.

We will not receive any proceeds from the sale or distribution of the common stock by the selling stockholders. The registration of the shares covered by this prospectus does not necessarily mean that any of the shares will be offered or sold by the selling stockholders. The timing and amount of any sale is within the respective selling stockholder's sole discretion, subject to certain restrictions. For additional information on the methods of sale, you should refer to the section entitled "Plan of Distribution" in this prospectus. The shares offered by this prospectus and any prospectus supplement may be offered by the selling stockholders directly to investors or to or through underwriters, dealers, or other agents. If any underwriters or agents are involved in the sale of any shares 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.

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

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 November 5, 2015

TABLE OF CONTENTS

ABOUT THIS PROSPECTUS 1
PROSPECTUS SUMMARY 2
RISK FACTORS 5
SPECIAL NOTE REGARDING FORWARD-LOOKING STATEMENTS 6
USE OF PROCEEDS 7
SELLING STOCKHOLDERS 8
DESCRIPTION OF CAPITAL STOCK 10
PLAN OF DISTRIBUTION 14
LEGAL MATTERS 16
EXPERTS 16
WHERE YOU CAN FIND MORE INFORMATION 16
INCORPORATION BY REFERENCE 17

ABOUT THIS PROSPECTUS

This prospectus is part of a registration statement that we filed with the Securities and Exchange Commission (the "SEC"). The prospectus relates to shares of our common stock which the selling stockholders named in this prospectus may sell from time to time. We will not receive any of the proceeds from these sales. We have agreed to pay the expenses incurred in registering these shares, including legal and accounting fees.

You should read this prospectus together with the additional information described under the heading "Where You Can Find More Information." You should rely only on the information contained or incorporated by reference in this prospectus and in any prospectus supplement or in any free writing prospectus that we may provide you. We have not, and the selling shareholders have not, authorized anyone to provide you with information different from that contained in this prospectus. We take no responsibility for, and can provide no assurance as to the reliability of, any other information that others may give you. You should not assume that the information contained in this prospectus, any prospectus supplement, any document incorporated by reference or any free writing prospectus is accurate as of any date other than the date mentioned on the cover page of these documents.

The selling stockholders are offering to sell, and seeking offers to buy, shares of our common stock only in jurisdictions where it is lawful to do so. The selling stockholders should not make an offer of these shares in any state where the offer is not permitted. Brokers or dealers should confirm the existence of an exemption from registration or effect a registration in connection with any offer and sale of these shares.

You should rely only on the information contained or incorporated by reference in this prospectus or a prospectus supplement. We have not authorized any other person to provide you with different information. If anyone provides you with different or inconsistent information, you should not rely on it. This prospectus is not an offer to sell securities, and it is not soliciting an offer to buy securities in any jurisdiction where the offer or sale is not permitted. You should assume that the information appearing in this prospectus or any prospectus supplement, as well as information we have previously filed with the SEC and incorporated by reference, is accurate as of the date on the front of those documents only. Our business, financial condition, results of operations and prospects may have changed since those dates.

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 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 use 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.

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.

Recent Developments - Registered and Unregistered Offerings

On September 8, 2015, we entered into a Securities Purchase Agreement (the "Purchase Agreement") with certain investors named therein (the "Investors"), pursuant to which the Company agreed to issue and sell, in a registered public offering by the Company directly to the Investors (the "Public Offering"), an aggregate of 13,123,360 shares of common stock of the Company, at an offering price of \$0.381 per share, and Series B Warrants to purchase 13,123,360 shares of common stock at an exercise price of \$0.47 per share, for gross proceeds of at least \$5.0 million before deducting the placement agent fee and related offering expenses. The Shares were offered by the Company pursuant to a registration statement on Form S-3 (File No. 333-205545), which was filed with the SEC on July 8, 2015, and was declared effective by the SEC on July 20, 2015.

In a concurrent private placement (the "Private Placement"), the Company agreed to issue to the Investors Series A Warrants and Series C Warrants, each exercisable for 13,123,360 shares of common stock at an exercise price of \$0.47 per share.

Stockholder approval is needed for the issuance of the shares underlying the Series B Warrants issued in the Public Offering and the shares underlying the Series C Warrants issued in the Private Placement in accordance with the requirements of The NASDAQ Listing Rules, including NASDAQ Listing Rule 5635(d) ("Stockholder Approval").

The Series A Warrants will be exercisable on the six month and one day anniversary of the date of issuance 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. If the underlying shares are not eventually registered with the SEC, the Series A Warrants will be exercisable on a cashless basis. The registration statement of which this prospectus is a part relates to the registration of the shares underlying the Series A Warrants and the Series C Warrants with the SEC.

The Series B Warrants will be exercisable after the Company receives Stockholder Approval and will remain exercisable until the Series B Termination Date. The "Series B Termination Date" means the later to occur of (i) the tenth trading day after the date the Company receives Stockholder Approval and (ii) the earlier to occur of (y) the date of Stockholder Approval and (z) December 30, 2015, provided that in the event that Stockholder Approval is not received, the Series B Warrants will terminate on the date of the failed stockholder vote.

The Series C Warrants will be exercisable on the date the Company obtains Stockholder Approval and will remain exercisable until the later to occur of (i) the sixth trading day after the Series C Trigger Date (as defined in the Series C Warrant) and (ii) the earlier to occur of (y) the date of Stockholder Approval and (z) December 30, 2015. In the event that Stockholder Approval is not received, the Series C Warrants will terminate on the date of the failed stockholder vote.

The exercisability of the Series A Warrants, the Series B Warrants and the Series C Warrants may be limited if, upon exercise, the holder or any of its affiliates would beneficially own more than 4.99% of the Company's common stock (the "Beneficial")

Ownership Limitation"). In the event a holder of the Series A Warrants, Series B Warrants or Series C Warrants is unable to fully exercise the holder's warrants due to the limitation, the holder may elect to receive a prepaid Series D Warrant rather than shares of common stock. 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. The Series D Warrants are exercisable at any time after their original issuance. 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.

The Series B Warrants and Series C Warrants will be automatically exercisable in full upon the occurrence of certain conditions, including, without limitation, obtaining the Stockholder Approval. If all conditions are satisfied, the Company anticipates receiving \$5.0 million in gross proceeds from the exercise of the Series B Warrants and an additional \$5.0 million in gross proceeds from the exercise of the Series C Warrants, in each case, before deducting the placement agent fee and related offering expenses. In addition, the Series A Warrants, Series B Warrants and Series C Warrants contain provisions that allow for the exercise price of those warrants to be decreased and for the number of shares underlying those warrants to be increased upon the occurrence of certain events.

For the complete terms of the Series A Warrants, the Series B Warrants, the Series C Warrants and the Series D Warrants, you should refer to the forms of those warrants which are filed as exhibits to the Current Report on Form 8-K filed with the SEC on September 8, 2015, which are incorporated herein by reference.

The Offering

Common stock that may be offered by the selling stockholders:

29,527,560 shares of our common stock consisting of (i) 13,123,360 shares of common stock issuable upon the exercise of the Series A Warrants and (ii) 125% of 13,123,360 shares of common stock issuable upon the exercise of the Series C Warrants.

We will not receive any of the proceeds from the sale of shares to be offered

by the selling stockholders.

Risk factors:

Use of proceeds:

Investing in our securities involves a high degree of risk. See the "Risk Factors" section of this prospectus on page 5 and in the documents we incorporate by reference in this prospectus for a discussion of factors you should consider carefully before deciding to invest in our securities.

NASDAQ Capital Market symbol:

AMDA

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, and the additional risks described below and other information in this 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 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.

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 forwardlooking statements within the meaning of Section 27A of the Securities Act of 1933, as amended (the "Securities Act") and Section 21E of the Securities and Exchange Act of 1934, as amended (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 forwardlooking 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

The shares of common stock offered by this prospectus will be sold or distributed by the selling stockholders, and the selling stockholders will receive all of the proceeds, if any, from the sales of such shares by them. We will not receive any proceeds from the sale or distribution of the common stock by the selling stockholders.

SELLING STOCKHOLDERS

The shares of our common stock being offered by the selling stockholders are those issuable to the selling stockholders upon the exercise of the Series A Warrants and the Series C Warrants following Stockholder Approval. This prospectus generally covers the resale of the shares of common stock issuable upon the exercise of the Series A Warrants and at least 125% of the maximum number of shares of common stock issuable upon the exercise of the Series C Warrants immediately preceding the date of the registration statement of which this prospectus forms a part is initially filed with the SEC. Because the number of shares underlying each of the Series A Warrants and the Series C Warrants may be adjusted in connection with an adjustment of such warrants exercise price, the number of shares that will actually be issued pursuant to the exercise of such warrants may be more or less than the number of shares being offered pursuant to this prospectus. Each of the selling stockholders may resell, from time to time, all, some or none of the shares of our common stock covered by this prospectus, as provided in this prospectus under "Plan of Distribution." However, we do not know when or in what amount the selling stockholders may offer their shares for sale under this prospectus, if any.

The following table sets forth, with respect to each selling stockholder, the name of the selling stockholder, the number of shares beneficially owned by the selling stockholder and the number of shares to be offered by the selling stockholder pursuant to this prospectus. The table also provides information regarding the beneficial ownership of our common stock with respect to each selling stockholder, as adjusted to reflect the assumed sale of all of the shares of common stock offered under this prospectus by such selling stockholder. As of September 24, 2015, 78,936,373 total shares of our common stock were issued and outstanding. Information concerning the selling stockholders may change from time to time and, if necessary, we will supplement this prospectus accordingly. In computing the number of shares of our common stock beneficially owned by a person and the percentage ownership of that person, we deemed as outstanding shares of our common stock that person has rights to acquire within 60 days of the date of this prospectus. Such shares, however, are not deemed outstanding for the purpose of computing the percentage ownership of any other person. Beneficial ownership as shown in the following table has been determined in accordance with the rules of the SEC.

Name and Address of selling stockholders	Shares Beneficially Owned Prior to This Offering		Number of Shares Offered Hereby	Shares Beneficially Owned After This Offering		
	Number		Percentage		Number	Percentage
Hudson Bay Master Fund Ltd. 777 Third Ave, 30 th Floor New York, NY 10017	4,374,453	(1)	5.5%	9,842,519 (4)	4,374,453	4.0%
Anson Investments Master Fund LP 190 Elgin Avenue George Town, Grand Cayman	4,374,453	(2)	5.5%	9,842,519 (5)	4,374,453	4.0%
Alto Opportunity Master Fund SPC 1180 Avenue of Americas, 19 th Floor New York, NY 10036	4,374,454	(3)	5.5%	9,842,522 (6)	4,374,454	4.0%

- (1) Represents 4,374,453 shares of common stock purchased by Hudson Bay Master Fund on September 11, 2015 pursuant to the Purchase Agreement. Excludes 8,748,906 shares of common stock issuable when the Series A and Series C Warrants become exercisable upon Stockholder Approval. Hudson Bay Capital Management LP, the investment manager of Hudson Bay Mater Fund Ltd., has voting and investment power over these securities. Sander Gerber is the managing member of Hudson Bay Capital GP LLC, which is the general partner of Hudson Bay Capital Management LP. Sand Gerber disclaims beneficial ownership of these securities.
- (2) Represents 4,374,453 shares of common stock purchased by Anson Investments Master Fund LP on September 11, 2015 pursuant to the Purchase Agreement. Excludes 8,748,906 shares of common stock issuable when the Series A and Series C Warrants become exercisable upon Stockholder Approval. M5V Advisors Inc and Frigate Ventures LP ("M5V" and "Frigate"), the Co-Investment Advisers of Anson Investments Master Fund LP, hold voting and dispositive power over the shares of common stock held by Anson Investments Master Fund LP. Bruce Winson is the managing member of Admiralty Advisors LLC, which is the general partner of Frigate. Moez Kassam and Adam Spears are directors of M5V. Mr. Winson, Mr. Kassam and Mr. Spears each disclaim beneficial ownership of these shares of common stock except to the extent of their pecuniary interest therein.
- (3) Represents 4,374,454 shares of common stock purchased by Alto Opportunity Master Fund on September 11, 2015 pursuant to the Purchase Agreement. Excludes 8,748,908 shares of common stock issuable when the Series A and Series C Warrants become exercisable upon Stockholder Approval. Daniel Kochav is a director of Alto Opportunity Master Fund,

- SPC and has voting and investment power over these securities. Mr. Kochav disclaims beneficial ownership of these securities.
- (4) Represents (i) 4,374,453 shares of common stock issuable when the Series A Warrant become exercisable and (ii) 125% of 4,374,453 shares of common stock issuable when the Series C Warrants become exercisable.
- (5) Represents (i) 4,374,453 shares of common stock issuable when the Series A Warrant become exercisable and (ii) 125% of 4,374,453 shares of common stock issuable when the Series C Warrants become exercisable.
- (6) Represents (i) 4,374,454 shares of common stock issuable when the Series A Warrant become exercisable and (ii) 125% of 4,374,454 shares of common stock issuable when the Series C Warrants become exercisable.

DESCRIPTION OF CAPITAL STOCK

As of the date of this prospectus, our restated 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 restated certificate of incorporation 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 restated certificate of incorporation and our 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 restated certificate of incorporation and our 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 September 24, 2015 there were 78,936,373 shares of common stock outstanding. In addition, as of September 24, 2015 there were: (i) 1,710,691 shares of common stock subject to outstanding options; (ii) no shares of common stock subject to outstanding restricted stock units; (iii) 1,444,295 shares of common stock reserved for future issuance under our Amended and Restated 2012 Equity Incentive Plan; and (iv) 42,901,818 common share purchase warrants outstanding. 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 10150 Mallard Creek Road, Suite 307, Charlotte, North Carolina 28262. 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 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 September 24, 2015, no shares of preferred stock were outstanding, and we have no current plans to issue any shares of preferred stock.

Warrants

As of September 24, 2015, there were 42,901,818 common share purchase warrants outstanding, which expire between May 2016 and December 2022. Each of these warrants entitles the holder to purchase one common share at prices ranging between \$0.38 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, 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.

Pursuant to the terms of the warrant issued to Hercules Technology on June 30, 2014, or 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, 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 unless the shares of common stock underlying the Closing Bridge Warrant are not subject to the current public information requirement under Rule 144 and are eligible for resale without volume or manner-of-sale restrictions.

Pursuant to the terms of the Unit Purchase Option the holder may require us to include the underlying shares of common stock as part of any registration of securities filed by us.

Pursuant to a registration rights agreement entered into by the Company in connection with the issuance of the Warrants, so long as the Warrants remain outstanding, there is not an effective registration statement covering the resale of the shares underlying the Warrants and the shares underlying the Warrants may not be sold pursuant to Rule 144 promulgated under the Securities Act without volume or manner-of-sale restrictions pursuant to Rule 144 and without the requirement for the Company to be in compliance with the public information requirement of Rule 144, we are required to include in any registration statement relating to an offering for our own account or for the account of others filed under the Securities Act the shares of common stock underlying the Warrants. The registration statement of which this prospectus forms a part is related to the registration of the shares of common stock underlying the Warrants.

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.

PLAN OF DISTRIBUTION

Each selling stockholder of the securities and any of their pledgees, assignees and successors-in-interest may, from time to time, sell any or all of their securities covered hereby on The NASDAQ Capital Market or any other stock exchange, market or trading facility on which the securities are traded or in private transactions. These sales may be at fixed or negotiated prices. A selling stockholder may use any one or more of the following methods when selling securities:

- ordinary brokerage transactions and transactions in which the broker-dealer solicits purchasers;
- block trades in which the broker-dealer will attempt to sell the securities as agent but may position and resell a portion of the block as principal to facilitate the transaction;
- purchases by a broker-dealer as principal and resale by the broker-dealer for its account:
- an exchange distribution in accordance with the rules of the applicable exchange;
- privately negotiated transactions;
- settlement of short sales;
- in transactions through broker-dealers that agree with the selling stockholders to sell a specified number of such securities at a stipulated price per security; through the writing or settlement of options or other hedging transactions, whether through an options exchange or otherwise; a combination of any such methods of sale; or
- any other method permitted pursuant to applicable
 law

The selling stockholders may also sell securities under Rule 144 under the Securities Act of 1933, as amended Securities Act, if available, rather than under this prospectus.

Broker-dealers engaged by the selling stockholders may arrange for other brokers-dealers to participate in sales. Broker-dealers may receive commissions or discounts from the selling stockholders (or, if any broker-dealer acts as agent for the purchaser of securities, from the purchaser) in amounts to be negotiated, but, except as set forth in a supplement to this Prospectus, in the case of an agency transaction not in excess of a customary brokerage commission in compliance with FINRA Rule 2440; and in the case of a principal transaction a markup or markdown in compliance with FINRA IM-2440.

In connection with the sale of the securities or interests therein, the selling stockholders may enter into hedging transactions with broker-dealers or other financial institutions, which may in turn engage in short sales of the securities in the course of hedging the positions they assume. The selling stockholders may also sell securities short and deliver these securities to close out their short positions, or loan or pledge the securities to broker-dealers that in turn may sell these securities. The selling stockholders may also enter into option or other transactions with broker-dealers or other financial institutions or create one or more derivative securities which require the delivery to such broker-dealer or other financial institution of securities offered by this prospectus, which securities such broker-dealer or other financial institution may resell pursuant to this prospectus (as supplemented or amended to reflect such transaction).

The selling stockholders and any broker-dealers or agents that are involved in selling the securities may be deemed to be "underwriters" within the meaning of the Securities Act in connection with such sales. In such event, any commissions received by such broker-dealers or agents and any profit on the resale of the securities purchased by them may be deemed to be underwriting commissions or discounts under the Securities Act. Each selling stockholder has informed the Company that it does not have any written or oral agreement or understanding, directly or indirectly, with any person to distribute the securities.

The Company is required to pay certain fees and expenses incurred by the Company incident to the registration of the securities. The Company has agreed to indemnify the selling stockholders against certain losses, claims, damages and liabilities, including liabilities under the Securities Act.

We agreed to keep this prospectus effective until the earlier of (i) the date on which the securities may be resold by the selling stockholders without registration and without regard to any volume or manner-of-sale limitations by reason of Rule 144, without the requirement for the Company to be in compliance with the current public information under Rule 144 under the Securities Act or any other rule of similar effect or (ii) all of the securities have been sold pursuant to this prospectus or Rule 144 under the Securities Act or any other rule of similar effect. The resale securities will be sold only through registered or

licensed brokers or dealers if required under applicable state securities laws. In addition, in certain states, the resale securities covered hereby may not be sold unless they have been registered or qualified for sale in the applicable state or an exemption from the registration or qualification requirement is available and is complied with.

Under applicable rules and regulations under the Exchange Act, any person engaged in the distribution of the resale securities may not simultaneously engage in market making activities with respect to the common stock for the applicable restricted period, as defined in Regulation M, prior to the commencement of the distribution. In addition, the selling stockholders will be subject to applicable provisions of the Exchange Act and the rules and regulations thereunder, including Regulation M, which may limit the timing of purchases and sales of the common stock by the selling stockholders or any other person. We will make copies of this prospectus available to the selling stockholders and have informed them of the need to deliver a copy of this prospectus to each purchaser at or prior to the time of the sale (including by compliance with Rule 172 under the Securities Act).

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 said 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.amedicacorp.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 SEC 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 SEC:

- 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 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, 2012, April 3, 2015, May 22, 2015, June 1, 2015, June 25, 2015, June 26, 2015 and July 7, 2015, July 22, 2015, July 23, 2015, August 20, 2015, August 25, 2015, September 8, 2015, September 9, 2015, September 11, 2015, September 18, 2015 and November 4, 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 29,527,560 Shares of Common Stock

November 5, 2015