

ENDOLOGIX INC /DE/
 Form 424B5
 April 02, 2019
Table of Contents

Filed Pursuant to Rule 424(b)(5)
 Registration No. 333-225320

PROSPECTUS SUPPLEMENT

(To Prospectus dated August 3, 2018)

7,889,552 Shares

Common Stock

We are offering 7,889,552 shares of our common stock directly to certain institutional investors pursuant to this prospectus supplement and the accompanying prospectus. Each share of our common stock is being sold at a purchase price of \$6.61 per share.

We are also offering to those purchasers, whose purchase of shares of common stock in this offering would result in the purchaser, together with its affiliates and certain related parties, beneficially owning more than 19.99% of our outstanding common stock following the consummation of this offering, the opportunity to purchase, in lieu of the shares of our common stock that would result in ownership in excess of 19.99%, pre-paid warrants to purchase up to 1,467,494 shares of our common stock. Each pre-paid warrant is being sold at an exercise price of \$6.61 per share. This prospectus also relates to the offering of the shares of common stock issuable upon exercise of these pre-funded warrants.

Our common stock trades on The Nasdaq Global Select Market under the symbol ELGX. On March 29, 2019, the last sale price of the common stock reported on The Nasdaq Global Select Market was \$6.61 per share.

	Per Share	Per Pre-Paid Warrant	Total
Public offering price	\$ 6.61	\$ 6.61	\$ 52,150,000
Proceeds, before expenses, to us	\$ 6.61	\$ 6.61	\$ 52,150,000

Certain of our executive officers and directors will purchase an aggregate of \$550,000 of our common stock in this offering.

Investing in our common stock involves a high degree of risk. Please read Risk Factors beginning on page S-9 of this prospectus supplement, on page 4 of the accompanying prospectus and in the documents incorporated by reference into this prospectus supplement.

Neither the Securities and Exchange Commission, or the SEC, nor any state securities commission has approved or disapproved of these securities or determined if this prospectus supplement or the accompanying prospectus, or determined if this prospectus supplement or accompanying prospectus is truthful or complete. Any representation to the contrary is a criminal offense.

Delivery of the shares of our common stock is expected to be made on or about April 3, 2019 through the book-entry facilities of the Depository Trust Company.

The date of this prospectus supplement is March 31, 2019.

Table of Contents

TABLE OF CONTENTS

Prospectus Supplement

	Page
<u>ABOUT THIS PROSPECTUS SUPPLEMENT</u>	S-ii
<u>CAUTIONARY NOTE REGARDING FORWARD-LOOKING STATEMENTS</u>	S-iv
<u>SUMMARY</u>	S-1
<u>RISK FACTORS</u>	S-9
<u>USE OF PROCEEDS</u>	S-10
<u>DILUTION</u>	S-11
<u>DESCRIPTION OF THE SECURITIES WE ARE OFFERING</u>	S-13
<u>LEGAL MATTERS</u>	S-15
<u>EXPERTS</u>	S-15
<u>WHERE YOU CAN FIND MORE INFORMATION</u>	S-15
<u>INCORPORATION OF CERTAIN INFORMATION BY REFERENCE</u>	S-16
PROSPECTUS	

	Page
<u>ABOUT THIS PROSPECTUS</u>	1
<u>SPECIAL NOTE REGARDING FORWARD-LOOKING INFORMATION</u>	2
<u>ABOUT THE COMPANY</u>	3
<u>RISK FACTORS</u>	4
<u>USE OF PROCEEDS</u>	5
<u>THE SECURITIES WE MAY OFFER</u>	6
<u>DESCRIPTION OF CAPITAL STOCK</u>	7
<u>DESCRIPTION OF WARRANTS</u>	10
<u>DESCRIPTION OF UNITS</u>	11
<u>PLAN OF DISTRIBUTION</u>	12
<u>LEGAL MATTERS</u>	14
<u>EXPERTS</u>	14
<u>INCORPORATION OF CERTAIN DOCUMENTS BY REFERENCE</u>	15
<u>WHERE YOU CAN FIND MORE INFORMATION</u>	17

We have not authorized anyone to provide any information or to make any representations other than those contained or incorporated by reference in this prospectus supplement or the accompanying prospectus. We take no responsibility for, and can provide no assurance as to the reliability of, any other information that others may give you. This prospectus supplement and the accompanying prospectus together constitute an offer to sell only the securities offered hereby, but only under circumstances and in jurisdictions where it is lawful to do so. The information contained in this prospectus supplement and the accompanying prospectus is current only as of its date. Our business, financial condition, results of operations and prospects may have changed since those dates. You should read this prospectus supplement, the accompanying prospectus and the documents incorporated by reference herein and therein when making your investment decision. You should also read and consider the information in the documents we have referred you to in the section of the accompanying prospectus entitled **Incorporation of Certain Information by Reference**.

S-i

Table of Contents

ABOUT THIS PROSPECTUS SUPPLEMENT

This prospectus supplement and the accompanying prospectus form part of a registration statement on Form S-3 that we filed with the SEC utilizing a shelf registration process. This document contains two parts. The first part consists of this prospectus supplement, which provides you with specific information about this offering. The second part, the accompanying prospectus, provides more general information, some of which may not apply to this offering. Generally, when we refer only to the prospectus, we are referring to both parts combined. This prospectus supplement may add, update or change information contained in the accompanying prospectus. To the extent that any statement we make in this prospectus supplement is inconsistent with statements made in the accompanying prospectus or any documents incorporated by reference herein or therein, the statements made in this prospectus supplement will be deemed to modify or supersede those made in the accompanying prospectus and such documents incorporated by reference herein and therein. You should read this prospectus supplement and the accompanying prospectus, including the information incorporated by reference herein and therein.

You should rely only on the information that we have included or incorporated by reference in this prospectus supplement and the accompanying prospectus. 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 supplement or the accompanying prospectus. You must not rely upon any information or representation not contained or incorporated by reference in this prospectus supplement or the accompanying prospectus. This prospectus supplement and the accompanying 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 does this prospectus supplement or the accompanying 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 supplement or the accompanying 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 herein or therein is correct on any date subsequent to the date of the document incorporated by reference, even though this prospectus supplement or accompanying prospectus is delivered, or securities are sold, on a later date.

Unless otherwise mentioned or unless the context requires otherwise, all references in this prospectus supplement to the terms Endologix, Company, we, our, and us or similar references refer to Endologix, Inc. and our consolidated subsidiaries.

This prospectus supplement contains or incorporates by reference 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 or will be filed or have been or will be incorporated by reference as exhibits to the registration statement of which this prospectus supplement forms apart, and you may obtain copies of those documents as described in this prospectus supplement under the heading Where You Can Find More Information.

TRADEMARKS AND TRADE NAMES

We own or have rights to trademarks or trade names that we use in conjunction with the operation of our business. Each trademark, trade name or service mark of any other company appearing in this prospectus or any accompanying prospectus supplement belongs to its holder. Use or display by us of other parties' trademarks, trade names or service marks is not intended to and does not imply a relationship with, or endorsement or sponsorship by us of, the trademark, trade name or service mark owner.

Table of Contents

INDUSTRY AND MARKET DATA

We obtained the industry, market and competitive position data in this prospectus supplement from our own internal estimates and research as well as from industry and general publications and research surveys and studies conducted by third parties. While we believe that each of these studies and publications is reliable, we have not independently verified market and industry data from third-party sources. In addition, while we believe our internal company research is reliable and the market definitions we use are appropriate, neither our internal research nor these definitions have been verified by any independent source.

S-iii

Table of Contents

CAUTIONARY NOTE REGARDING FORWARD-LOOKING STATEMENTS

This prospectus supplement, the accompanying prospectus and the documents incorporated by reference herein and therein, contain forward-looking statements within the meaning of the federal securities laws. These forward-looking statements are intended to qualify for the safe harbor from liability established by the Private Securities Litigation Reform Act of 1995. All statements other than statements of historical fact included in this prospectus supplement, the accompanying prospectus or the documents incorporated by reference herein or therein, are forward looking statements.

Our forward-looking statements are based on our management's current assumptions and expectations of future events and trends, which affect or may affect our business, strategy, operations or financial performance. Although we believe these forward-looking statements are based upon reasonable assumptions, they are subject to numerous known and unknown risks and uncertainties and are made in light of information currently available to us. Many important factors, in addition to the factors described in this prospectus supplement, may materially and adversely affect our results as indicated in our forward-looking statements. You should read this prospectus supplement, the accompanying prospectus and the documents we incorporate by reference herein and therein, completely and with the understanding that our actual future results may be materially different from and worse than what we expect.

Moreover, we operate in an evolving environment. New risk factors and uncertainties emerge from time to time and it is not possible for our management to predict all risk factors and uncertainties, nor can we assess the impact of all factors on our business or the extent to which any factor, or combination of factors, may cause actual results to differ materially from those contained in any forward-looking statements. Actual results could differ materially from those projected in forward-looking statements as a result of the following factors, among others:

continued market acceptance, use and endorsement of our products;

quality control problems with our products;

consolidation in the health care industry;

the success of our clinical trials relating to products under development;

our ability to grow and maintain strong relationships with certain key physicians;

continued growth in the number of patients qualifying for treatment of abdominal aortic aneurysms through our products;

our ability to effectively compete with the products offered by our competitors;

the level and availability of third party payor reimbursement for our products;

our ability to effectively develop new or complementary products and technologies;

our ability to manufacture our endovascular systems to meet demand;

our ability to grow product revenues;

changes to our international operations, including currency exchange rate fluctuations;

our ability to effectively manage our business and keep pace with our anticipated growth;

S-iv

Table of Contents

our ability to develop and retain a direct sales force in the United States and select European countries;

the nature of and any changes to domestic and foreign legislative, regulatory and other legal requirements that apply to us, our products, our suppliers and our competitors;

the timing of and our ability to obtain and maintain any required regulatory clearances and approvals;

our ability to protect our intellectual property rights and proprietary technologies;

our ability to operate our business without infringing the intellectual property rights and proprietary technology of third parties;

product liability claims;

pending and future litigation;

reputational damage to our products caused by the use, misuse or off-label use of our products or government or voluntary recalls of our products;

our utilization of single source suppliers for specialized components of our product lines;

our ability to attract, retain, and motivate qualified personnel;

our ability to make future acquisitions and successfully integrate any such future-acquired businesses;

our ability to maintain adequate liquidity to fund our operational needs and research and developments expenses;

our ability to identify and manage risks; and

general macroeconomic and world-wide business conditions.

Forward-looking statements speak only as of the date they were made, and, except to the extent required by law or the rules of The Nasdaq Global Select Market, we undertake no obligation to update or review any forward-looking statement because of new information, future events or other factors. You should, however, review the risks and uncertainties we describe in the reports we will file from time to time with the SEC, after the date of this prospectus

supplement. For more detailed information about the risks and uncertainties that could cause actual results to differ materially from those implied by, or anticipated in, these forward-looking statements, please refer to the section titled **Risk Factors** herein, as well as to the section titled **Risk Factors** in our Annual Report for the year ended December 31, 2018 on Form 10-K and subsequent updates that may be contained in the Company's Quarterly Reports on Form 10-Q and current reports on Form 8-K on file with the SEC. See the information included under the heading **Where You Can Find More Information**.

Forward-looking statements involve risks and uncertainties and are not guarantees of future performance. As a result of the risks and uncertainties described above, the forward-looking statements discussed in this prospectus supplement might not occur and our future results and performance may differ materially from the information provided in these forward-looking statements due to, but not limited to, the factors mentioned above. Because of these uncertainties, you should not place undue reliance on these forward-looking statements when making an investment decision in us.

We qualify all of our forward-looking statements by these cautionary statements.

S-v

Table of Contents

SUMMARY

This summary highlights information contained in other parts of this prospectus supplement. Because it is only a summary, it does not contain all of the information that you should consider before investing in shares of our common stock and it is qualified in its entirety by, and should be read in conjunction with, the more detailed information appearing elsewhere in this prospectus supplement, the accompanying prospectus, and the documents incorporated by reference herein and therein. You should read all such documents carefully, especially the risk factors and our financial statements and the related notes included or incorporated by reference herein or therein, before deciding to buy shares of our common stock. Unless the context requires otherwise, references in this prospectus to Endologix, the Company, we, us and our refer to Endologix, Inc. and our consolidated subsidiaries.

Our Business

We develop, manufacture, market and sell innovative medical devices for the treatment of aortic disorders. Our products are intended for the minimally invasive endovascular treatment of abdominal aortic aneurysms (AAA). Our AAA products are built on one of two platforms:

Traditional minimally-invasive endovascular aneurysm repair (EVAR); and

Endovascular aneurysm sealing (EVAS), our innovative solution for sealing the aneurysm sac while maintaining blood flow.

Our current EVAR products include the AFX[®] Endovascular AAA System (the AFX System), the VELA[®] Proximal Endograft (VELA) and the Ovation[®] Abdominal Stent Graft System (the Ovation System). Our current EVAS product is the Nellix[®] Endovascular Aneurysm Sealing System (the Nellix EVAS System). We sell our products through a direct sales force in the United States and internationally through a combination of direct sales and a network of third party distributors and agents.

Endologix[®], AFX[®], Duraply[®], VELA[®], IntuiTrak[®], ActiveSeal[®], Nellix[®], Ovation[®], Ovation Prime[®], Ovation Alto[®], and CustomSeal[®] are registered trademarks of Endologix, Inc. or its subsidiaries. The Nellix EVAS System and Ovation Alto[®] Abdominal Stent Graft System (the Ovation Alto), our next generation Ovation System device, are approved as investigational devices only and are not currently approved for commercial purposes in any market.

Market Overview and Opportunity

We estimate the global endovascular AAA market potential was \$3.2 billion in 2018. Of this amount, we estimate the traditional aneurysm market potential, encompassing aneurysms with aortic neck length greater than or equal to 10mm, was approximately \$1.8 billion. The majority of diagnosed aneurysms in this market can be treated with currently available EVAR products. We estimate that an approximately \$1.4 billion market opportunity exists for the treatment of complex anatomies, defined as aneurysms with neck lengths less than 10mm. Currently, there are limited options among available EVAR products to treat these short or no neck aortic aneurysms.

Table of Contents**Recent Developments***Convertible Note Exchange*

In connection with this offering, we entered into an exchange agreement (the *Exchange Agreement*) with certain holders (the *Holders*) providing for the exchange of the *Holders* existing notes (the *Existing Notes*) for new 5.00% Voluntary Convertible Senior Notes due 2024 (the *New Voluntary Notes*) and new 5.00% Mandatory Convertible Senior Notes due 2024 (the *New Mandatory Notes*), and together with the *New Voluntary Notes*, the *New Notes*). The exchanging *Holders* will receive \$900 principal amount of *New Notes* for every \$1000 principal amount of *Existing Notes* plus accrued interest exchanged pursuant to the *Exchange Agreement* (the *Exchange*). We will issue \$25.0 million of principal amount of the *New Mandatory Notes* and \$42.02 million of principal amount of the *New Voluntary Notes* to the *Holders*.

The *New Voluntary Notes* and *New Mandatory Notes* will be governed by separate Indentures (respectively, the *New Voluntary Notes Indenture* and *New Mandatory Notes Indenture*), and collectively, the *Indentures*). The *New Notes* will accrue interest at a rate of 5.00% per year, payable semi-annually in arrears on April 1 and October 1 of each year, commencing October 1, 2019. The *New Notes* will mature on the anniversary of the *Closing Date* in 2024, unless earlier purchased, redeemed or converted in accordance with the terms of the *Indenture*. The *Indentures* governing the *New Notes* will contain customary terms and covenants and events of default.

The *New Voluntary Notes* will be convertible at the option of each *Holder* into shares of common stock at any time on or after July 1, 2020, but prior to the close of business on the business day immediately preceding January 1, 2024, provided that, except if we undergo a fundamental change (as defined in the *New Voluntary Notes Indenture*) and for certain other customary circumstances of conversion, each *Holder* may not convert more than 30% the initial aggregate principal amount of his or her outstanding *New Voluntary Notes* per calendar quarter (a *Voluntary Conversion*). Thereafter, until the close of business on the business day immediately preceding the maturity date, the *New Voluntary Notes* will be convertible at the option of the holder at any time regardless of the conditions described in this paragraph. The initial conversion rate of the *New Voluntary Notes* in a *Voluntary Conversion* is 0.12103 shares of our common stock per \$1.00 principal amount of the *New Notes* (the *Voluntary Conversion Price*), which is equivalent to an initial conversion price per share equal to 125% of \$6.61. The conversion rate is subject to adjustment upon the occurrence of certain specified events. Except if we undergo a fundamental change (as defined in the *New Voluntary Notes Indenture*) and for certain other customary circumstances of conversion, in no event prior to the close of business on the business day immediately preceding January 1, 2024 may the *New Voluntary Notes* be converted in a calendar quarter unless the closing sale price of our common stock for at least twenty trading days during the period of thirty consecutive trading days ending on the last trading day of the immediately preceding calendar quarter is greater than or equal to 110% of the \$6.61 (subject to adjustment upon the occurrence of certain specified events) (the *Voluntary Conversion Threshold*).

The *New Mandatory Notes* provide for the mandatory conversion (a *Mandatory Conversion*) of \$1,666,666 of the aggregate principal amount each calendar month for fifteen consecutive months beginning on the calendar month beginning with May 1, 2019, if and only if at the end of the prior calendar month the trailing average volume weighted average price (*VWAP*) of the last five trading days of the prior calendar month is greater than 100% of \$6.61. In the event of a *Mandatory Conversion*, \$1,666,666 of the *New Mandatory Notes* would mandatorily convert at a conversion rate of 0.15129 shares of our common stock per \$1.00 principal amount of the *New Notes*, which is equivalent to a price per share equal to \$6.61. The *New Mandatory Notes* will be convertible at the

S-2

Table of Contents

option of each Holder into shares of common stock at the Voluntary Conversion Price at any time prior to the close of business on the business day immediately preceding January 1, 2024, provided that, except if we undergo a fundamental change (as defined in the New Mandatory Notes Indenture) and for certain other customary circumstances of conversion, each Holder may not convert more than 30% of the initial aggregate principal amount of his or her outstanding New Mandatory Note per calendar quarter, and provided further, that (i) voluntary conversions may be effected only if the Voluntary Conversion Threshold has been achieved and (ii) a voluntary conversion may not take place in the same calendar quarter as a Mandatory Conversion. Thereafter, until the close of business on the business day immediately preceding the maturity date, the New Mandatory Notes will be convertible at the option of the holder at any time regardless of the conditions described in this paragraph.

The Indentures will provide that in no event may a Holder convert, whether in a Voluntarily Conversion or a Mandatory Conversion or otherwise, into shares of common stock if such conversion would result in the Holder beneficially owning more than 9.5% of our outstanding common stock.

Second Amendment to Facility Agreement

In connection with this offering, we entered into a Second Amendment to Amended and Restated Facility Agreement and First Amendment to Amended and Restated Guaranty and Security Agreement (the Facility Amendment) with Deerfield Private Design Fund IV, L.P. and certain of its related funds and affiliates (collectively, Deerfield), dated August 9, 2018, as amended by that certain First Amendment to Amended and Restated Facility Agreement, dated November 20, 2018 (as so amended, the Facility Agreement). The Facility Amendment provides for, among other things, the reduction in the global excess liquidity covenant from \$22.5 million to \$17.5 million and the reduction of the minimum net revenue financial covenants. In addition, the percentage of the \$120.0 million of first out waterfall loans (the First Out Waterfall Loans) due on April 2, 2021 decreased from 33.33% to 16.67% of the First Out Waterfall Loans outstanding on such date, while the percentage of the remainder of the First Out Water Fall Loans due on April 2, 2022 remained at 50% of the First Out Waterfall Loans outstanding on such date.

The Facility Agreement provides for the exchange of the existing notes representing the First Out Waterfall Loans for amended notes (the First Out Waterfall Notes) that provide that in the event that, in any calendar month beginning April 1, 2019 and ending June 30, 2020 (the Mandatory Conversion Period), if (A)(i) the arithmetic mean of the VWAP on the five consecutive trading days ending on the 15th calendar day (or, if not a trading day, the first trading day thereafter) (the Mandatory Conversion Measurement Date) and (ii) the closing price our common stock on the Mandatory Conversion Measurement Date, both exceed \$6.625 (as may be adjusted to reflect certain events) (the Fixed Conversion Price) and (B)(i) the VWAP on the five (5) consecutive trading days ending on (and including) the third (3rd) trading day immediately prior to the Mandatory Conversion Measurement Date (the Initial Mandatory Conversion Measurement Date) and (ii) the closing price for our common stock on the Initial Mandatory Conversion Measurement Date both exceed the Fixed Conversion Price, Deerfield shall be obligated to convert \$1,666,666 of the principal amount of the loan into shares of common stock at the Fixed Conversion Price, up to a maximum aggregate amount of \$25.0 million over the Mandatory Conversion Period.

Deerfield also has the option to convert up to an additional \$50.0 million of our outstanding debt (the Voluntary Conversion Amount) at the greater of the Fixed Conversion Price and 85% of the arithmetic average of the volume weighted average price of our common stock on each of the fifteen consecutive trading days prior to the conversion date (the 15 Day VWAP). We have the option to require conversion of the Voluntary Conversion Amount (less the amount of prior voluntary

S-3

Table of Contents

conversions) if our 15 Day VWAP is greater than 175% of the Fixed Conversion Price. The First Amendment Waterfall Notes also provide that in no event may Deerfield convert, whether voluntarily or mandatorily, into shares of common stock if such conversion would result in Deerfield beneficially owning more than 4.985% of our outstanding common stock. The First Out Waterfall Notes also revises Deerfield's existing right to convert a portion of the outstanding principal amount of the first-out waterfall loan into a maximum of 1,430,000 shares of our common stock from the current conversion price of 96% of the arithmetic average of the volume weighted average price of our common stock on each of the three (3) consecutive trading days prior to the conversion date (the 96% VWAP Price) to the greater of (i) \$6.625 (subject to certain adjustments) or (ii) the 96% VWAP Price.

Further, the Facility Amendment also provides, upon the effectiveness, for an increase of \$5,000,000 in the amounts payable to the holders of the First Out Waterfall Notes as a fee upon termination (or reduction, or required reduction, of the outstanding amounts under the First Out Waterfall Notes to less than \$10,000,000) under the Facility Agreement and to reimburse Deerfield for all expenses incurred by Deerfield in connection with the negotiation and documentation of the Facility Amendment. Also, our existing right to satisfy interest payments on the First Out Waterfall Loans with up to 250,000 shares of its common stock has been removed.

The Facility Amendment is conditioned upon completion of the Financing with gross proceeds to us of at least \$40.0 million and the closing of the transactions contemplated by the Exchange Agreement, amongst other conditions.

In connection with entry into the Facility Amendment, we are amending warrants to purchase 647,001 shares of common stock previously issued to Deerfield pursuant to our prior facility agreement with Deerfield dated, April 3, 2017 (as amended, the 2017 Warrants) and warrants to purchase 875,001 shares of common stock previously issued to Deerfield pursuant to the Facility Agreement (as amended, the 2018 Warrants) and, together with the 2017 Warrants, the Warrants) in order to reduce the exercise price of the Warrants to the Equity Offering Price. All other material terms and conditions of the Warrants remain the same. Accordingly, the Facility Amendment is expected to become effective on or about April 3, 2019.

Second Amendment to Credit Agreement

In connection with this offering, we entered into a Second Amendment to Credit Agreement and First Amendment to Guaranty and Security Agreement (the Credit Amendment) with Deerfield ELGX Revolver, LLC and certain of its affiliates, dated August 9, 2018, as amended by that certain First Amendment to Credit Agreement, dated November 20, 2018 (as so amended, the Credit Agreement). The Credit Amendment includes conforming revisions to reflect the changes in the Facility Amendment. In addition, the Credit Amendment extends the maturity date of the Credit Agreement to the earlier of (i) April 2, 2023 or (ii) the date the loans pursuant to the Facility Agreement have been repaid in full.

Corporate Information

We were incorporated in California in March 1992 under the name Cardiovascular Dynamics, Inc. and reincorporated in Delaware in June 1993. In January 1999, we merged with Radiance Medical Systems, Inc. and changed our name to Radiance Medical Systems, Inc., which was a privately-held corporation. In May 2002, we merged with Endologix, Inc., which was a privately held corporation, and changed our name to Endologix, Inc. Our main offices are located at 2 Musick, Irvine, California 92618, and our telephone number is (949) 595-7200. Additional information about Endologix, Inc. and our

S-4

Table of Contents

products is available through our website at www.endologix.com. The information contained on or accessed through our website is not incorporated by reference into this prospectus supplement, other than the documents that we file with the SEC that are expressly incorporated by reference into this prospectus supplement, and you should not consider information contained on our website to be a part of this prospectus supplement or in deciding whether to purchase our securities. References in this prospectus supplement to our website are to inactive textual references only.

S-5

Table of Contents**The Offering**

Common stock offered by us in this offering	7,889,552 shares of our common stock.
Offering price per share of common stock	\$6.61
Pre-paid warrants offered by us in this offering	Pre-paid warrants to purchase up to 1,467,494 shares of our common stock. Each pre-paid warrant will be exercisable upon issuance and will expire ten years from the date of issuance. Pre-paid warrants are being offered to those purchasers, whose purchase of shares of common stock in this offering would result in the purchaser, together with its affiliates and certain related parties, beneficially owning more than 19.99% of our outstanding common stock following the consummation of this offering. In lieu of the shares of our common stock that would result in ownership in excess of 19.99%, such purchasers are purchasing warrants to purchase such excess shares of our common stock. This prospectus also relates to the offering of the shares of common stock issuable upon exercise of these pre-funded warrants.
Offering price per pre-paid warrant	\$6.61
Common stock outstanding immediately after this offering	16,767,425 shares, assuming none of the pre-paid warrants issued in connection with this offering are exercised.
Use of proceeds	We estimate that our net proceeds from this offering will be approximately \$51.1 million after deducting estimated expenses for this offering and the related restructuring transactions payable by us. We intend to use the net proceeds of this offering for general corporate purposes, including manufacturing expenses, clinical trial expenses, research and development expenses, sales and marketing expenses, general and administrative expenses. See <i>Use of Proceeds</i> .

Table of Contents

Risk factors	You should read the <i>Risk Factors</i> section beginning on page S-9 of this prospectus supplement, page 4 of the accompanying prospectus and the documents incorporated by reference into this prospectus supplement for a discussion of factors to consider carefully before deciding to invest in shares of our common stock.
Insider participation	Certain of our executive officers and directors will purchase an aggregate of \$550,000 of our common stock in this offering.
Listing	Our common stock is listed on the Nasdaq Global Select Market under the symbol ELGX. The shares of our common stock offered hereby and the shares of our common stock issuable upon exercise of the pre-paid warrants will be listed on the Nasdaq Global Select Market. We do not intend to list the pre-paid warrants on the Nasdaq Global Market, any other national securities exchange or any other nationally recognized trading system.

The number of shares of our common stock to be outstanding after this offering is based on 10,345,367 shares of our common stock outstanding as of December 31, 2018 and excludes:

1,525,510 shares of our common stock issuable upon the exercise of outstanding warrants to purchase shares our common stock;

Up to 333,149 shares that we may be required to issue to the former stockholders of Nellix, Inc. (Nellix), as contingent consideration pursuant to the terms of the merger agreement with Nellix and the other parties thereto;

755,695 shares initially issuable in connection with conversion of our outstanding convertible senior notes; and

1,315,360 shares of our common stock issuable upon exercise of outstanding options, 422,720 shares of our common stock issuable upon the settlement of restricted stock units, and 504,543 shares of our common stock that are reserved for future grant or issuance under our equity incentive plans.

S-7

Table of Contents

Our option holders and warrant holders may exercise the above-referenced options and warrants in the future or we may make future grants under the above-referenced plans. In addition, we may choose to raise additional capital through the sale of equity or convertible debt securities due to market conditions or strategic considerations, even if we believe we have sufficient funds for our current or future operating plans. To the extent that any of these options or warrants are exercised, new options or shares of our common stock are issued under the above-referenced plans, or we issue additional shares of our common stock or other equity securities in the future, there will be further dilution to investors purchasing in this offering.

S-8

Table of Contents

RISK FACTORS

*An investment in our common stock involves a high degree of risk. Before deciding whether to invest in our common stock, you should carefully consider the risks described below and those discussed under the Sections captioned **Risk Factors** contained in our Annual Report on Form 10-K for the year ended December 31, 2018, which is incorporated by reference in this prospectus supplement and the accompanying prospectus, together with other information in this prospectus supplement, the accompanying prospectus, and the information and documents incorporated by reference herein and therein. If any of these risks actually occurs, our business, financial condition, results of operations or cash flow could be seriously harmed. This could cause the trading price of our common stock to decline, resulting in a loss of all or part of your investment.*

Risks Related to This Offering

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

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

You will experience immediate and substantial dilution in the net tangible 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 net tangible book deficit per share of our common stock, you will suffer immediate and substantial dilution in the net tangible book value of the common stock you purchase in this offering. As of December 31, 2018, our net tangible book deficit was approximately \$(157.4) million, or \$(15.21) per share. Based on an offering price of \$6.61 per share of common stock offered hereby, and our net tangible book deficit as of December 31, 2018, if you purchase securities in this offering, you will suffer immediate and substantial dilution of \$(12.43) per share with respect to the net tangible book value of the common stock.

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

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

In addition, the sale of shares in this offering and any future sales of a substantial number of shares of our common stock in the public market, or the perception that such sales may occur, could adversely affect the price of our common stock. We cannot predict the effect, if any, that market sales of those shares of our common stock, or the perception that those shares may be sold, will have on the market price of our common stock.

Table of Contents

USE OF PROCEEDS

We estimate that the net proceeds from the sale of the securities offered under this prospectus supplement, after deducting estimated expenses for this offering and the related restructuring transactions payable by us, will be approximately \$51.1 million. We intend to use the net proceeds from this offering for general corporate purposes, including manufacturing expenses, clinical trial expenses, research and development expenses, sales and marketing expenses, general and administrative expenses. We may also use a portion of the net proceeds to acquire or invest in complementary businesses, products and technologies. Although we have no specific agreements, commitments or understandings with respect to any acquisition, we evaluate acquisition opportunities and engage in related discussions with other companies from time to time. As of the date of this prospectus supplement, we cannot specify with certainty all of the particular uses of the proceeds, if any, from this offering. Accordingly, we will retain broad discretion over the use of any such proceeds. Pending the use of the net proceeds, from this offering as described above, we intend to invest the net proceeds in investment-grade, interest-bearing instruments.

Investors are cautioned that the proceeds from this offering are expected to be sufficient to enable us to continue operations for only a short period of time. We expect that we will have to raise additional capital through the sale of additional equity or debt securities, including debt securities that may be convertible into equity securities. It may be difficult for us to raise additional funds when needed and on favorable terms, or at all.

Table of Contents**DILUTION**

If you invest in our common stock in this offering, your ownership interest will be immediately diluted to the extent of the difference between the public offering price per share and the as adjusted net tangible book value per share after this offering. As of December 31, 2018, our net tangible book value was \$(157.4) million, or \$(15.21) per share. Net tangible book value per share represents our total tangible assets less our total liabilities (excluding deferred revenue), divided by the number of shares outstanding.

After giving effect to the issuance and sale by us of 7,889,552 shares of our common stock in this offering at \$6.61 per share, and after deducting estimated expenses for this offering and the related restructuring transactions payable by us, our as adjusted net tangible book value as of December 31, 2018 would have been \$(106.2) million, or \$(5.82) per share.

This amount represents an immediate increase in net tangible book value of \$9.39 per share to our existing stockholders and immediate dilution in net tangible book value of \$(12.43) per share to new investors purchasing shares in this offering. We determine dilution by subtracting the as adjusted net tangible book value per share after this offering from the price per share paid by an investor in this offering.

The following table illustrates this dilution.

Offering price per share		\$ 6.61
Net tangible book value per share as of December 31, 2018		\$(15.21)
Increase in net tangible book value per share attributable to this offering		9.39
As adjusted net tangible book value per share after this offering		\$(5.82)
Dilution per share to new investors in this offering		\$(12.43)

The number of shares of our common stock to be outstanding after this offering is based on 10,345,367 shares of our common stock outstanding as of December 31, 2018, which amount includes shares issuable upon exercise of the pre-paid warrants and excludes:

1,525,510 shares of our common stock issuable upon the exercise of outstanding warrants to purchase shares our common stock;

Up to 333,149 shares that we may be required to issue to the former stockholders of Nellix, Inc. (Nellix), as contingent consideration pursuant to the terms of the merger agreement with Nellix and the other parties thereto;

755,695 shares initially issuable in connection with conversion of our outstanding convertible senior notes; and

1,315,360 shares of our common stock issuable upon exercise of outstanding options, 422,720 shares of our common stock issuable upon the settlement of restricted stock units, and 504,543 shares of our

common stock that are reserved for future grant or issuance under our equity incentive plans.

S-11

Table of Contents

Our option holders and warrant holders may exercise the above-referenced options and warrants in the future or we may make future grants under the above-referenced plans. In addition, we may choose to raise additional capital through the sale of equity or convertible debt securities due to market conditions or strategic considerations, even if we believe we have sufficient funds for our current or future operating plans. To the extent that any of these options or warrants are exercised, new options or shares of our common stock are issued under the above-referenced plans, or we issue additional shares of our common stock or other equity securities in the future, there will be further dilution to investors purchasing in this offering.

S-12

Table of Contents

DESCRIPTION OF THE SECURITIES WE ARE OFFERING

Common Stock

See Description of Capital Stock on page 7 of the accompanying prospectus for a description of the material terms of our common stock.

Pre-Paid Warrant

The following brief summary of the material terms and provisions of the pre-paid warrants is subject to, and qualified in its entirety by, the form of pre-paid warrant.

Exercisability. Each pre-paid warrant will be immediately exercisable and will expire ten years from the date of issuance. The pre-paid warrants will be exercisable, at the option of each holder, in whole or in part by delivering to us a duly executed exercise notice for the number of shares of our common stock indicated upon such exercise.

Exercise Price. Each pre-paid warrant represents the right to receive one share of common stock. The pre-paid warrants will have an exercise price equal to price per share of our common stock being sold in this offering. The exercise price of the pre-paid warrant will be pre-paid to the Company on or prior to the initial issuance date and, consequently, no additional consideration will be required to be paid by the holder to any person to effect any exercise of the pre-paid. Subject to limited exceptions, a holder of pre-paid warrants will not have the right to exercise any portion of the pre-paid warrant to the extent that, after giving effect to the exercise, the holder, together with its affiliates, would beneficially own in excess of 19.99% of the number of shares of our common stock outstanding immediately after giving effect to its exercise.

Fundamental Transactions. In the event we effect certain mergers, consolidations, sales of substantially all of our assets, tender or exchange offers, recapitalization, reclassification or share exchange in which our common stock is effectively converted into or exchanged for other securities, cash or property, we consummate a business combination in which another person acquires 50% of the outstanding shares of our common stock, or any person or group becomes the beneficial owner of 50% of the aggregate ordinary voting power represented by our issued and outstanding common stock, then, upon any subsequent exercise of the pre-paid warrants, the holders of pre-paid warrants will have the right to receive any shares of the acquiring corporation or other consideration it would have been entitled to receive if it had been a holder of the number of shares of common stock then issuable upon exercise in full of the pre-paid warrants. Upon the consummation of such a transaction, the successor entity shall succeed to, and be substituted for and may exercise every right and power of the Company and shall assume all of the obligations of the Company under the pre-paid warrant.

Transferability. Subject to applicable laws, a holder may transfer a pre-paid warrant upon surrender of the pre-paid warrant to us with a completed and signed assignment in the form attached to the pre-paid warrant. The transferring holder will be responsible for any tax that liability that may arise as a result of the transfer.

Exchange Listing. There is no established public trading market for the pre-paid warrants, and we do not expect a market to develop. In addition, we do not intend to apply for listing of the pre-paid warrants on any securities exchange or recognized trading system.

Table of Contents

Rights as Stockholder. Except as set forth in the pre-paid warrant, the holder of a pre-paid warrant, solely in such holder's capacity as a holder of a pre-paid warrant, will not be entitled to vote, to receive dividends, or to any of the other rights of our stockholders.

Amendments and Waivers. The provisions of each pre-paid warrant may be modified or amended or the provisions thereof waived with the written consent of us and the holder.

S-14

Table of Contents

LEGAL MATTERS

The validity of the securities being offered by this prospectus supplement will be passed upon for us by DLA Piper LLP (US), San Diego, California. Certain attorneys affiliated with DLA Piper LLP (US) collectively own an aggregate of 15,128 shares of our common stock.

EXPERTS

The consolidated financial statements and schedule of Endologix, Inc. as of December 31, 2018 and 2017 and for each of the years in the three-year period ended December 31, 2017, and management's assessment of the effectiveness of internal control over financial reporting as of December 31, 2017, have been incorporated by reference herein in reliance upon the reports of KPMG LLP, independent registered public accounting firm, incorporated by reference herein, and upon the authority of said firm as experts in accounting and auditing.

WHERE YOU CAN FIND MORE INFORMATION

This prospectus supplement and the accompanying prospectus form part of a registration statement on Form S-3 that we filed with the SEC. This prospectus supplement and the accompanying prospectus do not contain all of the information set forth in the registration statement and the exhibits to the registration statement or the documents incorporated by reference herein and therein. For further information with respect to us and the securities that we are offering under this prospectus supplement, we refer you to the registration statement and the exhibits and schedules filed as a part of the registration statement and the documents incorporated by reference herein and therein. You should rely only on the information contained in this prospectus supplement or the accompanying prospectus or incorporated by reference herein or therein. We have not authorized anyone else to provide you with different information. We are not making an offer of these securities in any state where the offer is not permitted. You should not assume that the information in this prospectus supplement is accurate as of any date other than the date on the front page of this prospectus supplement, regardless of the time of delivery of this prospectus supplement or any sale of the securities offered hereby.

We file annual, quarterly and current reports, proxy statements and other information with the SEC. The SEC maintains a website that contains reports, proxy statements and other information regarding issuers that file electronically with the SEC, including Endologix, Inc. The address of the SEC website is www.sec.gov.

We maintain a website at www.endologix.com. Information contained in or accessible through our website does not constitute a part of this prospectus supplement.

Table of Contents

INCORPORATION OF CERTAIN INFORMATION BY REFERENCE

The SEC allows us to incorporate into this prospectus supplement information that we file with the SEC in other documents. This means that we can disclose important information to you by referring to other documents that contain that information. Any information that we incorporate by reference into this prospectus supplement is considered part of this prospectus supplement.

Information contained in this prospectus supplement and information that we file with the SEC in the future and incorporate by reference in this prospectus supplement automatically modifies and supersedes previously filed information, including information in previously filed documents or reports that have been incorporated by reference in this prospectus supplement, to the extent the new information differs from or is inconsistent with the old information. Any statement so modified will be deemed to constitute a part of this prospectus supplement only as so modified, and any statement so superseded will be deemed not to constitute a part of this prospectus supplement.

We incorporate by reference, as of their respective dates of filing, the documents listed below that we have filed with the SEC and any future documents that we file with the SEC pursuant to Sections 13(a), 13(c), 14 or 15(d) of the Exchange Act, including any documents filed after the date of the initial registration statement of which this prospectus supplement is a part until the offering of the securities covered by this prospectus supplement has been completed, other than, in each case, documents or information deemed to have been furnished and not filed in accordance with SEC rules:

our Annual Report on Form 10-K for the fiscal year ended December 31, 2018, filed with the SEC on March 29, 2019;

our Current Reports on Form 8-K as filed with the SEC on each of January 10, 2019, February 20, 2019, February 25, 2019, and March 5, 2019; and

the description of our common stock contained in our registration statement on Form 8-A, filed with the SEC on June 18, 1996, including any amendment or report filed for the purpose of updating such description.

These filings have not been included in or delivered with this prospectus supplement. We will provide to each person, including any beneficial owner to whom this prospectus supplement is delivered, a copy of any document that is incorporated by reference in this prospectus supplement. You may obtain a copy of these documents, at no cost, from our website (www.endologix.com) or by contacting us using the following information:

Endologix, Inc.

2 Musick

Irvine, California 92618

Attention: Investor Relations

(949) 595-7200

Exhibits to the documents will not be sent, however, unless those exhibits have specifically been incorporated by reference in this prospectus supplement.

S-16

Table of Contents

\$100,000,000

ENDOLOGIX, INC.

Common Stock

Preferred Stock

Warrants

Units

We may offer and sell, from time to time in one or more offerings, any combination of common stock, preferred stock, warrants and/or units having an aggregate initial offering price not to exceed \$100,000,000. The preferred stock may be convertible into or exchangeable for other shares of our preferred stock, shares of our common stock or warrants. The warrants may be exercisable for shares of our common stock, shares of our preferred stock, and/or units.

This prospectus provides a general description of the securities we may offer. Each time we sell a particular class of securities, we will provide specific terms of the securities offered in a supplement to this prospectus. The prospectus supplement may also add, update or change information in this prospectus. You should read this prospectus and any prospectus supplement, as well as the documents incorporated by reference or deemed to be incorporated by reference herein or therein, carefully before you invest in any of the securities offered pursuant to this prospectus.

This prospectus may not be used to offer or sell our securities unless accompanied by a prospectus supplement relating to the offered securities.

These securities may be sold directly by us, through dealers or agents designated from time to time, to or through underwriters or dealers or through a combination of these methods on a continuous or delayed basis. For additional information on the methods of sale, you should refer to the section entitled **Plan of Distribution** in this prospectus. We will describe the plan of distribution for any particular offering of our securities in a prospectus supplement. If any agents, underwriters or dealers are involved in the sale of any securities with respect to which this prospectus is being delivered, we will set forth in a prospectus supplement the names of such agents or underwriters and any applicable fees, commissions, discounts and over-allotment options. We will also set forth in a prospectus supplement the price to the public of such securities and the net proceeds we expect to receive from such sale.

Our common stock is listed on the NASDAQ Global Select Market and traded under the symbol **ELGX**. On May 30, 2018, the last reported sale price for our common stock on the NASDAQ Global Select Market was \$5.64 per share.

INVESTING IN OUR SECURITIES INVOLVES A HIGH DEGREE OF RISK. YOU SHOULD REVIEW CAREFULLY THE RISKS AND UNCERTAINTIES DESCRIBED UNDER THE HEADING RISK FACTORS BEGINNING ON PAGE 4 OF THIS PROSPECTUS, AS WELL AS THE RISKS AND UNCERTAINTIES DESCRIBED UNDER A SIMILAR HEADING IN ANY APPLICABLE PROSPECTUS SUPPLEMENT AND IN THE DOCUMENTS THAT WE INCORPORATE BY REFERENCE HEREIN OR THEREIN.

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

The date of this prospectus is August 3, 2018

Table of Contents

TABLE OF CONTENTS

PROSPECTUS

	Page
<u>ABOUT THIS PROSPECTUS</u>	1
<u>SPECIAL NOTE REGARDING FORWARD-LOOKING INFORMATION</u>	2
<u>ABOUT THE COMPANY</u>	3
<u>RISK FACTORS</u>	4
<u>USE OF PROCEEDS</u>	5
<u>THE SECURITIES WE MAY OFFER</u>	6
<u>DESCRIPTION OF CAPITAL STOCK</u>	7
<u>DESCRIPTION OF WARRANTS</u>	10
<u>DESCRIPTION OF UNITS</u>	11
<u>PLAN OF DISTRIBUTION</u>	12
<u>LEGAL MATTERS</u>	14
<u>EXPERTS</u>	14
<u>INCORPORATION OF CERTAIN DOCUMENTS BY REFERENCE</u>	15
<u>WHERE YOU CAN FIND MORE INFORMATION</u>	17

Table of Contents

ABOUT THIS PROSPECTUS

This prospectus is part of a registration statement that we filed with the Securities and Exchange Commission, or the SEC, using a shelf registration process. Under this shelf registration process, we may from time to time offer and sell any combination of the securities described in this prospectus in one or more offerings with an aggregate initial offering price not to exceed \$100,000,000. We have provided to you in this prospectus a general description of the securities we may offer. Each time we offer or sell any of our securities under this prospectus, we will, to the extent required by law, provide a prospectus supplement that will contain specific information about the terms of the offering.

We may add, update or change any of the information contained in this prospectus or in any accompanying prospectus supplement we may authorize to be delivered to you. To the extent there is a conflict between the information contained in this prospectus and any accompanying prospectus supplement, you should rely on the information in the prospectus supplement, provided that if any statement in one of these documents is inconsistent with a statement in another document having a later date for example, a document incorporated by reference in this prospectus or any prospectus supplement the statement in the document having the later date modifies or supersedes the earlier statement. Any statement so modified will be deemed to constitute a part of this prospectus only as so modified, and any statement so superseded will be deemed not to constitute a part of this prospectus. This prospectus, together with any accompanying prospectus supplement, includes all material information relating to an offering pursuant to this registration statement.

You should rely only on the information contained in this prospectus, in any accompanying prospectus supplement, or in any document incorporated by reference herein or therein. We have not authorized anyone to provide you with any different information. We take no responsibility for, and can provide no assurance as to the reliability of, any other information that others may provide to you. The information contained in this prospectus, in any applicable prospectus supplement, and in the documents incorporated by reference herein or therein is accurate only as of the date such information is presented. Our business, financial condition, results of operations and future prospects may have changed since those respective dates.

This prospectus and any accompanying prospectus supplement does 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 does this prospectus and any accompanying prospectus supplement 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. This prospectus may not be used to offer or sell our securities unless accompanied by a prospectus supplement relating to the offered securities.

The registration statement containing this prospectus, including the exhibits to the registration statement, provides additional information about us and the securities offered pursuant to this prospectus. For a more complete understanding of the offering of the securities, you should refer to the registration statement, including its exhibits. The registration statement can be read on the SEC's website or at the SEC's offices mentioned under the heading **Where You Can Find More Information**.

Table of Contents

SPECIAL NOTE REGARDING FORWARD-LOOKING INFORMATION

This prospectus, any accompanying prospectus supplement, and the documents incorporated by reference herein and therein, contain forward-looking statements within the meaning of the federal securities laws. These forward-looking statements are intended to qualify for the safe harbor from liability established by the Private Securities Litigation Reform Act of 1995. All statements other than statements of historical fact included in this prospectus, any accompanying prospectus supplement, or the documents incorporated by reference herein or therein, are forward looking statements.

Our forward-looking statements are based on our management's current assumptions and expectations of future events and trends, which affect or may affect our business, strategy, operations or financial performance. Although we believe these forward-looking statements are based upon reasonable assumptions, they are subject to numerous known and unknown risks and uncertainties and are made in light of information currently available to us. Many important factors, in addition to the factors described in this prospectus, may materially and adversely affect our results as indicated in our forward-looking statements. You should read this prospectus, any accompanying prospectus supplement, and the documents we incorporate by reference herein and therein, completely and with the understanding that our actual future results may be materially different from and worse than what we expect.

Moreover, we operate in an evolving environment. New risk factors and uncertainties emerge from time to time and it is not possible for our management to predict all risk factors and uncertainties, nor can we assess the impact of all factors on our business or the extent to which any factor, or combination of factors, may cause actual results to differ materially from those contained in any forward-looking statements.

Forward-looking statements speak only as of the date they were made, and, except to the extent required by law or the rules of the NASDAQ Stock Market, we undertake no obligation to update or review any forward-looking statement because of new information, future events or other factors. You should, however, review the risks and uncertainties we describe in the reports we will file from time to time with the SEC, after the date of this prospectus. See the information included under the heading **Where You Can Find More Information**.

Forward-looking statements involve risks and uncertainties and are not guarantees of future performance. As a result of the risks and uncertainties described above, the forward-looking statements discussed in this prospectus might not occur and our future results and performance may differ materially from the information provided in these forward-looking statements due to, but not limited to, the factors mentioned above. Because of these uncertainties, you should not place undue reliance on these forward-looking statements when making an investment decision.

We qualify all of our forward-looking statements by these cautionary statements.

Table of Contents

ABOUT THE COMPANY

Overview

We develop, manufacture, market, and sell innovative medical devices for the treatment of aortic disorders. Our products are intended for the minimally invasive endovascular treatment of abdominal aortic aneurysms (AAA). Our AAA products are built on one of two platforms:

Traditional minimally-invasive endovascular aneurysm repair (EVAR); and

Endovascular aneurysm sealing (EVAS), our innovative solution for sealing the aneurysm sac while maintaining blood flow through two blood flow lumens.

Our current EVAR products include the AFX[®] Endovascular AAA System (the AFX System), the VELA[®] Proximal Endograft (VELA), and the Ovator[®] Abdominal Stent Graft System (the Ovation System). Our current EVAS product is the Nellix[®] Endovascular Aneurysm Sealing System (the Nellix EVAS System). We sell our EVAR platforms (including extensions and accessories) to hospitals in the United States, Canada, New Zealand, South Korea and Europe, and our EVAS platform to hospitals in New Zealand and Europe. We sell our EVAR and EVAS platforms (including extensions and accessories) to third-party international distributors and agents in Asia, Europe, South America and in other parts of the world. Such sales of our EVAR and EVAS platforms provide the sole source of our reported revenue.

Endologix[®], AFX[®], Duraply[®], VELA[®], IntuiTrak[®], ActiveSeal[®], Nellix[®], Ovation[®], Ovation Prime[®], Ovation Alto[®], and CustomSeal[®] are registered trademarks of Endologix, Inc. and its subsidiaries.

We have obtained CE Mark approval for the Nellix EVAS System in the European Union. The Nellix EVAS System is only approved as an investigational device in the United States. Ovation Alto, our next generation Ovation System device, is only approved as an investigational device and is not currently approved in any market.

Corporate Information

We were incorporated in California in March 1992 under the name Cardiovascular Dynamics, Inc. and reincorporated in Delaware in June 1993. In January 1999, we merged with Radiance Medical Systems, Inc. and changed our name to Radiance Medical Systems, Inc., which was a privately-held corporation. In May 2002, we merged with Endologix, Inc., which was a privately held corporation, and changed our name to Endologix, Inc. Our main offices are located at 2 Musick, Irvine, California 92618, and our telephone number is (949) 595-7200. Additional information about Endologix, Inc. and our products is available through our website at www.endologix.com. The information contained on or accessed through our website is not incorporated by reference into this prospectus, and you should not consider information contained on our website to be a part of this prospectus or in deciding whether to purchase our securities. References in this prospectus to our website are to inactive textual references only.

Table of Contents

RISK FACTORS

Investing in our securities involves a high degree of risk. Before making an investment decision, you should carefully consider the risks described in the sections entitled "Risk Factors" in our most recent Annual Report on Form 10-K and subsequent Quarterly Reports on Form 10-Q, as filed with the SEC, which are incorporated by reference in this prospectus in their entirety, as well as any amendments or updates to our risk factors reflected in subsequent filings with the SEC, including any applicable prospectus supplement. If any of these risks actually occur, our business, financial condition, results of operations and future prospects could be materially and adversely affected. In that case, the trading price of our securities could decline and you might lose all or part of your investment. For more information, see "Where You Can Find More Information."

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 business, financial condition or results of operations.

This prospectus and the documents we incorporate by reference in this prospectus contain forward-looking statements that involve risks and uncertainties. Our actual results could differ materially from those anticipated in these forward-looking statements as a result of certain factors, including the risks and uncertainties mentioned elsewhere in this prospectus. For more information, see "Special Note Regarding Forward-Looking Information."

Table of Contents

USE OF PROCEEDS

We intend to use the net proceeds we receive from the sale of our securities, and from the exercise of any warrants issued pursuant hereto, for working capital and other general corporate purposes.

We may set forth additional information regarding the anticipated use of proceeds from the sale of securities we offer under this prospectus in a prospectus supplement relating to the specific offering. We have not determined the amount of net proceeds to be used from any specific offering. As a result, our management will have broad discretion in the allocation of the net proceeds.

Table of Contents

THE SECURITIES WE MAY OFFER

We may offer and sell, from time to time in one or more offerings, any combination of common stock, preferred stock, warrants, and/or units having an aggregate initial offering price not to exceed \$100,000,000. The preferred stock may be convertible into or exchangeable for other shares of our preferred stock, shares of our common stock or warrants. The warrants may be exercisable for shares of our common stock, shares of our preferred stock, and/or units. In this prospectus, we refer to the common stock, preferred stock, warrants and units that we may offer collectively as securities.

This prospectus provides a general description of the securities we may offer. Each time we sell any of our securities under this prospectus, we will, to the extent required by law, provide a prospectus supplement that will contain specific information about the terms of the offering. The prospectus supplement may also add, update or change information in this prospectus. For more information, see [About this Prospectus](#).

Table of Contents

DESCRIPTION OF CAPITAL STOCK

The following is a summary of all material characteristics of our capital stock as set forth in our amended and restated certificate of incorporation, as amended, or our Charter, and our amended and restated bylaws, or our Bylaws. The summary does not purport to be complete and is qualified in its entirety by reference to our Charter and our Bylaws, copies of which have been filed as exhibits to our SEC filings. For more information, see [Where You Can Find More Information](#).

Common Stock

General. We may issue shares of our common stock from time to time. We are currently authorized to issue 135,000,000 shares of common stock, par value \$0.001 per share. As of March 31, 2018, there were 83,996,817 shares of our common stock issued and outstanding. Pursuant to a definitive proxy statement filed with the SEC on April 30, 2018, we have asked our stockholders to approve an amendment to our Charter to increase the total number of authorized shares of our common stock by 35,000,000 shares, from 135,000,000 shares to 170,000,000 shares, or the Charter Amendment Proposal. If our stockholders approve the Charter Amendment Proposal at our annual meeting of stockholders to be held on June 14, 2018, we will be authorized to issue 170,000,000 shares of our common stock, par value \$0.001 per share. The rights, preferences and privileges of holders of our common stock are subject to, and may be adversely affected by, the rights of the holders of shares of any of our outstanding preferred stock.

Dividend Rights. Subject to preferences that may be applicable to any then outstanding shares of preferred stock, holders of common stock are entitled to receive ratably such dividends as may be declared by the board of directors out of funds legally available therefor.

Voting Rights. The holders of our common stock are entitled to one vote for each share held of record on all matters submitted to a vote of the stockholders. The holders of common stock are not entitled to cumulative voting rights with respect to the election of directors, and as a consequence, minority stockholders will not be able to elect directors on the basis of their votes alone.

No Preemptive, Conversion or Similar Rights. Holders of common stock have no preemptive rights and no right to convert their common stock into any other securities.

Right to Receive Liquidation Distributions. In the event of a liquidation, dissolution or winding up, holders of the common stock are entitled to share ratably in all assets remaining after payment of liabilities and the liquidation preferences of any then outstanding shares of preferred stock.

Fully Paid and Non-Assessable. All outstanding shares of common stock are, and all shares of common stock to be issued under this prospectus will be, fully paid and non-assessable.

Preferred Stock

Our Charter provides that our board of directors has the authority, without further action by the stockholders, to issue up to 5,000,000 shares of preferred stock in one or more series and to fix the number of shares constituting any series or the designation of a series and to determine or alter for each series or designation of a series the voting powers, if any, and the designations, preferences, and relative, participating, optional, or other rights, and the qualifications, limitations or restrictions, of any series or the designation of a series. Prior to the issuance of shares of each series of preferred stock, the board of directors is required by the General Corporation Law of the State of Delaware, or the DGCL, and our Charter, to adopt resolutions and file a certificate of designation with the Secretary of State of the

State of Delaware. The certificate of designation will establish, for each class or series of preferred stock, the rights, preferences, and privileges of such class or series.

Table of Contents

Whenever preferred stock is to be sold pursuant to this prospectus, we will file a prospectus supplement relating to that sale which will specify (in each case to the extent applicable):

the title and stated value of the preferred stock;

the number of shares of the preferred stock offered, the liquidation preference per share and the offering price of the preferred stock;

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

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

any listing of the preferred stock on any securities exchange;

the provision for redemption of the preferred stock;

the terms and conditions upon which the preferred stock will be convertible into any other class of capital stock, including the conversion price;

voting rights of the preferred stock;

preemption rights;

the relative ranking and preferences of the preferred stock as to dividend rights and rights upon the liquidation, dissolution or winding up of our affairs;

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

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

The DGCL provides that the holders of preferred stock will have the right to vote separately as a class on any proposed fundamental change in the rights of the preferred stock. This right is in addition to any voting rights that may be provided for in the applicable certificate of designation.

All shares of preferred stock offered by this prospectus will, when issued, be fully paid and nonassessable and will not have any preemptive or similar rights.

Delaware Law and Certain Certificate of Incorporation and Bylaw Provisions

The provisions of Delaware law, our Charter and our Bylaws may have the effect of delaying, deferring or discouraging another person from acquiring control of us by means of a tender offer, a proxy contest or otherwise, or removing incumbent officers and directors. These provisions, summarized below, are expected to discourage certain types of coercive takeover practices and takeover bids that our board of directors may consider inadequate and to encourage any person seeking to acquire control of us to first negotiate with our board of directors.

Delaware Law. We are governed by the provisions of Section 203 of the DGCL. In general, Section 203 prohibits a public Delaware corporation from engaging in a business combination with an interested stockholder for a period of three years after the date such stockholder became an interested stockholder. A business combination includes mergers, asset sales or other transactions resulting in a financial benefit to the stockholder. An interested stockholder is a person who, together with affiliates and associates, owns, or within three years did, prior to the determination of interested stockholder status, own, 15% or more of the corporation's outstanding voting stock. These provisions may have the effect of delaying, deferring or preventing a change in control of our company not approved in advance by our board of directors.

Table of Contents

Charter and Bylaw Provisions. Our Charter and our Bylaws also include a number of other provisions that may have the effect of deterring hostile takeovers or delaying or preventing changes in control or our management as follows:

Our Charter and our Bylaws provide for a classified board of directors comprised of three classes of directors with each class serving a staggered three-year term. Our directors may be removed with or without cause.

Our Bylaws provide that all stockholder action must be effected at a duly called meeting of stockholders and not by a consent in writing.

Our Bylaws provide that stockholders seeking to present proposals before a meeting of stockholders, or to nominate candidates for election as directors at a meeting of stockholders, must provide timely notice in writing. Our Bylaws also specify requirements as to the form and content of a stockholder's notice. These provisions may delay or preclude stockholders from bringing matters before a meeting of stockholders or from making nominations for directors at a meeting of stockholders, which could delay or deter takeover attempts or changes in management.

Our Bylaws provide that all vacancies, including newly created directorships, may, except as otherwise required by law, be filled by the affirmative vote of a majority of our directors then in office, even if less than a quorum.

Our board of directors has the authority to issue preferred stock, which could potentially be used to discourage attempts by third parties to obtain control of us through a merger, tender offer, proxy or consent solicitation or otherwise, by making those attempts more difficult to achieve or more costly.

NASDAQ Global Select Market

Our common stock is listed on the NASDAQ Global Select Market and traded under the symbol ELGX. On May 30, 2018, the last reported sale price for our common stock on the NASDAQ Global Select Market was \$5.64 per share.

Transfer Agent and Registrar

The transfer agent and registrar for our common stock is American Stock Transfer & Trust Company, LLC. The address of American Stock Transfer & Trust Company is 6201 15th Avenue, Brooklyn, NY 11219 and the telephone number is (718) 921-8200.

Table of Contents

DESCRIPTION OF WARRANTS

We may issue warrants for the purchase of shares of common stock, shares of preferred stock and/or units, 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. If we issue warrants, they will be evidenced by warrant agreements or warrant certificates issued under one or more warrant agreements, which will be contracts between us and the holders of the warrants or an agent for the holders of the warrants. The forms of warrant agreements or warrant certificates, as applicable, relating to the warrants will be filed as exhibits to the registration statement that includes this prospectus, or as an exhibit to a filing with the SEC that is incorporated by reference into this prospectus.

Table of Contents

DESCRIPTION OF UNITS

We may issue units comprised of one or more of the other securities described in this prospectus in any combination from time to time. 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. If we issue units, they will be evidenced by unit agreements or unit certificates issued under one or more unit agreements, which will be contracts between us and the holders of the units or an agent for the holders of the units. 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. The forms of unit agreements or unit certificates, as applicable, relating to the units will be filed as exhibits to the registration statement that includes this prospectus, or as an exhibit to a filing with the SEC that is incorporated by reference into this prospectus.

Table of Contents

PLAN OF DISTRIBUTION

We may sell our securities from time to time in any manner permitted by the Securities Act, including any one or more of the following ways:

through agents;

to or through underwriters;

to or through broker-dealers (acting as agent or principal);

in at the market offerings , within the meaning of Rule 415(a)(4) of the Securities Act, to or through a market maker or into an existing trading market, on an exchange or otherwise; and/or

directly to purchasers, through a specific bidding or auction process or otherwise.

The securities may be sold at a fixed price or prices, which may be changed, at market prices prevailing at the time of sale, at prices relating to the prevailing market prices or at negotiated prices.

Offers to purchase offered securities may be solicited by agents designated by us from time to time. Any agent involved in the offer or sale of the offered securities in respect of which this prospectus is delivered will be named, and any commissions payable by us will be set forth, in the applicable prospectus supplement. Unless otherwise set forth in the applicable prospectus supplement, any agent will be acting on a reasonable best efforts basis for the period of its appointment. Any agent may be deemed to be an underwriter, as that term is defined in the Securities Act, of the offered securities so offered and sold.

We will set forth in a prospectus supplement the terms of the offering of our securities, including:

the name or names of any agents, underwriters or dealers;

the type of securities being offered;

the purchase price of our securities being offered and the net proceeds we expect to receive from the sale;

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

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

the public offering price;

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

any securities exchanges on which such securities may be listed.

If offered securities are sold to the public by means of an underwritten offering, either through underwriting syndicates represented by managing underwriters or directly by the managing underwriters, we will execute an underwriting agreement with an underwriter or underwriters, and the names of the specific managing underwriter or underwriters, as well as any other underwriters, will be set forth in the applicable prospectus supplement. In addition, the terms of the transaction, including commissions, discounts and any other compensation of the underwriters and dealers, if any, will be set forth in the applicable prospectus supplement, which prospectus supplement will be used by the underwriters to make resales of the offered securities. If underwriters are utilized in the sale of the offered securities, the offered securities will be acquired by the underwriters for their own account and may be resold from time to time in one or more transactions, including:

transactions on the NASDAQ Global Select Market or any other organized market where the securities may be traded;

in the over-the-counter market;

Table of Contents

in negotiated transactions; or

under delayed delivery contracts or other contractual commitments.

We may grant to the underwriters options to purchase additional offered securities to cover over-allotments, if any, at the public offering price with additional underwriting discounts or commissions, as may be set forth in the applicable prospectus supplement. If we grant any over-allotment option, the terms of the over-allotment option will be set forth in the applicable prospectus supplement.

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

We may indemnify agents, underwriters and dealers against specified liabilities, including liabilities incurred under the Securities Act, or to contribution by us to payments they may be required to make in respect of such liabilities. Agents, underwriters or dealers, or their respective affiliates, may be customers of, engage in transactions with or perform services for us or our respective affiliates, in the ordinary course of business.

Unless otherwise specified in the applicable prospectus supplement, each class or series of securities will be a new issue with no established trading market, other than our common stock, which is traded on the NASDAQ Global Select Market. We may elect to list any other class or series of securities on any exchange and, in the case of our common stock, on any additional exchange. However, unless otherwise specified in the applicable prospectus supplement, we will not be obligated to do so. It is possible that one or more underwriters may make a market in a class or series of securities, but the underwriters will not be obligated to do so and may discontinue any market making at any time without notice. We cannot give any assurance as to the liquidity of the trading market for any of the offered securities.

Any underwriter may engage in over-allotment, stabilizing transactions, short-covering transactions and penalty bids in accordance with Regulation M under the Securities Exchange Act of 1934, as amended, or the Exchange Act. Over-allotment involves sales in excess of the offering size, which create a short position. Stabilizing transactions permit bids to purchase the underlying security so long as the stabilizing bids do not exceed a specified maximum price. Syndicate-covering or other short-covering transactions involve purchases of the securities, either through exercise of the over-allotment option or in the open market after the distribution is completed, to cover short positions. Penalty bids permit the underwriters to reclaim a selling concession from a dealer when the securities originally sold by the dealer are purchased in a stabilizing or covering transaction to cover short positions. Those activities may cause the price of the securities to be higher than it would otherwise be. If commenced, the underwriters may discontinue any of the activities at any time.

To comply with the securities laws of certain states, if applicable, the securities offered by this prospectus will be offered and sold in those states only through registered or licensed brokers or dealers.

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

Table of Contents

LEGAL MATTERS

Certain legal matters, including the validity of the issuance of the securities offered by this prospectus, will be passed upon for us by Stradling Yocca Carlson & Rauth, P.C., Newport Beach, California.

EXPERTS

The consolidated financial statements and schedule of Endologix, Inc. as of December 31, 2017 and 2016 and for each of the years in the three-year period ended December 31, 2017, and management's assessment of the effectiveness of internal control over financial reporting as of December 31, 2017, have been incorporated by reference herein in reliance upon the reports of KPMG LLP, independent registered public accounting firm, incorporated by reference herein, and upon the authority of said firm as experts in accounting and auditing.

Table of Contents

INCORPORATION OF CERTAIN DOCUMENTS BY REFERENCE

The SEC allows us to incorporate into this prospectus information that we file with the SEC in other documents. This means that we can disclose important information to you by referring to other documents that contain that information. Any information that we incorporate by reference into this prospectus is considered part of this prospectus.

Information contained in this prospectus and information that we file with the SEC in the future and incorporate by reference in this prospectus automatically modifies and supersedes previously filed information, including information in previously filed documents or reports that have been incorporated by reference in this prospectus, to the extent the new information differs from or is inconsistent with the old information. Any statement so modified will be deemed to constitute a part of this prospectus only as so modified, and any statement so superseded will be deemed not to constitute a part of this prospectus. For more information, see About this Prospectus.

We incorporate by reference, as of their respective dates of filing, the documents listed below that we have filed with the SEC and any future documents that we file with the SEC pursuant to Sections 13(a), 13(c), 14 or 15(d) of the Exchange Act, including any documents filed after the date of the initial registration statement of which this prospectus is a part until the offering of the securities covered by this prospectus has been completed, other than, in each case, documents or information deemed to have been furnished and not filed in accordance with SEC rules:

our Annual Report on Form 10-K for the fiscal year ended December 31, 2017, or our Annual Report, filed with the SEC on March 13, 2018;

our Quarterly Report on Form 10-Q for the fiscal quarter ended March 31, 2017, or our Quarterly Report, filed with the SEC on May 9, 2018;

the information specifically incorporated by reference into our Annual Report from our Definitive Proxy Statement on Schedule 14A (Revised), filed with the SEC on April 30, 2018;

our Current Reports on Form 8-K as filed with the SEC on each of January 8, 2018, January 31, 2018, February 21, 2018 and May 2, 2018; and

the description of our common stock contained in our registration statement on Form 8-A, filed with the SEC on June 18, 1996, including any amendment or report filed for the purpose of updating such description. These filings have not been included in or delivered with this prospectus. We will provide to each person, including any beneficial owner to whom this prospectus is delivered, a copy of any document that is incorporated by reference in this prospectus. You may obtain a copy of these documents, at no cost, from our website (www.endologix.com) or by contacting us using the following information:

Endologix, Inc.

2 Musick

Edgar Filing: ENDOLOGIX INC /DE/ - Form 424B5

Irvine, California 92618

Attention: Investor Relations

(949) 595-7200

Exhibits to the documents will not be sent, however, unless those exhibits have specifically been incorporated by reference in this prospectus.

Table of Contents

You should rely only on the information contained in this prospectus, in any accompanying prospectus supplement, or in any document incorporated by reference herein or therein. We have not authorized anyone to provide you with any different information. We take no responsibility for, and can provide no assurance as to the reliability of, any other information that others may provide to you. The information contained in this prospectus, in any applicable prospectus supplement, and in the documents incorporated by reference herein or therein is accurate only as of the date such information is presented. Our business, financial condition, results of operations and future prospects may have changed since those respective dates.

Table of Contents

WHERE YOU CAN FIND MORE INFORMATION

We file annual, quarterly and current reports and other information with the SEC. You may read and copy any document we file at the SEC's Public Reference Room located at 100 F Street, N.E., Washington, D.C. 20549. You may obtain information on the operation of the public reference room by calling the SEC at 1-800-SEC-0330. Our filings with the SEC also are available from the SEC's website at www.sec.gov, which contains reports, proxy and information statements, and other information regarding issuers that file electronically.

This prospectus is part of a registration statement that we filed with the SEC. As permitted by SEC rules, this prospectus and any accompanying prospectus supplement that we may file, which form a part of the registration statement, do not contain all of the information that is included in the registration statement. The registration statement contains more information regarding us and our securities, including certain exhibits. You can obtain a copy of the registration statement from the SEC at the address listed above or from the SEC's website.

Table of Contents

7,889,552 Shares of Common Stock

PROSPECTUS

SUPPLEMENT

March 31, 2019