MERIT MEDICAL SYSTEMS INC
Form 424B5
March 23, 2017

Use these links to rapidly review the document
TABLE OF CONTENTS
TABLE OF CONTENTS

Table of Contents

Filed pursuant to Rule 424(b)(5)
Registration Statement No. 333-193059

PROSPECTUS SUPPLEMENT

(To Prospectus dated May 22, 2014)

4,500,000 Shares

MERIT MEDICAL SYSTEMS, INC.

Common Stock

We are selling 4,500,000 shares of our common stock.

Our shares trade on The NASDAQ Global Select Market under the symbol "MMSI." On March 22, 2017, the last sale price of our shares as reported on NASDAQ was $29.60 per share.

Investing in our common stock involves a high degree of risk. You should carefully consider the risks described under "Risk Factors" on page S-16 of this prospectus supplement before making a decision to invest in our common stock.

	Per Share	Total
Public offering price	$ 28.25	$ 127,125,000
Underwriting discount(1)	$ 1.695	$ 7,627,500
Proceeds, before expenses, to us	$ 26.555	$ 119,497,500

(1) We refer you to "Underwriting (Conflicts of Interest)" beginning on page S-45 of this prospectus supplement for additional information regarding total underwriter compensation.

The underwriters may also exercise their option to purchase up to an additional 675,000 shares from us, at the public offering price, less the underwriting discount, for 30 days after the date of this prospectus supplement.

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

The shares will be ready for delivery on or about March 28, 2017.

BofA Merrill Lynch	**Piper Jaffray**	**Wells Fargo Securities**
Canaccord Genuity	**Raymond James**	**SunTrust Robinson Humphrey**

The date of this prospectus supplement is March 23, 2017.

TABLE OF CONTENTS

Table of Contents

ABOUT THIS PROSPECTUS SUPPLEMENT

Unless otherwise indicated, references in this prospectus supplement to "Merit," "we," "us," "our," "our company" and similar terms refer to Merit Medical Systems, Inc. and our consolidated subsidiaries.

This prospectus supplement and the accompanying prospectus form part of a registration statement on Form S-3 that we filed with the Securities and Exchange Commission, or SEC, utilizing a "shelf" registration process. We provide information to you about this offering of shares of our common stock in two separate documents that are bound together. The first part is this prospectus supplement, which describes the specific details regarding this offering and also adds to and updates information contained in the accompanying prospectus and the documents incorporated by reference into this prospectus supplement and the accompanying prospectus. The second part is the accompanying prospectus, which provides general information, some of which may not apply to this offering. Generally, when we refer to this prospectus, we are referring to both documents combined.

In this prospectus supplement, we "incorporate by reference" information from other documents that we file with the SEC. This means we can disclose important information to you by referring you to those documents. See "Where You Can Find Additional Information" and "Important Information Incorporated by Reference" below for further discussion. The information incorporated by reference is considered to be a part of this prospectus and should be read with the same care. When we update the information contained in documents that have been incorporated by reference by making future filings with the SEC, the information included or incorporated by reference in this prospectus supplement is considered to be automatically updated and superseded. In other words, in case of a conflict or inconsistency among information contained in this prospectus supplement and information in the accompanying prospectus or documents incorporated by reference into this prospectus supplement, you should rely on the information contained in the document that was filed later.

You should rely only on information contained in or incorporated by reference into this prospectus supplement and the accompanying prospectus or any free writing prospectus we may provide to you in connection with this offering, which you should read carefully before deciding to invest. We have not, and the underwriters have not, authorized anyone to provide you with information that is different. The information contained in this prospectus supplement, the accompanying prospectus, the documents incorporated by reference herein and any free writing prospectus we may provide to you in connection with this offering is accurate only as of their respective dates, regardless of the time of delivery of this prospectus supplement or of any sale of our common stock.

Be aware that any representations, warranties, covenants or similar provisions contained in agreements filed as an exhibit to documents incorporated by reference herein were made solely for the benefit of the parties to such agreements. In each case, these provisions were specifically negotiated between the parties and, in some cases, are intended chiefly to allocate risk. As such, you should in no case rely on any such provision in deciding whether to invest, as such provisions speak only as of the date given and do not necessarily reflect the current state of our business or financial condition.

We are offering to sell and seeking offers to buy shares of our common stock only in jurisdictions where offers and sales are permitted. The distribution of this prospectus supplement and the accompanying prospectus and the offering of the common stock in certain jurisdictions may be restricted by law. Persons outside the United States who come into possession of this prospectus supplement and the accompanying prospectus must inform themselves about, and observe any restrictions relating to, the offering of the common stock and the distribution of this prospectus supplement and the accompanying prospectus in their jurisdiction. This prospectus supplement and the accompanying prospectus do not constitute, and may not be used in connection with, an offer to sell, or a solicitation of an offer to buy, any securities offered by this prospectus supplement and the

Table of Contents

accompanying prospectus by any person in any jurisdiction in which it is unlawful for such person to make such an offer or solicitation.

Unless otherwise indicated, all information in this prospectus supplement assumes no exercise by the underwriters of their right to purchase from us up to an additional 675,000 shares of common stock (at the public offering price less the underwriting discount) in this offering.

The industry and market data contained or incorporated by reference in this prospectus supplement are based either on our management's own estimates or on independent industry publications, reports by market research firms or other published independent sources. Although we believe these sources are reliable, we have not independently verified the information and cannot guarantee its accuracy and completeness, as industry and market data are subject to change and cannot always be verified with complete certainty due to limits on the availability and reliability of raw data, the voluntary nature of the data gathering process and other limitations and uncertainties inherent in any statistical survey of market shares. Accordingly, you should be aware that the industry and market data contained or incorporated by reference in this prospectus supplement, and estimates and beliefs based on such data, may not be reliable. Unless otherwise indicated, all information contained or incorporated by reference in this prospectus supplement concerning our industry in general or any segment thereof, including information regarding our general expectations and market opportunity, is based on management's estimates using internal data, data from industry related publications, consumer research and marketing studies and other externally obtained data.

This prospectus and the documents incorporated by reference herein include trademarks, tradenames and service marks that are our property or the property of licensors or other third parties. Solely for convenience, such trademarks and tradenames may appear without any " " or "®" symbol. However, failure to include such symbols is not intended to suggest, in any way, that we will not assert our rights or the rights of any applicable licensor or other third party to such trademarks, tradenames and service marks.

Table of Contents

SPECIAL NOTE REGARDING FORWARD-LOOKING STATEMENTS

The information included or incorporated by reference in this prospectus contains forward-looking statements about us, our industry, our shares and the offering that involve substantial risks and uncertainties. We intend such statements, and all subsequent forward-looking statements attributable to us or persons acting on our behalf in connection with the offering, to be expressly qualified in their entirety by these cautionary statements and covered by the safe harbor provisions for forward-looking statements contained in Section 21E of the Securities Exchange Act of 1934, as amended, or the Exchange Act, and Section 27A of the Securities Act of 1933, as amended, or the Securities Act. All statements included or incorporated by reference in this prospectus, other than statements of historical facts, are forward-looking statements for purposes of these provisions, including projections of earnings, revenues or other financial items, statements of the plans and objectives of our management for future operations, statements concerning proposed new products or services, statements regarding the integration, development or commercialization of any business or assets acquired from other parties, statements regarding future economic conditions or performance, and statements of assumptions underlying any of the foregoing. These statements involve known and unknown risks, uncertainties and other factors that may cause our actual results, levels of activity, performance or achievement to be materially different from those expressed or implied by the forward-looking statements. In some cases, forward-looking statements can be identified by the use of terminology such as "anticipate," "believe," "continue," "estimate," "expect," "forecast," "intend," "may," "might," "plan," "potential," "project," "will," "would," "seek," "should," "could," "can," "predict," "potential," "continue," "objective" or other forms of these words or similar words or expressions, or the negative thereof or other comparable terminology. However, not all forward-looking statements contain such identifying words.

All forward-looking statements included or incorporated by reference in this prospectus speak only as of the date made, are based on information available to us as of such date, and are subject to change. We assume no obligation to update or revise any forward-looking statement. If we do update or correct one or more forward-looking statements, you should not conclude that we will make additional updates or corrections. Although we believe that the assumptions and expectations reflected in the forward-looking statements included or incorporated by reference in this prospectus are reasonable, our actual results will likely differ, and may differ materially, from anticipated results. You should not unduly rely on any such forward-looking statements.

The offering, our future results and any forward-looking statements included or incorporated by reference in this prospectus are subject to inherent risks and uncertainties, including the following:

- risks relating to managing growth, particularly if accomplished through acquisitions, and the integration of acquired businesses;
- risks relating to protecting our intellectual property;
- claims by third parties that we infringe their intellectual property rights which could cause us to incur significant legal or licensing expenses and prevent us from selling our products;
- greater scrutiny and regulation by governmental authorities, including risks relating to the subpoena we received in October 2016 from the U.S. Department of Justice seeking information on our marketing and promotional practices;
- risks relating to our products being used in unapproved circumstances;
- risks relating to significant adverse changes in, or our failure to comply, with governing regulations;
- regulatory clearance processes of the Food and Drug Administration, or FDA, and any failure to obtain and maintain required regulatory clearances and approvals;

Table of Contents

failure to comply with export control laws, customs laws, sanctions laws and other laws governing our operations in the U.S. and other countries, which could subject us to civil or criminal penalties, other remedial measures and legal expenses;

disruption of our critical information systems or material breaches in the security of our systems;

restrictions and limitations in our debt agreements and instruments, which could affect our ability to operate our business and our liquidity;

expending significant resources for research, development, testing and regulatory approval or clearance of our products under development and any failure to develop the products or obtain approvals for commercial use;

violations of laws targeting fraud and abuse in the healthcare industry;

risks relating to healthcare reform legislation negatively affecting our financial results, business, operations or financial condition;

loss of key personnel;

product liability claims and recalls;

failure to report adverse medical events to the FDA, which may subject us to sanctions that may materially harm our business;

failure to maintain or establish sales capabilities on our own or through third parties, which may result in our inability to commercialize any of our products in countries where we lack direct sales and marketing capabilities;

our estimates on the addressable market for our product groups have not been established with precision, and may be smaller than we estimate;

demands for price concessions resulting from consolidations in the healthcare industry, group purchasing organizations or public procurement policies;

inability to compete in markets, particularly if there is a significant change in relevant practices or technology;

fluctuations in foreign currency exchange rates negatively impacting our financial results;

termination or interruption of our supply relationships or increases in the price of our component parts, finished products, third-party services or raw materials, particularly petroleum-based products;

inability to accurately forecast customer demand for our products or manage our inventory, including rapid increases in the demand for our products;

changes in international and national economic and industry conditions;

inability to generate sufficient cash flow to fund our debt obligations, capital expenditures, and ongoing operations;

risks relating to our revenues being derived from a few products and medical procedures;

risks relating to work stoppage, transportation interruptions, severe weather and natural disasters;

fluctuations in our effective tax rate adversely affecting our business, financial condition or results of operation;

Table of Contents

limits on reimbursement imposed by governmental and other programs;

failure to comply with applicable environmental laws and regulations;

volatility of the market price of our common stock;

dilution as a result of future equity offerings;

risks relating to the sufficiency of demand for our common stock, the price we are able to obtain for our common stock and satisfaction of customary closing conditions for the offering; and

other factors and risks described or referenced in documents filed with the SEC.

Table of Contents

NON-GAAP FINANCIAL MEASURES

Although our financial statements are prepared in accordance with accounting principles which are generally accepted in the United States of America, or GAAP, this prospectus supplement includes non-GAAP financial measures which are derived on the basis of methodologies other than in accordance with GAAP. Such measures include:

- constant currency revenue;
- core revenue;
- non-GAAP net income;
- non-GAAP earnings per share; and
- non-GAAP gross margin.

Our management team believes that the non-GAAP financial measures referred to in this prospectus supplement provide investors with useful information regarding the underlying business trends and performance of our ongoing operations and can be useful for period-over-period comparisons of such operations. Additionally, our management team uses these non-GAAP financial measures to evaluate our profitability and efficiency, to compare operating results to prior periods, to evaluate changes in the operating results of each of our operating segments, and to measure and allocate financial resources internally. However, our management does not consider such non-GAAP measures in isolation or as an alternative to such measures determined in accordance with GAAP.

You should consider any non-GAAP measures referred to in this prospectus supplement in addition to, and not as a substitute for, financial reporting measures prepared in accordance with GAAP. Such non-GAAP financial measures exclude some, but not all, items that may affect our net sales, net income, earnings per share, and gross margin. In addition, they are subject to inherent limitations as they reflect the exercise of judgment by management about which items are excluded. We believe it is useful to exclude such items in the calculation of constant currency revenue, core revenue, non-GAAP net income, non-GAAP earnings per share, and non-GAAP gross margin (in each case, as illustrated under the caption "Summary Consolidated Financial Information") because such amounts in any specific period may not directly correlate to the underlying performance of our business operations and can vary significantly between periods as a result of factors such as new acquisitions, non-cash expense related to amortization of previously acquired tangible and intangible assets, unusual compensation expenses, and expenses resulting from litigation or governmental proceedings. We may incur similar types of expenses in the future, and the non-GAAP financial information included in this prospectus supplement should not be viewed as a statement or indication that these types of expenses will not recur. Additionally, the non-GAAP financial measures used in this prospectus supplement may not be comparable with similarly titled measures of other companies.

We urge investors and potential investors to review the reconciliations of our non-GAAP financial measures to the comparable GAAP financial measures, and not to rely on any single financial measure to evaluate our business or results of operations.

Table of Contents

WHERE YOU CAN FIND MORE INFORMATION

We have filed with the SEC a registration statement on Form S-3 under the Securities Act of 1933, as amended, or the Securities Act, with respect to the shares of common stock we are offering under this prospectus supplement. This prospectus supplement and the accompanying prospectus do not contain all the information set forth in the registration statement and the exhibits to the registration statement. For further information with respect to us and the securities we are offering under this prospectus supplement, we refer you to the registration statement and the exhibits and schedules filed as a part of the registration statement. Statements contained in this prospectus supplement as to the contents of any contract or any other document referred to are not necessarily complete, and in each instance, we refer you to the copy of the contract or other document filed as an exhibit to the registration statement or the documents incorporated by reference therein or herein. Each of these statements is qualified in all respects by this reference.

We also file annual reports, quarterly reports, proxy statements, and other documents and information with the SEC under the Securities Exchange Act of 1934, as amended, or the Exchange Act. The public may read and copy any materials we file with the SEC, including the registration statement of which this prospectus supplement and the accompany prospectus are a part, at the SEC's Public Reference Room at 100 F Street, N.E., Room 2521, Washington, D.C. 20549. The public may obtain information on the operation of the Public Reference Room by calling the SEC at 1-800-SEC-0330. Also, the SEC maintains an internet site at *www.sec.gov* that contains reports, proxy and information statements and other information regarding issuers that file electronically with the SEC, including Merit. General information about Merit, including our annual report on Form 10-K, quarterly reports on Form 10-Q and current reports on Form 8-K, as well as any amendments and exhibits to those reports, are available free of charge through our website at *www.merit.com* as soon as reasonably practicable after we file them with, or furnish them to, the SEC. Information on or available through our website is not incorporated into this prospectus supplement and the accompanying prospectus and you should not rely on any such information in deciding whether to participate in the offering.

Table of Contents

IMPORTANT INFORMATION INCORPORATED BY REFERENCE

The SEC allows "incorporation by reference" into this prospectus supplement and the accompanying prospectus of information that we file with the SEC. This permits us to disclose important information to you by referencing documents filed with the SEC. Any information referenced this way is considered part of this prospectus supplement and the accompanying prospectus, and any information filed by us with the SEC and incorporated herein by reference subsequent to the date of this prospectus supplement and the accompanying prospectus will automatically be deemed to update and supersede such information. We incorporate by reference into the prospectus the following documents which have been filed with the SEC:

Our Annual Report on Form 10-K for our fiscal year ended December 31, 2016 filed with the SEC on March 1, 2017, or the 2016 Annual Report;

The information specifically incorporated by reference into our Annual Report on Form 10-K for our fiscal year ended December 31, 2015, filed with the SEC on February 29, 2016, from our definitive proxy statement on Schedule 14A, filed with the SEC on April 11, 2016;

Exhibits 99.3, 99.4 and 99.5 of our Current Report on Form 8-K/A filed on September 21, 2016, and Item 5.02 of our Current Report on July 27, 2016; and

The description of our shares of common stock contained in our Registration Statement on Form 8-A, filed with the SEC on May 11, 1990, including any subsequent amendment or report filed for the purpose of updating such description.

All documents filed by us under Sections 13(a), 13(c), 14 or 15(d) of the Exchange Act from the date of this prospectus supplement until the sale of all securities registered hereunder or the termination of the offering shall be deemed to be incorporated in this prospectus supplement and the accompanying prospectus by reference. However, documents or portions thereof that are not deemed "filed" with the SEC, including any information furnished under Item 2.02 or Item 7.01 of Form 8-K, or in any related exhibits furnished pursuant to Item 9.01 of Form 8-K, will not be deemed to be incorporated by reference in this prospectus supplement unless otherwise indicated in the applicable document or portion thereof.

Any statement contained in this prospectus supplement and the accompanying prospectus or in a document incorporated or deemed to be incorporated by reference herein shall be deemed to be modified or superseded for purposes of this prospectus supplement and the accompanying prospectus to the extent that a statement contained in any subsequently filed document which is or is deemed to be incorporated by reference herein modifies or supersedes such statement. Any such statement so modified or superseded shall not be deemed, except as so modified or superseded, to constitute a part of this prospectus supplement and the accompanying prospectus. Except as otherwise noted above, all our documents filed with the SEC prior to the 2016 Annual Report are deemed to be modified and superseded by the documents listed in the immediately preceding paragraph.

Upon written or oral request, we will provide without charge to each person to whom a copy of this prospectus supplement or the accompanying prospectus is delivered, including any beneficial owner, a copy of the information that has been or may be incorporated by reference in this prospectus supplement or the accompanying prospectus. Direct any request for copies to:

Merit Medical Systems, Inc.
1600 West Merit Parkway
South Jordan, Utah 84095
Attention: Brian G. Lloyd
Phone: (801) 253-1600

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

Table of Contents

PROSPECTUS SUPPLEMENT SUMMARY

The following summary highlights information about us and the offering described in more detail elsewhere in this prospectus supplement, the accompanying prospectus and the documents incorporated by reference herein. This summary provides an overview of selected information and does not contain all the information you should consider before investing in our common stock. Therefore, you should carefully read this entire prospectus supplement, the accompanying prospectus and the documents incorporated by reference herein before making an investment decision, including the section entitled "Risk Factors" in this prospectus supplement, beginning on page S-16, and the financial statements and the section entitled "Management's Discussion and Analysis of Financial Condition and Results of Operations" in the 2016 Annual Report, which is incorporated by reference herein.

Our Business

We are a leading manufacturer and marketer of disposable medical devices used in an array of interventional, diagnostic and therapeutic medical procedures, particularly in cardiology, radiology and endoscopy. Our mission is to be the most customer-focused company in healthcare. We are determined to make a difference by understanding our customers' needs, and innovating and delivering a diverse range of products that improve the lives of people and communities throughout the world. We fundamentally believe that long-term value is created for our customers, employees, shareholders, and communities when we focus outward and are determined to deliver an exceptional customer experience.

We design, develop, market, and manufacture, through our own operations and contract manufacturers, approximately 180 medical products (classified into more than 20,000 individual product catalog numbers) that we believe offer a high level of quality, value and safety to our customers, as well as the patients they serve. Our products are sold to approximately 10,000 customers in approximately 120 countries around the world and we have a direct sales force presence in 20 countries.

Our products are used in the following clinical areas: diagnostic and interventional cardiology; interventional radiology; neurointerventional radiology and surgery; vascular, general and thoracic surgery; electrophysiology; cardiac rhythm management; interventional pulmonology; interventional nephrology; orthopaedic spine surgery; interventional oncology and pain management; outpatient access centers; computed tomography; ultrasound; and interventional gastroenterology.

We currently report our operations in two operating segments: cardiovascular and endoscopy. Within those operating segments, we offer products focused in the following four core product groups:

- peripheral intervention, which includes products designed to alleviate patient suffering from peripheral vascular and nonvascular diseases;
- cardiac intervention, which includes products designed to aid in the treatment of various cardiac conditions specific to interventional cardiology and electrophysiology, including cardiac rhythm management and cardiac resynchronization therapy;
- interventional oncology and spine, which includes vertebral augmentation products for the treatment of vertebral compression fractures as well as medical devices used to treat metastatic spine tumors; and
- endoscopy, which integrates advanced non-vascular stent technology with balloon dilators, inflation devices, guide wires, procedure kits, and other devices used by gastroenterologists, endoscopists, pulmonologists, and thoracic and general surgeons.

In addition, our interventional radiology and other special procedure labs perform a variety of invasive diagnostic and interventional procedures and we provide certain specialty procedure products.

Table of Contents

We provide our products to hospitals and clinic-based cardiologists, radiologists, neurologists, nephrologists, vascular surgeons, orthopaedic surgeons, interventional gastroenterologists and pulmonologists, thoracic surgeons, physiatrists (pain management physicians), general surgeons, thoracic surgeons, oncologists, electrophysiologists, technicians, and nurses. Hospitals and acute care facilities in the United States generally purchase our products through our direct sales force, distributors, OEM partners, or custom procedure tray manufacturers who assemble and combine our products in custom kits and packs. Outside the United States, hospitals and acute care facilities generally purchase our products through our direct sales force, or, in the absence of a sales force, through independent distributors or OEM partners.

Our business strategy focuses on four target areas as follows:

- enhancing growth and profitability through research and development, sales model optimization, strategic acquisitions and alliances, cost discipline, and operational focus;

- optimizing our operational capability through lean processes, cost effective environments, and asset utilization;

- targeting high-growth, high-return opportunities by understanding, innovating, acquiring and delivering in peripheral, cardiac, interventional oncology and spine, and endoscopy product groups; and

- maintaining a highly disciplined, customer-focused enterprise guided by strong core values to globally address unmet or underserved healthcare needs.

We believe that successful introduction and adoption of new products should help us continue to strengthen our product portfolio, help us to achieve greater market penetration, and if successful, drive top-line growth. We believe the following products, which we introduced to our product portfolio in the United States or Europe since the third quarter of 2015 or are developing, will help us continue our growth objectives in 2017:

- CorVocet Biopsy System

- SwiftNINJA® Steerable Microcatheter

- Elation® GI & Pulmonary Balloons

- TWISTER® PLUS Rotatable Retrieval Device

- PreludeEASE Hydrophilic Sheath Introducer

- PreludeSync Radial Compression Device

- HeRO® Graft

- Super HeRO®

- True Form Guide Wires

Heartspan® Transseptal Sheath

Amplatz Guide Wires

Merit PAK Pedal Access

Critical Care Products (acquired from Argon Medical Devices, Inc.)

Dual Cap® Disinfection and Protection (acquired from Catheter Connections, Inc.)

The success of our products is enhanced by the extensive experience of our management team in the healthcare industry, our experienced direct sales force and distributors, our ability to provide

Table of Contents

custom procedural solutions such as kits, trays and procedural packs at the request of our customers, and our dedication to offering facility-unique solutions in the markets we serve worldwide.

Sales of our products in the U.S. accounted for approximately 61% of our net sales in the year ended December 31, 2016. In the U.S., we have a dedicated, direct sales organization of 128 employees who are primarily focused on selling to end-user physicians, hospitals and clinics, major buying groups and integrated healthcare networks. Internationally, we employ 158 sales representatives, and we also contract with independent dealer organizations and custom procedure tray manufacturers to distribute our products worldwide, including territories in Europe, Africa, the Middle East, Asia, South and Central America, Oceania, and Canada. In 2016, our international sales accounted for approximately 39% of our net sales.

During the year ended December 31, 2016, net sales generated by our top ten selling products accounted for approximately 39% of our total net sales. Sales of our inflation devices accounted for approximately 12%, 14% and 14% of our net sales for the years ended December 31, 2016, 2015 and 2014, respectively. As of December 31, 2016, we employed approximately 4,150 people.

Our Results of Operations

For the year ended December 31, 2016, we reported net sales of approximately $603.8 million ($608.8 million on a constant currency basis, using applicable 2015 foreign exchange rates), up approximately $61.7 million, or 11.4% (up 12.3% on a constant currency basis, using applicable 2015 foreign exchange rates), over 2015 net sales of approximately $542.1 million ($553.4 million on a constant currency basis, using applicable 2014 foreign exchange rates). For the year ended December 31, 2016, we had core revenue, or net sales excluding sales attributable to the HeRO® Graft, acquired in February 2016, and DFINE, Inc., acquired in July 2016, of approximately $583.3 million, as compared to $542.1 million for the year ended December 31, 2015.

Gross profit as a percentage of sales, or gross margin, increased to 43.9% for the year ended December 31, 2016, as compared to 43.5% for the year ended December 31, 2015. Non-GAAP gross margin increased to 46.9% for the year ended December 31, 2016, as compared to 45.6% for the year ended December 31, 2015.

Net income for the year ended December 31, 2016 was approximately $20.1 million, or $0.45 per share, as compared to $23.8 million, or $0.53 per share, for the year ended December 31, 2015. Non-GAAP net income for the year ended December 31, 2016 was approximately $45.1 million, or $1.01 non-GAAP earnings per share, as compared to $38.5 million, or $0.87 non-GAAP earnings per share, for the year ended December 31, 2015.

For additional information, including a discussion of trends that we expect to impact our business in 2017, please review the section entitled "Management's Discussion and Analysis of Financial Condition and Results of Operations" in the 2016 Annual Report, which is incorporated by reference herein. Additionally, please see the sections in this prospectus supplement entitled "Non-GAAP Financial Measures" and "Summary Consolidated Financial Information" for further information regarding the non-GAAP measures presented above, including tables reconciling such measures to their corresponding GAAP measures.

Recent Developments

Acquisitions

On January 31, 2017, we acquired substantially all the assets, including intellectual property covered by approximately 40 patents and pending applications, and assumed certain liabilities, of Catheter Connections, Inc., or Catheter Connections, in exchange for a payment of $38.0 million. Catheter Connections, which is based in Salt Lake City, Utah, developed and marketed the DualCap

Table of Contents

System, an innovative family of disinfecting products designed to protect patients from intravenous infections resulting from infusion therapy.

On January 31, 2017, we completed the acquisition of the critical care division of Argon Medical Devices, Inc., or Argon. As part of the acquisition, we acquired several Argon subsidiaries located in Singapore, Japan and Europe, a manufacturing facility in Singapore, as well as approximately 100 registered trademarks and other intellectual property, and inventory located in the United States. The products within the acquired Argon critical care division include pressure monitoring transducers and various catheters. The transaction consideration was valued at approximately $10.0 million.

We currently estimate that the two acquisitions noted above will result in incremental intangible amortization expense of approximately $3.3 million to $4.3 million in 2017, of which we expect to recognize approximately $0.5 million to $0.7 million in the first quarter of 2017. Similarly, we currently estimate that inventory write-up from these acquisitions will reduce our GAAP gross margin by approximately $1.0 million to $1.4 million in 2017, of which $0.4 million to $0.7 million would be reflected in the first quarter of 2017. These estimates are preliminary, based on currently available information, and subject to change as we continue to finalize the valuation of acquired assets and purchase accounting for these acquisitions. All of these amounts are on a GAAP basis, before tax and would be added back for non-GAAP reporting. We continue to evaluate acquisition opportunities as part of our growth strategy.

Legal Expenses Related to DOJ Subpoena

We currently expect that our results in the first quarter of 2017 will be impacted by legal expenses related to our ongoing efforts to respond to the subpoena we received from the Department of Justice in October 2016. As previously reported, we incurred approximately $1.0 million of such expenses in the fourth quarter of 2016, and we currently expect that these expenses will be approximately $4.5 million to $4.7 million for the first quarter of 2017. We expect that these expenses will be in a similar range in subsequent quarters or potentially higher, depending on the progress of the investigation and other factors beyond our control. All of these amounts are on a GAAP basis, before tax and would be added back for non-GAAP reporting.

For further information related to the subpoena we received from the Department of Justice in October 2016, please refer to Item 3 (Legal Proceedings) of our 2016 Annual Report, which is incorporated by reference herein.

Amendment to Credit Agreement

On March 20, 2017 we entered into an amendment to our Second Amended and Restated Credit Agreement, or the Second Amended Credit Agreement, which we entered into with Wells Fargo Bank, National Association, Bank of America, N.A., U.S. Bank, National Association and HSBC Bank USA, National Association (as lenders) and Wells Fargo Bank, National Association (as administrative agent) on July 6, 2016 and which was previously amended on September 28, 2016.

In pertinent part, the amendment gives us flexibility in determining how to allocate the net proceeds from an issuance of equity securities to repay amounts due under then-outstanding term loans and revolving credit loans. Specifically, the amendment allows us to choose to use the net proceeds from any equity issuance, including this offering, in one of four ways, namely:

(1) to first repay term loans with the excess, if any, being used to repay revolving credit loans;

(2) to first repay revolving credit loans with the excess, if any, being used to repay outstanding term loans;

Table of Contents

(3) to first repay revolving credit loans (with a corresponding, permanent reduction in our revolving credit commitment, which is currently $275.0 million) with the excess, if any, being used to repay outstanding term loans; and

(4) (for any equity issuance where the net proceeds exceed $50 million) to first repay at least $50 million of term loans with the excess, if any, being used to repay revolving credit loans.

To the extent we exercise the second or fourth option above in connection with any equity issuance prior to December 31, 2017, we will be required to have a leverage ratio of 3.5 to 1.0 or less at the end of each subsequent fiscal quarter through March 31, 2018.

To the extent we exercise the first, third or fourth option above in connection with net proceeds received from an issuance of equity securities in 2017, the amount of our permitted acquisition basket under the Second Amended Credit Agreement would be restored by an amount equal to the amount of such prepayment, up to a maximum basket amount of $50.0 million.

As of December 31, 2016, $180.0 million of revolving credit loans were outstanding, before giving effect to $38.0 million of additional revolving credit loans borrowed to finance our acquisition of substantially all of the assets of Catheter Connections in January 2017.

Although exercising the first, second or fourth option above will not result in a reduction of our revolving credit commitment, to the extent we exercise the third option above, we would experience a corresponding reduction in our revolving credit commitment and our access to financing under the Second Amended Credit Agreement would be reduced. See "Risk Factors Risks Related to the Offering and the Ownership of Our Common Stock We will have discretion in how to use the net proceeds received from this offering."

For further details on the terms of our Second Amendment Credit Agreement, please see note 7 (Revolving Credit Facility and Long-Term Debt) to our audited consolidated financial statements included in our 2016 Annual Report, which is incorporated by reference herein.

Product Recall

In February 2017, we initiated a recall of four lots, or batches, of our Prelude Short Sheath Introducer. We do not currently expect that this recall will have a material impact on our operations or revenues. For additional information, please see "Risk Factors Risks Related to Our Business Our products may be subject to product liability claims and recalls."

Corporate Information

We were incorporated in 1987 as a Utah corporation. We conduct our operations through a number of domestic and foreign subsidiaries. Our principal offices and world headquarters are located at 1600 West Merit Parkway, South Jordan, Utah 84095, and our telephone number is (801) 253-1600. We maintain an Internet website at *www.merit.com*. We do not incorporate by reference into this prospectus supplement or the accompanying prospectus the information on, or accessible through, our website, and you should not consider it as part of this prospectus supplement or the accompanying prospectus.

Table of Contents

SUMMARY OF THE OFFERING

Common stock offered:	4,500,000 shares.
Common stock to be outstanding immediately after this offering:	49,179,658 shares.
Underwriters' option to purchase additional shares:	We have granted the underwriters an option to purchase up to an additional 675,000 shares of our common stock, at the public offering price, less the underwriting discount, which is exercisable for 30 days after the date of this prospectus supplement.
Use of proceeds:	We intend to use the net proceeds we receive from the offering to repay currently outstanding indebtedness under our Second Amended Credit Agreement. See "Use of Proceeds."
Conflicts of interest:	Affiliates of Merrill Lynch, Pierce, Fenner & Smith Incorporated and Wells Fargo Securities, LLC, underwriters in this offering, are lenders under our Second Amended Credit Agreement. Because such affiliates are expected to receive 5% or more of the net proceeds of this offering, not including underwriting compensation, Merrill Lynch, Pierce, Fenner & Smith Incorporated and Wells Fargo Securities, LLC are deemed to have a "conflict of interest", within the meaning of Rule 5121 of the Financial Industry Regulatory Authority, Inc., or Rule 5121. Accordingly, this offering is being made in compliance with the applicable provisions of Rule 5121. The appointment of a "qualified independent underwriter" (within the meaning of the rule) is not necessary for this offering because the shares of common stock being offered hereby have a "bona fide public market" (within the meaning of the rule). See "Use of Proceeds" and "Underwriting (Conflicts of Interest) Conflicts of Interest."
Dividends:	We have never declared or paid cash dividends on our common stock. We presently intend to retain any future earnings for use in our business and, therefore, do not anticipate paying any dividends on our common stock in the foreseeable future. Additionally, the payment of cash dividends by us is restricted by our Second Amended Credit Agreement, which prohibits us from paying any cash dividends without the lenders' prior approval. See "Description of Common Stock Dividend Policy" and "Risk Factors Risks Related to the Offering and the Ownership of Our Common Stock We do not anticipate declaring any cash dividends on our common stock and capital appreciation, if any, is expected to be your sole return on investment."
Transfer agent and share registrar:	Zion's Bank, a division of ZB, N.A.

Table of Contents

Risk factors:	You should read the "Risk Factors" beginning on page S-16 of this prospectus supplement and the other information included or incorporated by reference in this prospectus supplement and the accompanying prospectus for a discussion of factors you should consider carefully before deciding to purchase shares of our common stock.
NASDAQ Global Select Market symbol:	"MMSI"

The number of shares of common stock that will be outstanding after this offering as reflected above is based on the actual number of shares outstanding as of March 17, 2017, which was 44,679,658 shares, and does not include, as of that date:

- 1,184,307 shares of common stock issuable upon the exercise of outstanding options, warrants and rights, with a weighted average exercise price of $14.09 per share; and

- 1,853,510 shares of common stock reserved for future issuance under our 2006 Long-Term Incentive Plan and our non-qualified Employee Stock Purchase Plan.

Table of Contents

SUMMARY CONSOLIDATED FINANCIAL INFORMATION

The summary consolidated statements of operations information as of, and for the years ended, December 31, 2016, 2015 and 2014 are derived from our audited consolidated financial statements that are incorporated by reference into this prospectus supplement. The historical results presented below are not necessarily indicative of financial results to be achieved in future periods.

This summary financial information should be read in conjunction with (a) our consolidated financial statements and the notes related thereto and (b) "Management's Discussion and Analysis of Financial Condition and Results of Operations," in each case, which are included in our 2016 Annual Report incorporated by reference into this prospectus supplement.

	Year ended December 31,		
	2016	2015	2014
	(in thousands, except gross margin and per share data)		
GAAP Operating Data:			
Net sales(1)	$ 603,838	$ 542,149	$ 509,689
Cost of sales	338,813	306,368	284,467
Gross profit	265,025	235,781	225,222
Operating Expenses:			
Selling, general, and administrative	184,398	156,348	147,894
Research and development	45,229	40,810	36,632
Intangible asset impairment charge			1,102
Contingent consideration expense (benefit)	61	80	(572)
Acquired in-process research and development	461	1,000	
Total operating expenses	230,149	198,238	185,056
Income From Operations	34,876	37,543	40,166
Other Income (Expense):			
Interest income	81	272	217
Interest expense	(8,798)	(6,229)	(8,829)
Other income (expense)	(773)	(386)	18
Other income (expense) net	(9,490)	(6,343)	(8,594)
Income before income taxes	25,386	31,200	31,572
Income tax expense	5,265	7,398	8,598
Net income	$ 20,121	$ 23,802	$ 22,974
Gross margin(2)	43.9%	43.5%	44.2%
Earnings Per Share:			
Basic	0.45	0.54	0.53
Diluted	$ 0.45	$ 0.53	$ 0.53

Average Common Shares:			
Basic	44,408	44,036	43,143
Diluted	44,862	44,511	43,409

To illustrate movements in our gross margin on a quarter-by-quarter basis, in the table below, we have included unaudited GAAP gross margins for the three-month periods ended December 31, 2016, September 30, 2016, June 30, 2016, March 31, 2016 and December 31, 2015.

	Three Months Ended				
	December 31, 2016	**September 30, 2016**	**June 30, 2016**	**March 31, 2016**	**December 31, 2015**
GAAP gross margin	44.5%	43.2%	44.3%	43.5%	43.6%

Table of Contents

	As of December 31,		
	2016	2015	2014
	(in thousands)		
GAAP Balance Sheet Data:			
Working capital	$ 155,092	$ 116,093	$ 116,910
Total assets	942,803	778,728	747,165
Long-term debt, less current portion	314,373	197,593	214,490
Stockholders' equity	498,189	466,103	435,259

In this section, we have also included certain unaudited, non-GAAP financial measures with reconciliations to the most directly comparable GAAP financial measures during the periods shown. You should consider any non-GAAP measures referred to in this prospectus supplement in addition to, and not as a substitute for, financial reporting measures prepared in accordance with GAAP. For additional information, see "Non-GAAP Financial Measures."

In the table below, we have included unaudited core revenue, non-GAAP net income, non-GAAP earnings per share and non-GAAP gross margin for the years ended December 31, 2016, 2015 and 2014.

	Year ended December 31,		
	2016	2015	2014
	(unaudited; in thousands, except gross margin and per share data)		
Non-GAAP Financial Measures:			
Core revenue(3)	$ 583,259	$ 542,149	$ 509,689
Non-GAAP net income(4)	45,116	38,521	33,758
Non-GAAP earnings per share(4)	1.01	0.87	0.78
Non-GAAP gross margin(5)	46.9%	45.6%	46.4%

In the table below, we have included unaudited non-GAAP gross margins for the three-month periods ended December 31, 2016, September 30, 2016, June 30, 2016, March 31, 2016 and December 31, 2015.

	Three Months Ended				
	December 31, 2016	September 30, 2016	June 30, 2016	March 31, 2016	December 31, 2015
	(non-GAAP information unaudited)				
Non-GAAP gross margin(5)	48.4%	46.8%	46.4%	45.9%	45.6%

Notes:

(1)

During the year ended December 31, 2016, we had net sales of $603.8 million (or $608.8 million on a constant currency basis, using applicable 2015 foreign exchange rates) an increase of 11.4% (or 12.3% on a constant currency basis, using applicable 2015 foreign exchange rates) over net sales for the year ended December 31, 2015 of $542.1 million. During the year ended December 31, 2015, we had net sales of $542.1 million (or $553.4 million on a constant currency basis, using applicable 2014 foreign exchange rates) an increase of 6.4% (or 8.6% on a constant currency basis, using applicable 2014 foreign exchange rates) over net sales for the year ended December 31, 2014 of $509.7 million.

Constant currency revenue, or net sales on a constant currency basis, is a non-GAAP financial measure prepared by translating the current-period reported net sales of subsidiaries whose functional currency is other than the U.S. dollar at the applicable foreign exchange rates in effect during the comparable prior period. Our constant currency revenue adjustment of

Table of Contents

$4.9 million for the year ended December 31, 2016 was calculated using the applicable average foreign exchange rates for the year ended December 31, 2015 and our constant currency revenue adjustment of $11.3 million for the year ended December 31, 2015 was calculated using the applicable average foreign exchange rates for the year ended December 31, 2014.

(2) Gross margin refers to our gross profit as a percentage of net sales.

(3) We define core revenue as reported net sales excluding net sales attributable to the HeRO® Graft, acquired in February 2016, and DFINE, Inc., acquired in July 2016. The following tables show our core revenue, or non-GAAP net sales, for the years ended December 31, 2016, 2015 and 2014 and, to illustrate quarterly impact, the three-month periods ended December 31, 2016 and 2015 and reconcile our core revenue to our GAAP net sales during the same periods.

	Year ended December 31,		
	2016	2015	2014
	(in thousands; non-GAAP information unaudited)		
GAAP net sales	**$ 603,838**	**$ 542,149**	**$ 509,689**
Non-GAAP Adjustments:			
Net sales from HeRO® Graft and DFINE, Inc.	20,579		
Core revenue	**$ 583,259**	**$ 542,149**	**$ 509,689**

	Three months ended December 31,	
	2016	2015
	(in thousands; non-GAAP information unaudited)	
GAAP net sales	**$ 157,715**	**$ 138,404**
Non-GAAP Adjustments:		
Net sales from HeRO® Graft and DFINE, Inc.	8,355	
Core revenue	**$ 149,360**	**$ 138,404**

(4) Non-GAAP net income and non-GAAP earnings per share include net income adjusting for amortization of intangibles, inventory mark-up and severance expenses related to acquisitions, acquisition-related costs, and other adjustments as illustrated further below.

The following tables set forth our non-GAAP net income and non-GAAP earnings per share for the years ended December 31, 2016, 2015 and 2014 and for the three-month periods ended December 31, 2016 and 2015, respectively, and reconcile such information to our GAAP net

Table of Contents

income and earnings per share during the same periods. The footnotes are included after the last table on page S-14.

	Year ended December 31, 2016			
	Pre-Tax	Tax Impact(a)	After-Tax	Per Share Impact
	(in thousands, except per share data; non-GAAP information unaudited)			
GAAP Net Income	**$ 25,386**	**$ (5,265)**	**$ 20,121**	**$ 0.45**
Non-GAAP Adjustments:(b)				
Cost of sales				
Amortization of intangibles	15,122	(5,592)	9,530	0.21
Inventory mark-up related to acquisitions	2,990	(1,163)	1,827	0.04
Severance	56	(22)	34	0.00
Selling, general, and administrative				
Severance	10,271	(3,878)	6,393	0.14
Acquisition-related(c)	4,503	(1,448)	3,055	0.07
Fair value adjustment to contingent consideration(d)	61	(24)	37	0.00
Long-term asset impairment charge(e)	100	(38)	62	0.00
Acquired in-process research and development	461	(179)	282	0.01
Amortization of intangibles	4,167	(1,595)	2,572	0.06
Special legal expense(f)	1,016	(395)	621	0.01
Other income (expense)				
Amortization of long-term debt issuance costs	952	(370)	582	0.01
Non-GAAP Net Income	**$ 65,085**	**$ (19,969)**	**$ 45,116**	**$ 1.01**

Diluted Shares 44,862

	Year ended December 31, 2015			
	Pre-Tax	Tax Impact(a)	After-Tax	Per Share Impact
	(in thousands, except per share data; non-GAAP information unaudited)			
GAAP Net Income	**$ 31,200**	**$ (7,398)**	**$ 23,802**	**$ 0.53**
Non-GAAP Adjustments:(b)				
Cost of sales				
Amortization of intangibles	11,255	(3,779)	7,476	0.17
Selling, general, and administrative				
Severance	2,934	(1,141)	1,793	0.04
Acquisition-related(c)	2,305	(897)	1,408	0.03
Fair value adjustment to contingent consideration(d)	80	(31)	49	0.00
Long-term asset impairment charge(e)	141	(55)	86	0.00
Acquired in-process research and development	1,000	(389)	611	0.01
Amortization of intangibles	3,563	(1,359)	2,204	0.05
Termination fee(g)	800	(311)	489	0.01
Other income (expense)				
Amortization of long-term debt issuance costs	987	(384)	603	0.01
Non-GAAP Net Income	**$ 54,265**	**$ (15,744)**	**$ 38,521**	**$ 0.87**

Diluted Shares	44,511

Table of Contents

	Year ended December 31, 2014			
	Pre-Tax	Tax Impact(a)	After-Tax	Per Share Impact
	(in thousands, except per share data; non-GAAP information unaudited)			
GAAP Net Income	**$ 31,572**	**$ (8,598)**	**$ 22,974**	**$ 0.53**
Non-GAAP Adjustments:(b)				
Cost of sales				
Amortization of intangibles	11,096	(4,216)	6,880	0.16
Selling, general, and administrative				
Severance	149	(57)	92	0.00
Acquisition-related(c)	98	(37)	61	0.00
Fair value adjustment to contingent consideration(d)	(572)	217	(355)	(0.01)
Long-term asset impairment charge(e)	690	(262)	428	0.01
Amortization of intangibles	3,842	(1,460)	2,382	0.05
Intangible asset impairment charges(h)	1,102	(419)	683	0.02
Other income (expense)				
Amortization of long-term debt issuance costs	989	(376)	613	0.01
Non-GAAP Net Income	**$ 48,966**	**$ (15,208)**	**$ 33,758**	**$ 0.78**
Diluted Shares				43,409

Table of Contents

	Three months ended December 31, 2016			
	Pre-Tax	Tax Impact(a)	After-Tax	Per Share Impact
	(in thousands, except per share data; non-GAAP information unaudited)			
GAAP net income	**$ 9,622**	**$ (2,116)**	**$ 7,506**	**$ 0.17**
Non-GAAP Adjustments:(i)				
Cost of sales				
Amortization of intangibles	4,434	(1,653)	2,781	0.06
Inventor mark-up related to acquisitions	1,581	(615)	966	0.02
Selling, general, and administrative				
Severance	848	(330)	518	0.01
Acquisition-related(c)	753	(266)	487	0.01
Fair value adjustment to contingent consideration(d)	(38)	15	(23)	(0.00)
Long-term asset impairment charge(e)	13	(5)	8	0.00
Acquired in-process research and development	61	(24)	37	0.00
Amortization of intangibles	1,298	(499)	799	0.02
Special legal expense(f)	1,016	(395)	621	0.01
Other income (expense)				
Amortization of long-term debt issuance costs	172	(67)	105	0.00
Non-GAAP Net Income	**$ 19,760**	**$ (5,955)**	**$ 13,805**	**$ 0.31**
Diluted Shares				45,165

Table of Contents

	Three months ended December 31, 2015			
	Pre-Tax	Tax Impact(a)	After-Tax	Per Share Impact
	(in thousands, except per share data; non-GAAP information unaudited)			
GAAP Net Income	**$ 6,554**	**$ (145)**	**$ 6,409**	**$ 0.14**
Non-GAAP Adjustments:(i)				
Cost of sales				
Amortization of intangibles	2,857	(1,041)	1,816	0.04
Selling, general, and administrative				
Severance	1,217	(473)	744	0.02
Acquisition-related(c)	1,841	(716)	1,125	0.03
Fair value adjustment to contingent consideration(d)	(105)	41	(64)	(0.00)
Long-term asset impairment charge(e)	42	(16)	26	0.00
Acquired in-process research and development				
Amortization of intangibles	910	(347)	563	0.01
Other income (expense)				
Amortization of long-term debt issuance costs	246	(96)	150	0.00
Non-GAAP Net Income	**$ 13,562**	**$ (2,794)**	**$ 10,768**	**$ 0.24**
Diluted Shares				44,642

(a) Reflects the tax effect of each non-GAAP adjustment.

(b) The non-GAAP adjustments referenced do not reflect stock-based compensation expense of approximately $2.5 million, $2.2 million and $1.5 million for the years ended December 31, 2016, 2015 and 2014, respectively.

(c) Represents selling, general and administrative expenses related to acquisitions during the period.

(d) Represents changes in the fair value of contingent consideration liabilities and contingent receivables as a result of acquisitions.

(e) Represents abandoned patents.

(f) Costs incurred in responding to an inquiry from the U.S. Department of Justice. See Item 3 (Legal Proceedings) of our 2016 Annual Report for more information.

(g) Costs associated with the termination of our agreement with a third-party contract manufacturer in Tijuana, Mexico.

(h) Represents impairment charges of certain non-tangible assets.

(i)

The non-GAAP adjustments do not reflect stock-based compensation expense of approximately $593,000 and $600,000 for the three-month periods ended December 31, 2016 and 2015, respectively.

(5) Non-GAAP gross margin is calculated by adjusting our gross profit by amounts recorded for amortization of intangible assets, inventory mark-up and severance expense related to acquisitions.

Table of Contents

The following tables show our non-GAAP gross margins for the periods noted and reconcile such measures to our GAAP gross margin for the same period.

	Year ended December 31,		
	2016	2015	2014
	(in thousands, except percentages; non-GAAP information unaudited)		
Net sales	$ 603,838	$ 542,149	$ 509,689
GAAP gross profit	$ 265,025	$ 235,781	$ 225,222
as a percentage of net sales	43.9%	43.5%	44.2%
Non-GAAP Adjustments:			
Amortization of intangibles	15,122	11,255	11,096
Inventory mark-up related to acquisition	2,990		
Severance	56		
Non-GAAP gross profit	$ 283,193	$ 247,036	$ 236,318
as a percentage of net sales	46.9%	45.6%	46.4%

	Three Months Ended				
	December 31, 2016	September 30, 2016	June 30, 2016	March 31, 2016	December 31, 2015
	(in thousands, except percentages; non-GAAP information unaudited)				
Net sales	$ 157,715	$ 156,975	$ 151,071	$ 138,077	$ 138,404
GAAP gross profit	$ 70,255	$ 67,815	$ 66,854	$ 60,100	$ 60,307
as a percentage of net sales	44.5%	43.2%	44.3%	43.5%	43.6%
Non-GAAP Adjustments:					
Amortization of intangibles	4,434	4,446	3,169	3,074	2,857
Inventory mark-up related to acquisition	1,581	1,202	61	146	
Severance		56			
Non-GAAP gross profit	$ 76,270	$ 73,519	$ 70,084	$ 63,320	$ 63,164
as a percentage of net sales	48.4%	46.8%	46.4%	45.9%	45.6%

Table of Contents

RISK FACTORS

Before you make a decision to invest in our common stock, you should consider carefully the risks described below, together with other information in this prospectus supplement, the accompanying prospectus and the information incorporated by reference in this prospectus supplement.

If any of the following events actually occur, our business, operating results, prospects or financial condition could be materially harmed. This could cause the trading price of our common stock to decline, and you may lose all or part of your investment. The risks described below and in the information incorporated by reference herein are not the only ones that we face or that apply to ownership of our common stock. Additional risks not presently known to us or that we currently deem immaterial may also significantly impair our business operations and could result in a complete loss of your investment.

Risks Related to Our Business

Among the factors that may have a direct bearing on our business, operations, or financial condition are the factors identified below.

We may be unable to successfully manage growth, particularly if accomplished through acquisitions, and the integration of acquired businesses may present significant challenges that could harm our operations.

Successful implementation of our business strategy will require that we effectively manage any associated growth. To manage growth effectively, our management will need to continue to implement changes in certain aspects of our business, to improve our information systems, infrastructure and operations to respond to increased demand, to attract and retain qualified personnel, and to develop, train, and manage an increasing number of management-level and other employees. Growth could place an increasing strain on our management, financial, product design, marketing, distribution and other resources, and we could experience operating difficulties. Any failure to manage growth effectively could have a material adverse effect on our business, operations or financial condition.

Over the past several years, we completed a series of significant acquisitions, including our acquisition of DFINE, Inc. in 2016. As we grow through acquisitions, we face the additional challenges of integrating the operations, culture, information management systems and other characteristics of the acquired entity with our own. For instance, prior to its acquisition, DFINE was not profitable or cash flow positive and, as such, we have sought to make DFINE operations accretive to our results of operations by, among other things, substantially reducing the number of employees at DFINE, restructuring our sales and marketing operations, and consolidating a significant portion of the manufacturing activities related to the DFINE products. These and other efforts to integrate DFINE, as well as efforts to integrate future acquisitions, may be hampered by delays, the loss of certain employees, suppliers or customers, proceedings resulting from employment terminations, culture clashes, unbudgeted costs, and other issues at certain levels, which may occur at levels that are more severe or prolonged than anticipated.

We have incurred, and will likely continue to incur, significant expenses in connection with negotiating and consummating various acquisition transactions, and we may inherit significant liabilities in connection with prospective acquisitions, including regulatory, infringement, product liability, discrimination or other legal claims or issues. In addition, we may not realize competitive advantages, synergies or other benefits anticipated in connection with any such acquisition. If we do not adequately identify targets for, or manage issues related to, our future acquisitions, such acquisitions may have an adverse effect on our business, operations or financial condition.

Table of Contents

We may not be able to effectively protect our intellectual property, which could harm our business and financial condition.

Our ability to remain competitive is dependent, in part, upon our ability to protect our intellectual property rights and prevent other companies from using our intellectual property. We seek to protect our intellectual property rights through a combination of confidentiality and license agreements, and through copyright, patent, trademark, and trade secrets laws. However, all these measures afford only limited protection and may be challenged, invalidated, or circumvented by third parties. Additionally, these measures may not prevent competitors from duplicating our products or gaining access to our proprietary information and technology. Third parties may copy all or portions of our products or otherwise use our intellectual property without authorization, and we may not be able to prevent the unauthorized disclosure or use of our technical knowledge or trade secrets by consultants, vendors, former employees and current employees, despite the existence of nondisclosure and confidentiality agreements and other contractual restrictions, all of which could have an adverse effect on our business, operations, or financial condition.

Third parties may also develop similar or superior technology independently or by designing around our patents. In addition, the laws of some foreign countries do not offer the same level of protection for our intellectual property as the laws of the U.S. Further, no assurances can be given that any patent application we have filed or will file will result in a patent being issued, or that any existing or future patents will afford adequate or meaningful protection against competitors or against similar technologies. All of our patents will eventually expire and some of our patents, including patents protecting significant elements of our technology, will expire within the next several years.

In the ordinary course of business, we are involved in various claims and intellectual property litigation matters. These claims and matters may involve our patents, trade secrets, trademarks, and copyrights. Filing, prosecuting and defending our intellectual property in all countries throughout the world may be prohibitively expensive. Litigation may be necessary in the future to enforce our intellectual property rights, protect our trade secrets or to determine the validity and scope of proprietary rights claimed by others. Any such lawsuits that we might initiate could be expensive, take significant time and divert management's attention from our business. Litigation also puts our patents at risk of being invalidated or interpreted narrowly. Additionally, we may provoke third parties to assert claims against us. Moreover, the legal systems of certain countries, particularly certain developing countries, do not favor the aggressive enforcement of patent and other intellectual property protection which makes it difficult to stop infringement. We may not prevail in any lawsuits that we initiate and the damages or other remedies awarded, if any, may not be commercially valuable.

Third parties claiming that we infringe their intellectual property rights could cause us to incur significant legal or licensing expenses and prevent us from selling our products.

Our commercial success will depend in part on not infringing or violating the intellectual property rights of others. From time to time, third parties may claim that we have infringed their intellectual property rights, including claims regarding patents, copyrights, trademarks, and trade secrets. We may not be aware of whether our products do or will infringe existing or future patents or the intellectual property rights of others. Because of constant technological change in the medical device industry in which we compete, the extensive patent coverage of existing technologies, and the rapid rate of issuance of new patents, it is possible that the number of these claims may grow. In addition, former employers of our former, current, or future employees may assert claims that such employees have improperly disclosed to us the confidential or proprietary information of these former employers. Any such claim, with or without merit, could result in costly litigation, distract management from day-to-day operations and harm our brand or reputation, which in turn could harm our business or results of operations. If we are not successful in defending such claims, we could be required to stop selling, delay shipments of, or redesign, our products, discontinue the use of related trademarks,

Table of Contents

technologies or designs, pay monetary amounts as damages, enter into royalty or licensing arrangements or satisfy indemnification obligations that we have with some of our customers. Royalty or licensing arrangements that we may seek in such circumstances may not be available to us on commercially reasonable terms or at all and we may not be able to redesign applicable products in a way to avoid infringing the intellectual property rights of others. We have made and expect to continue making significant expenditures to investigate, defend and settle claims related to the use of technology and intellectual property rights as part of our strategy to manage this risk.

The medical device industry is experiencing greater scrutiny and regulation by governmental authorities. Moreover, in October 2016, we received a subpoena from the U.S. Department of Justice seeking information on our marketing and promotional practices. If governmental authorities determine that we have violated laws or regulations, including in respect of our marketing or promotional practices, our company or our employees may be subject to various penalties, including civil or criminal penalties.

Our medical devices and business activities are subject to rigorous regulation by the FDA and other federal, state and foreign governmental authorities. These authorities and members of Congress have been increasing their scrutiny of the medical device industry. In recent years, the U.S. Congress, Department of Justice, the Office of Inspector General of the Department of Health and Human Services and the Department of Defense have issued subpoenas and other requests for information to medical device manufacturers, primarily related to financial arrangements with healthcare providers, regulatory compliance and product promotional practices. If we fail to comply with applicable regulatory requirements, we may be subjected to a wide variety of sanctions and enforcement actions, including warning letters that require corrective action, injunctions, product seizures or recalls, suspension of product manufacturing, revocation of approvals, exclusion from participation in government healthcare programs, civil fines, and criminal penalties.

In October 2016, we received a subpoena from the U.S. Department of Justice seeking information on certain of our marketing and promotional practices. Although we are in the process of responding to the subpoena, we may not be able to resolve this matter, or similar matters that may arise in the future, without our company or employees incurring significant fines, penalties, or other adverse civil or criminal consequences. Even if we are successful in resolving the pending matter without such consequences, we have incurred, and anticipate that we will continue to incur, substantial costs in connection with the matter. The pending matter, or other governmental proceedings, could significantly impact our reputation and divert management's attention and resources from growing our business, which in turn could harm our business, results of operations, financial condition and ability to obtain financing on reasonable terms or at all.

We anticipate that government authorities will continue to scrutinize our industry closely, and that additional regulation by government authorities may increase compliance costs, exposure to litigation and other adverse effects on our operations.

Use of our products in uncleared or unapproved circumstances could expose us to liabilities.

The marketing approvals and clearances from the FDA and other regulators of certain of our products are, or are expected to be, limited to specific uses. We are prohibited from marketing or promoting any uncleared or unapproved use of our products. However, physicians may use these products in ways or circumstances other than those strictly within the scope of the regulatory approval or clearance. Although the product training we provide to physicians and other healthcare professionals is limited to approved and cleared uses, some physicians may be using our products in procedures that are not included in the clearance or approval of the products. Consequently, claims may be asserted by the FDA or other enforcement agencies that we are not in compliance with applicable laws or regulations, or have improperly promoted our products for uncleared or unapproved uses. The FDA or such other agencies could require a recall of products or allege that our promotional activities

Table of Contents

misbrand or adulterate our products or violate other legal requirements, which could result in investigations, prosecutions, or other civil or criminal actions.

A significant adverse change in, or failure to comply with, governing regulations could adversely affect our business, operations or financial condition.

We have extensive global operations, which necessitate that we seek various regulatory clearances or approvals for our products in the jurisdictions where our products are sold. Different regulatory requirements for product approvals and our need to comply with different regulatory regimes could impact our business.

Substantially all of our products are "devices," as defined in the Federal Food, Drug, and Cosmetic Act, or FDCA, and the manufacture, distribution, record keeping, labeling and advertisement of substantially all of our products are subject to regulation by the FDA in the United States and equivalent regulatory agencies in various foreign countries in which our products are manufactured, distributed, labeled, offered or sold. Further, we are subject to regular review and periodic inspections at our facilities with respect to compliance with the FDCA, the FDA's Quality System Regulation, or QSR, ISO standards and similar requirements of foreign countries, which may cover, among others, the procedures and documentation of the design, testing, production, control, quality assurance, labeling, packaging, sterilization, storage and shipment of medical devices. Failure to comply with such requirements, or later discovery of previously unknown problems with our products or our third-party manufacturers' manufacturing processes, including any failure to take satisfactory corrective action in response to an adverse QSR inspection, could result in total or partial suspension of production or distribution, a regulatory agency's refusal to grant pending or future clearances or approvals for our products, withdrawal or suspension of regulatory clearances or approvals, clinical holds, warning letters or untitled letters or refusal to permit the import or export of our products.

The FDA regulatory clearance and approval processes are expensive, time-consuming and uncertain, and the failure to obtain and maintain required regulatory clearances and approvals could prevent us from commercializing our products.

Before we can introduce a new device or a new use of or a claim for a cleared device in the United States, we must generally obtain market clearance from the FDA through the 510(k) premarket notification process or FDA approval through a premarket approval, or PMA, application, unless an exemption from premarket review for lower-risk devices or an alternative procedure, such as a *de novo* classification request or a humanitarian device exemption, applies. The FDA clearance and approval processes for medical devices are expensive, uncertain, and time-consuming.

To obtain 501(k) clearance, a device manufacturer must submit a premarket notification to the FDA demonstrating that the device is substantially equivalent to another legally marketed predicate device. To be substantially equivalent, the notification must show that the new device has the same intended use and the same technology as the predicate device, or, if the new device has different technology, that the device is as safe and effective as the predicate device and does not raise different questions of safety and effectiveness. Performance testing is generally required to demonstrate substantial equivalence, and, for some devices, clinical data may be required. The standards and data requirements necessary for the clearance of a new device may be unclear or may be subject to change. In addition, the FDA may publish or adopt special controls it deems necessary to provide a reasonable assurance of the safety and effectiveness of a device, which might include standards for the testing and clearance of a new device. In addition to the time required to conduct clinical trials, if necessary, it usually takes between three months and one year from the date a 510(k) notification is submitted to obtain clearance, but it may take longer. The FDA may find that substantial equivalence has not been shown and, as a result, require additional clinical or non-clinical testing to support a 510(k) or require the submission of a *de novo* classification request or PMA application for the device.

Table of Contents

A *de novo* classification is an alternate pathway to classify novel devices that are low to moderate risk but for which no substantially equivalent predicate device exists. Clearance of a *de novo* request generally takes six months to one year from the time of submission of the *de novo* request, although it can take longer.

A PMA application is required for Class III devices. The application must demonstrate that there is reasonable assurance that the device is safe and effective for its intended use based on valid scientific evidence. The PMA application process generally takes several years to complete and is expensive, as it typically includes, among other things, human clinical trials, manufacturing facility inspection, bench tests, and laboratory and animal studies, which can be costly to conduct. The FDA may also require additional testing or clinical trials prior to approval or as a condition of approval. Even if the FDA approves the PMA application, it may nevertheless place restrictions on the device. If the FDA's evaluation of the PMA application is not favorable, the FDA may deny approval of the PMA application or issue a "not approvable" letter.

If human clinical trials of a medical device are required for FDA clearance or approval and the device presents a significant risk, the sponsor of the trial must file an investigational device exemption, or IDE, application with the FDA prior to commencing such trials in the U.S. Submission of an IDE application does not ensure that the FDA will issue the IDE. If the IDE application is approved, there can be no assurance the FDA will determine that the data derived from the trials support the safety and effectiveness of the device or warrant the continuation of clinical trials. For clinical trials involving a device that does not present a significant risk, the sponsor is not required to obtain approval of an IDE, but the sponsor must obtain the review and approval of an institutional review board. Both significant risk and non-significant risk trials are subject to additional FDA regulations, including a requirement to obtain informed consent and reporting and recordkeeping requirements. We, the FDA, or the institutional review board, may suspend a clinical trial at any time for various reasons, including a belief that the risks to study subjects outweigh the anticipated benefits.

We are also required to seek FDA clearance or approval for certain manufacturing changes, product enhancements and product line extensions, which may require new 510(k) clearance or approval of a PMA supplement. For devices marketed under an approved PMA, we must submit a PMA supplement to FDA for review and approval prior to making a change to the device that affects the safety or effectiveness of the device, including changes to the design, manufacturing or labeling of the device. Likewise, for 510(k)-cleared devices, we must obtain new FDA 510(k) clearance when there is a major change or modification in the intended use or indications for use or a change or modification of the device that could significantly affect the safety or effectiveness of the device. In some cases, clinical data may be required to support a PMA supplement or 510(k) premarket notification for a device modification.

The FDA requires every manufacturer to make the determination regarding the need for a new 510(k) submission or a PMA supplement in the first instance, but the FDA may review the manufacturer's decisions not to seek a new 510(k) or PMA supplement. We may make changes to our cleared products without seeking additional clearances or approvals if we believe such clearances or approvals are not necessary. However, the FDA may disagree and determine that such a modified device is not substantially equivalent to the marketed device or may require additional information, including clinical data, to be submitted before a determination is made, in which case we may be required to delay the introduction and marketing of our modified products, redesign our products, conduct clinical trials to support any modifications and pay significant regulatory fines or penalties. In addition, the FDA may not approve or clear our products for the indications that are necessary or desirable for successful commercialization.

There is no assurance that we will be able to obtain the necessary regulatory clearances or approvals for any product on a timely basis or at all. Further, the FDA may change its clearance and

Table of Contents

approval policies, adopt additional regulations or revise existing regulations, or take other actions which may prevent or delay approval or clearance of our products under development or impact our ability to modify our currently cleared products on a timely basis. Delays in receipt of, or failure to obtain, regulatory clearances for any product enhancements or new products we develop would result in delayed or no realization of revenue from such product enhancements or new products and in substantial additional costs, which could decrease our profitability.

In addition, we are required to continue to comply with applicable FDA and other regulatory requirements once we have obtained clearance for a product. We cannot assure you that we will successfully maintain the clearances we have received or may receive in the future. In addition, our existing clearances can be revoked if any issues arise that question our products' safety or effectiveness. The loss of previously received clearances or approvals, or the failure to comply with existing or future regulatory requirements could also have a material adverse effect on our business.

We are subject to export control laws, customs laws, sanctions laws and other laws governing our operations in the U.S. and other countries. If we fail to comply with these laws, we could be subject to civil or criminal penalties, other remedial measures and legal expenses, which could adversely affect our business, results of operations and financial condition.

Our global operations expose us to trade and economic sanctions and other restrictions imposed by the United States, the European Union and other governments and organizations. The U.S. Departments of Justice, Commerce, State and Treasury and other federal agencies and authorities have a broad range of civil and criminal penalties they may seek to impose against corporations and individuals for violations of economic sanctions laws, export control laws, and other federal statutes and regulations, including those established by the Office of Foreign Asset Controls. Under these laws and regulations, as well as other export control laws, customs laws, sanctions laws and other laws governing our operations, various government agencies may require export licenses, may seek to impose modifications to business practices, including cessation of business activities in sanctioned countries or with sanctioned persons or entities and modifications to compliance programs, which may increase compliance costs, and may subject us to fines, penalties and other sanctions. A violation of these laws or regulations could adversely impact our business, results of operations and financial condition.

Disruption of critical information systems or material breaches in the security of our systems may adversely affect our business and customer relationships.

We rely on information technology systems to process, transmit, and store electronic information in our day-to-day operations. We also rely on our technology infrastructure, among other functions, to interact with customers and suppliers, fulfill orders and bill, collect and make payments, ship products, provide support to customers, fulfill contractual obligations and otherwise conduct business. Our internal information technology systems, as well as those systems maintained by third-party providers, may be subjected to computer viruses or other malicious codes, unauthorized access attempts, and cyber-attacks, any of which could result in data leaks or otherwise compromise our confidential or proprietary information and disrupt our operations. Cyber-attacks are becoming more sophisticated and frequent, and there can be no assurance that our protective measures will prevent security breaches that could have a significant impact on our business, reputation and financial results. If we fail to monitor, maintain or protect our information technology systems and data integrity effectively or fail to anticipate, plan for or manage significant disruptions to these systems, we could, among other things, lose customers, have difficulty preventing fraud, have disputes with customers, physicians, other health care professionals and employees, be subject to regulatory sanctions or penalties, incur expenses or lose revenues or suffer other adverse consequences. Any of these events could have a material adverse effect on our business, operations or financial condition.

Table of Contents

The agreements and instruments governing our debt contain restrictions and limitations that could significantly affect our ability to operate our business, as well as significantly affect our liquidity.

In connection with our acquisition of DFINE, Inc., we entered into the Second Amended Credit Agreement, which contains a number of significant covenants that could adversely affect our ability to operate our business, our liquidity, or our results of operations. These covenants restrict, among other things, our incurrence of indebtedness, creation of liens or pledges on our assets, mergers or similar combinations or liquidations, asset dispositions, repurchases or redemptions of equity interests or debt, issuances of equity, payment of dividends and certain distributions and entry into related party transactions.

We have pledged substantially all of our assets as collateral for the Second Amended Credit Agreement. Our breach of any covenant in the Second Amended Credit Agreement, not otherwise cured, waived or amended, could result in a default under that agreement and could trigger acceleration of the underlying obligations. Any default under the Second Amended Credit Agreement could adversely affect our ability to service our debt and to fund our planned capital expenditures and ongoing operations. The administrative agent and lenders under the Second Amended Credit Agreement have available to them the remedies typically available to lenders and secured parties, including the ability to foreclose on the collateral we have pledged. Any default under the Second Amended Credit Agreement would at a minimum harm our ability to service our debt and to fund our prospective capital expenditures and ongoing operations. It could lead to an acceleration of indebtedness and foreclosure on our assets.

The Second Amended Credit Agreement provides for a total potential borrowing base of $425.0 million, which is $100.0 million more than the aggregate amount we were permitted to borrow under our prior credit agreement. Under the terms of the Second Amended Credit Agreement, it may be more difficult for us to comply with leverage ratios and other restrictive covenants in the Second Amended Credit Agreement, compared to our prior credit agreement. We may also have less cash available for operations and investments in our business, as we will be required to use additional cash to satisfy the minimum payment obligations associated with this increased indebtedness.

We will be required to expend significant resources for research, development, testing and regulatory approval or clearance of our products under development and these products may not be developed successfully or approved for commercial use.

Most of our products under development will require significant additional research, development, engineering and, in some cases, preclinical and clinical testing, as well as regulatory approval or clearance and a commitment of significant additional resources prior to their commercialization. It is possible that our products may not:

be developed successfully;

be proven safe or effective in clinical trials;

offer therapeutic or other improvements over current treatments and products;

meet applicable regulatory standards or receive regulatory approvals or clearances;

be capable of production in commercial quantities at acceptable costs and in compliance with regulatory requirements;

be successfully marketed; or

be covered by private or public insurers.

We are currently conducting three clinical trials in an effort to obtain approval from the FDA that would enable us to expand our efforts to commercialize the QuadraSphere Microspheres,

Table of Contents

Embosphere Microspheres and EndoMAXX EVT Valved Esophageal Stent. European Union regulations do not currently require such applications for these classes of medical device. In order for us to obtain FDA approval or clearance to promote the use of QuadraSphere Microspheres, Embosphere Microspheres and EndoMAXX EVT Valved Esophageal Stent for the purposes indicated in our clinical trials, we will need to complete those trials and submit positive clinical data to the FDA. If we cannot enroll study subjects in sufficient numbers to complete the necessary studies, if there is a disruption in the supply of materials for the trials or if any other factors preclude us from completing the trials in a timely manner, we will likely not be able to complete those trials. Even if we complete any of the currently pending clinical trials, the FDA may require us to undertake additional testing, or the trial results may not be sufficient to obtain FDA approval or clearance for other reasons, including inconclusive or negative results of our trials or those conducted by our competitors or other third parties. Any clinical trials we undertake in the future will likely be subject to these and similar risks. If we do not obtain FDA approval or clearance of the product use claimed in a clinical trial, we will not be able to promote the subject product for the indicated treatment of the specific disease or condition in the United States.

We are subject to laws targeting fraud and abuse in the healthcare industry, the violation of which could adversely affect our business or financial results.

Our operations are subject to various state and federal laws targeting fraud and abuse in the healthcare industry, including the federal Anti-Kickback Statute and other anti-kickback laws, which prohibit any person from knowingly and willfully offering, paying, soliciting or receiving remuneration, directly or indirectly, to induce or reward either the referral of an individual, or the furnishing or arranging for an item or service, for which payment may be made under federal healthcare programs, such as the Medicare and Medicaid programs. Violations of these fraud and abuse-related laws are punishable by criminal or civil sanctions, including substantial fines, imprisonment and exclusion from participation in healthcare programs such as Medicare and Medicaid, any of which could harm our business or financial results.

We are also subject to the Foreign Corrupt Practices Act, or FCPA, the U.K. Bribery Act, and similar anti-bribery laws in non-U.S. jurisdictions. These laws generally prohibit companies and their intermediaries from illegally offering things of value to any individual for the purpose of obtaining or retaining business. As we continue to expand our business activities internationally, compliance with the FCPA and other anti-bribery laws presents greater challenges to our operations. If our employees or agents violate the provisions of the FCPA or other anti-bribery laws, we may incur fines or penalties, which could have a material adverse effect on our operating results or financial condition.

Healthcare reform legislation has negatively affected our financial results and may have a material adverse effect on our business, operations or financial condition.

The Patient Protection and Affordable Care Act, or PPACA, was enacted into law in March 2010, and most of the core pieces of the PPACA are now in effect. Certain other provisions of the legislation are not scheduled to become effective for a number of years. There are many programs and requirements for which the details have not yet been fully established or consequences not fully understood, and it is unclear what the full impact of the legislation will be. The law imposes on medical device manufacturers a 2.3% excise tax on U.S. sales of certain medical devices. Although this tax was suspended for the 2016 and 2017 tax years, during the year ended December 31, 2015 we incurred $4.3 million related to this tax, which reduced our gross profit by 0.8%. We cannot predict whether the suspension will be continued beyond 2017. In addition, the costs of compliance with the PPACA's reporting and disclosure requirements, frequently identified as the Sunshine Act, with regard to payments or other transfers of value made to healthcare providers may have a material, negative impact on our results of operations and our cash flows.

Table of Contents

Judicial challenges to, as well as legislative and executive initiatives to modify, limit, or repeal, the PPACA have been initiated and continue. For instance, in January 2017, President Trump issued an executive order which, among other things, stated that one of the priorities of the current administration is to seek prompt repeal of the PPACA and instructed all executive departments and branches to exercise their authority and discretion to minimize the economic and regulatory burdens of the PPACA to the maximum extent permitted by law.

We also currently market, and intend to continue to market, our products in Europe. To market our products in the Member States of the European Economic Area, or EEA, under the CE conformity mark, our devices are required to comply with the essential requirements of the EU Medical Devices Directives (Council Directive 93/42/EEC of 14 June 1993 concerning medical devices, as amended), including a completion of a conformity assessment procedure which varies in severity based on the type and classification of the medical device. Since 2012, the European authorities have been working on a reform of the E.U. regulatory framework for medical devices. A final proposal for a new regulation, known as the Medical Devices Regulation, has been agreed upon by the European Commission and the European Parliament in June 2016 and is expected to be formally approved and enter into force in the first half of 2017 and become applicable three years thereafter. The adoption of the Medical Devices Regulation may, however, be materially delayed. In its current form it would, among other things, impose additional reporting requirements on manufacturers of high risk medical devices, impose an obligation on manufacturers to appoint a "qualified person" responsible for regulatory compliance, and provide for more strict clinical evidence requirements. These new rules and procedures may result in increased regulatory oversight of any future high-risk devices that we may develop and this may, in turn, increase the costs, time and requirements that need to be met in order to maintain or place such devices on the EEA market.

We cannot predict what healthcare programs and regulations will be ultimately implemented at the federal or state level, or the effect of any future legislation or regulation in the U.S. or internationally. However, any changes, or uncertainty with respect to potential changes, that lower reimbursements for our products or reduce medical procedure volumes could harm our business and results of operations. As we cannot ultimately predict the long-term effect of the PPACA provisions as they are implemented, any changes to healthcare reform that lower reimbursement amounts for our products could harm our business, results of operation or financial condition.

We are dependent upon key personnel.

Our success is dependent on key management personnel, including Fred P. Lampropoulos, our Chairman of the Board, President and Chief Executive Officer. Mr. Lampropoulos is not subject to any agreement prohibiting his departure, and we do not maintain key man life insurance on his life. The loss of Mr. Lampropoulos, or of certain other key management personnel, could have a materially adverse effect on our business and operations. Our success also depends on, among other factors, the successful recruitment and retention of key operating, manufacturing, sales and other personnel.

Our products may be subject to product liability claims and recalls.

Our products are used in connection with invasive procedures and in other medical contexts that entail an inherent risk of product liability claims. If medical personnel or their patients suffer injury or death in connection with the use of our products, whether as a result of a failure of our products to function as designed, an inappropriate design, inadequate disclosure of product-related risks or information, improper use, or for any other reason, we could be subject to lawsuits seeking significant compensatory and punitive damages. Product liability claims may be brought by individuals or by groups seeking to represent a class. We have previously faced claims by patients claiming injuries from our products. To date, these claims have not resulted in material harm to our operations or financial condition. The outcome of this type of personal injury litigation is difficult to assess or

Table of Contents

quantify. We maintain product liability insurance; however, there is no assurance that this coverage will be sufficient to satisfy any claim made against us. Moreover, any product liability claim brought against us could result in significant costs, divert our management's attention from other business matters or operations, increase our product liability insurance rates, or prevent us from securing insurance coverage in the future. As a result, any lawsuit seeking significant monetary damages may have a material adverse effect on our business, operations or financial condition.

In addition, the occurrence of such an event or claim, or the discovery of a defect in products that have been delivered to our customers, could result in a correction, removal or recall of products from the market or a safety alert relating to such products. For instance, in February 2017, we initiated a recall of four lots, or batches, of our Prelude Short Sheath Introducer, a product which accounted for less than 0.5% of our net sales in 2016, after being notified by a physician of two incidents where that product malfunctioned and after conducting an investigation into the cause of the malfunctions. We notified the FDA of the malfunctions and related patient injuries in accordance with medical device reporting regulations and have modified our manufacturing process to reduce the risk of future recurrence. We also are in the process of gathering the affected products. The FDA has not yet classified the recall or advised whether they will require us to take any additional actions. Recalls such as this could result in significant costs, reduce our revenue, divert management's attention from our business, and harm our reputation.

Our products may cause or contribute to adverse medical events that we are required to report to the FDA, and if we fail to do so, we may be subject to sanctions that may materially harm our business.

Our products are subject to medical device reporting, or MDR, regulations, which require us to report to the FDA any incident in which our products may have caused or contributed to a death or serious injury, or in which our products malfunctioned and, if the malfunction were to recur, it could likely cause or contribute to a death or serious injury. Our obligation to report under the MDR regulations is triggered on the date on which we become aware of an adverse event and the nature of the event. We may fail to report adverse events of which we become aware within the prescribed timeframe. We may also fail to recognize that we have become aware of a reportable adverse event, especially if it is not reported to us as an adverse event or if it is an adverse event that is unexpected or if the product characteristic that caused the adverse event is removed in time from our products. If we fail to comply with our MDR reporting obligations, the FDA could issue warning letters or untitled letters, take administrative actions, commence criminal prosecution, impose civil monetary penalties, revoke our device clearances, seize our products, or delay the clearance of our future products.

We generally offer a limited warranty for the return of products due to defects in quality and workmanship. We attempt to estimate our potential liability for future product returns and establish reserves on our financial statements in amounts that we believe will be sufficient to address our warranty obligations; however, our actual liability for product returns may significantly exceed the amount of our reserves. If we underestimate our potential liability for future product returns, or if unanticipated events result in returns that exceed our historical experience, our financial condition and operating results could be materially harmed.

We lack direct sales and marketing capabilities in many countries, and are wholly dependent on our distributors for the commercialization of our products in these countries. If we are unable to maintain or establish sales capabilities on our own or through third parties, we may not be able to commercialize any of our products in those countries.

We have no or limited direct sales or marketing capabilities in some of the regions and countries in which our products are sold, including, among others, China, Russia and Japan. We have entered into distribution agreements with third parties to market and sell our products in those countries in which we do not have a direct sales force and in those countries in which we utilize a

Table of Contents

"modified direct" sales approach, which is an approach where we employ sales people to work with distributors to promote the clinical advantages of our products to clinicians and other decision makers at hospitals. If we are unable to maintain or enter into such distribution arrangements on acceptable terms, or at all, we may not be able to successfully commercialize our products in certain countries. Moreover, to the extent that we enter into distribution arrangements with other companies, our revenues, if any, will depend on the terms of any such arrangements and the efforts of others. These efforts may turn out not to be sufficient and our third-party distributors may not effectively sell our products. In addition, although our contract terms require our distributors to comply with all applicable laws regarding the sale of our products, including anti-competition, anti-corruption, anti-money laundering and sanctions laws, we may not be able to ensure proper compliance. If our distributors fail to effectively market and sell our products in full compliance with applicable laws, our results of operations and business could be impacted.

Our employees, independent contractors, consultants, manufacturers and distributors may engage in misconduct or other improper activities, including noncompliance with applicable regulatory standards and requirements.

We are exposed to the risk that our employees, independent contractors, consultants, manufacturers and distributors may engage in fraudulent conduct or other illegal activity. Misconduct by these parties could include intentional, reckless or negligent conduct or disclosure of unauthorized activities to us that violates healthcare laws and regulations of the FDA and other federal, state and international authorities, manufacturing standards, and laws that require the true, complete and accurate reporting of financial information or data. We have adopted a code of business conduct and ethics, but it is not always possible to identify and deter misconduct, and the precautions we take to detect and prevent this activity may not be effective in controlling unknown or unmanaged risks or losses or in protecting us from governmental investigations or other actions or lawsuits stemming from a failure to be in compliance with such laws or regulations. If any such actions are instituted against us, and we are not successful in defending ourselves or asserting our rights, those actions could have a significant impact on our business, including the imposition of significant civil, criminal and administrative penalties.

The size of the market for our product groups has not been established with precision, and may be smaller than we estimate.

Our estimates of the annual total addressable market for our cardiovascular and endoscopy reporting segments are based on a number of internal and third-party estimates, including published industry data. While we believe these factors have historically provided and may continue to provide us with effective tools in estimating the total market for our products, these estimates may not be correct and the conditions supporting our estimates may change at any time, thereby reducing the predictive accuracy of the underlying factors we consider in our analysis. As a result, our estimates of the annual total addressable market for our products may prove to be incorrect. If the actual number of patients who would benefit from our products and the annual total addressable market for our products is smaller than we have estimated, our sales growth may be impaired and our business adversely impacted.

Consolidation in the healthcare industry, group purchasing organizations or public procurement policies could lead to demands for price concessions, which may impact our ability to sell our products at prices necessary to support our current business strategies.

Healthcare costs have risen significantly over the past decade, which has resulted in or led to numerous cost reform initiatives by legislators, regulators and third-party payers. Cost reform has triggered a consolidation trend in the healthcare industry to aggregate purchasing power, which may

Table of Contents

create more requests for pricing concessions in the future. Additionally, group purchasing organizations, independent delivery networks, public procurement policies and large single accounts may continue to use their market power to consolidate purchasing decisions for hospitals and healthcare service providers. We expect that market demand, government regulation, third-party coverage and reimbursement policies and societal pressures will continue to change the healthcare industry worldwide, resulting in further business consolidations and alliances among our customers, which may exert further downward pressure on the prices of our products.

We may be unable to compete in our markets, particularly if there is a significant change in relevant practices or technology.

The markets in which our products compete are highly competitive. We face competition from many companies which are larger, better established, have greater financial, technical and other resources and possess a greater market presence than we do. Such resources and market presence may enable our competitors to more effectively market competing products or to market competing products at reduced prices in order to gain market share.

In addition, our ability to compete successfully is dependent, in part, upon our response to changes in technology and upon our efforts to develop and market new products which achieve significant market acceptance. Competing companies with substantially greater resources than us are actively engaged in research and development of new methods, treatments, drugs, and procedures to treat or prevent cardiovascular disease that could limit the market for our products and eventually make some of our products obsolete. A reduction in the demand for a significant number of our products, or a few key products, could have a material adverse effect on our business, operations or financial condition.

Fluctuations in foreign currency exchange rates may negatively impact our financial results.

As our operations have grown outside the United States, we have also become increasingly subject to market risk relating to foreign currency. Those fluctuations could have a negative impact on our margins and financial results. For example, during 2016 and 2015, the exchange rate between all applicable foreign currencies and the U.S. Dollar resulted in a decrease in our net sales of approximately $4.9 million and $11.3 million, respectively.

For the year ended December 31, 2016, approximately $154.3 million, or 26%, of our net sales were denominated in foreign currencies, with our Euro-denominated sales representing our largest single currency risk. If the rate of exchange between foreign currencies declines against the U.S. Dollar, we may not be able to increase the prices we charge our customers for products whose prices are denominated in those respective foreign currencies. Furthermore, we may be unable or elect not to enter into hedging transactions which could mitigate the effect of declining exchange rates. As a result, if the rate of exchange between foreign currencies declines against the U.S. Dollar, our financial results may be negatively impacted.

Termination or interruption of our supply relationships or increases in the price of our component parts, finished products, third-party services or raw materials, particularly petroleum-based products, could have an adverse effect on our business, operations or financial condition.

We rely on raw materials, component parts, finished products and third-party services in connection with our business. For example, substantially all of our products are sterilized by only a few different entities. Additionally, many of our products have components that are manufactured using resins, plastics and other petroleum-based materials which are available from a limited number of suppliers. We are experiencing a growing trend among suppliers of polymer resins to refuse to supply resin to the medical device manufacturers or to require such manufacturers to assume additional risks

Table of Contents

due to the potential for product liability claims. Additionally, there is no assurance that crude oil supplies will be uninterrupted or that petroleum-based manufacturing materials will be available for purchase in the future. Any interruption to the supply of polymers or petroleum-based resins could have an adverse effect on our ability to produce, or on the cost to produce, our products.

The availability and price of these materials is affected by a variety of factors beyond our control, including the willingness of suppliers to sell into the medical device industry, changes in supply and demand, general economic conditions, labor costs, fuel-related transportation costs, competition, import duties, tariffs, currency exchange rates and political uncertainty around the world. Our suppliers may pass some of their cost increases on to us, and if such increased costs are sustained or increase further, our suppliers may pass further cost increases on to us. In addition to the effect on resin prices, transportation costs generally increase based on the effect of higher crude oil prices, and these increased transportation costs may be passed on to us. Our ability to recover such increased costs may depend upon our ability to raise prices on our products. Due to the highly competitive nature of the healthcare industry and the cost-containment efforts of our customers and third-party payers, we may be unable to pass along cost increases through higher prices. If we are unable to fully recover these costs through price increases or offset these increases through cost reductions or we experience terminations or interruption of our relationships with our suppliers we could experience lower margins and profitability, and our results of operations, financial condition and cash flows could be materially harmed.

We may be unable to accurately forecast customer demand for our products and manage our inventory, including rapid increases in the demand for our products, particularly if the increase may not be sustained.

To ensure adequate supply, we must forecast our inventory needs and place orders with our suppliers based on estimates of future demand for particular products. Our ability to accurately forecast demand for our products could be negatively affected by many factors, including our failure to accurately manage our expansion strategy and customer acceptance of new products, product introductions by our competitors, an increase or decrease in customer demand for our products or for products of our competitors, unanticipated changes in general market conditions or regulatory matters and weakening of economic conditions or consumer confidence in future economic conditions. Inventory levels in excess of customer demand may result in inventory write-downs or write-offs, which would impact our gross margin. Conversely, if we underestimate customer demand for our products, our manufacturing facilities may not be able to deliver products to meet our order requirements, which could damage our reputation and customer relationships.

In particular, due to regulatory issues experienced by a competitor during the year ended December 31, 2016, we experienced an increase in demand for certain of our products. We do not know whether this increase will be short-term, medium-term or sustained, nor can we presently estimate the amount of the increase. As a result of this increase, demand for those products may exceed our inventory and manufacturing capacity. In response to the development, we have increased capacity at some of our existing facilities; however, this increase may not be sufficient to meet demand and could place stress on our human and other resources. It may also place stress on our relationships with third-party suppliers. In the short term, we cannot outsource this manufacturing because our products need to be manufactured to exact specifications, in a clean environment and by a manufacturer that satisfies certain regulatory requirements. This is forcing us to make allocation decisions among existing and new customers. We may be unable to efficiently manage this increase in demand for certain products. In addition, such products are lower margin products and the increase in sales of the products may reduce our gross margins. Failure to efficiently manage the situation could result in the loss of skilled employees or damage our existing supply relationships. A rapid increase in production may also lead to failures in our internal controls, including those related to quality,

Table of Contents

operations, or financial reporting. Any such failures on our part may result in long-term declines in our profitability and results of operations.

International and national economic and industry conditions constantly change, and could harm our business and results of operations.

Our business and our results of operation are affected by many changing economic, industry and other conditions beyond our control, including, for instance, potential changes to the economic relationship between the United States and Mexico, China, and other countries in which we operate as a result of the new U.S. administration, and other changes and developments that we cannot anticipate, each of which could harm our business and results of operations. Actual or potential changes in international, national, regional and local economic, business and financial conditions, including recession, inflation and trade protection measures, may negatively affect consumer preferences, perceptions, spending patterns or demographic trends, any of which could harm our business or results of operations. Our customers may experience financial difficulties or be unable to borrow money to fund their operations, which may harm their ability or decision to purchase or pay for our products. Disruptions in the credit markets have previously resulted, and could again result, in volatility, decreased liquidity, widening of credit spreads, and reduced availability of financing. There can be no assurance that future financing will be available to us on acceptable terms, if at all. An inability to obtain necessary additional financing on acceptable terms may have an adverse impact on us and on our ability to implement our business plan.

In particular, the new U.S. Administration has called for and may introduce substantial changes to fiscal, healthcare, trade and tax policies and legislation, which may include comprehensive tax reform and changes to existing trade agreements, including, but not limited to, the North American Free Trade Agreement, or NAFTA. Such changes may have a significant impact on our operations and financial results. In particular, the potential enactment of tariffs on goods imported into the U.S., including but not limited to, goods imported from Mexico where we manufacture many of our products that we sell internationally, could adversely affect our gross profit margins. If enacted, any legislation by the U.S. federal government that restricts trade, such as tariffs, trade barriers, and other protectionist or retaliatory measures taken by governments in Europe, Asia, and other regions, could adversely impact our ability to sell products and services internationally. We cannot predict the impact, if any, of these changes to our business. If economic conditions worsen or fail to improve, changes in legislation impact the relationship between the U.S. and Mexico, China and other countries in which we operate or the continuity of NAFTA and other trade agreements, or new legislation is passed related to the healthcare system, fiscal or tax policies, customer demand may not materialize to the levels we require to achieve our anticipated financial results, which could have a material adverse effect on our business, financial condition, results of operations, or cash flows.

On June 23, 2016, the United Kingdom held a referendum in which voters approved an exit from the European Union, commonly known as Brexit. As a result of the referendum, negotiations are under way to determine the future terms of the United Kingdom's relationship with the European Union, including the terms of trade. It is possible that there will be greater restrictions on the movement of goods and people between the United Kingdom and the European Union countries and increased regulatory complexities, which could affect our ability to sell products in certain European Union countries and in the United Kingdom. Brexit could adversely affect European and worldwide economic and market conditions and could further contribute to instability in global financial and foreign exchange markets, including volatility in the value of the British pound and Euro, to which we have significant exposure. In addition, other European countries may seek to conduct referenda with respect to continuing membership with the European Union. We do not know to what extent such changes will impact our business.

Table of Contents

The above developments, and others that we cannot anticipate, could adversely affect our business, operations and financial results.

We depend on generating sufficient cash flow to fund our debt obligations, capital expenditures, and ongoing operations.

We are dependent on our cash on hand and free cash flow to fund our debt obligations, capital expenditures and ongoing operations. Our ability to service our debt and to fund our planned capital expenditures and ongoing operations will depend on our ability to continue to generate cash flow. If we are unable to generate sufficient cash flow or we are unable to access additional liquidity sources, we may not be able to service or repay our debt, operate our business, respond to competitive challenges, or fund our other liquidity and capital needs.

A significant portion of our revenues is derived from a few products and medical procedures.

A significant portion of our revenues is attributable to sales of our inflation devices. During the year ended December 31, 2016, sales of our inflation devices (including inflation devices sold in custom kits and through OEM channels) accounted for approximately 12% of our net sales. Any material decline in market demand, or change in OEM supplier preference, for our inflation devices could have an adverse effect on our business, operations or financial condition.

In addition, the products that have accounted for a majority of our historical revenues are designed for use in connection with a few related medical procedures, including angioplasty, stent placement procedures, and spinal procedures. If subsequent developments in medical technology or drug therapy make such procedures obsolete, or alter the methodology of such procedures so as to eliminate the usefulness of our products, we may experience a material decrease in demand for our products and experience deteriorating financial performance.

We are subject to work stoppage, transportation, severe weather, natural disasters and related risks.

We manufacture products at various locations in the United States and foreign countries and sell our products worldwide. We depend on third-party transportation companies to deliver supplies necessary to manufacture our products from vendors to our various facilities and to move our products to customers, operating divisions, and other subsidiaries located worldwide. Our manufacturing operations, and the operations of the transportation companies on which we depend, may be harmed by natural disasters or significant human events, such as a war, civil unrest, terrorist attack, riot, strike, slowdown, or similar events. Any disruption in our manufacturing or transportation could materially harm our ability to meet customer demands or our operations.

Furthermore, our manufacturing operations could be affected by many other factors beyond our control, including severe weather conditions and natural disasters, including hurricanes, earthquakes and tornadoes. These conditions could cause substantial damage to our facilities, interrupt our production and disrupt our ability to deliver products to our customers.

Fluctuations in our effective tax rate may adversely affect our business, financial condition or results of operation.

We are subject to taxation in numerous countries, states and other jurisdictions. Our effective tax rate is derived from a combination of applicable tax rates in the various countries, states and other jurisdictions in which we operate. In preparing our financial statements, we estimate the amount of tax that will become payable in each of these jurisdictions. Our effective tax rate may, however, differ from the estimated amount due to numerous factors, including a change in the mix of our profitability from country to country and changes in tax laws. Relevant authorities may also disagree with tax positions we have taken and assess further taxes. Proposals for broad reform of the existing United States corporate

Table of Contents

tax system are under evaluation by various legislative and administrative bodies. In addition, further changes in the tax laws of foreign jurisdictions could arise, including as a result of recommendations issued by the Organisation for Economic Cooperation and Development, or the OECD, which could, if implemented, result in substantial changes to numerous long-standing tax positions and principles. These contemplated changes, to the extent adopted by OECD members or other countries, could increase tax uncertainty and may adversely affect our provision for income taxes. Any of these factors could cause us to experience an effective tax rate significantly different from previous periods or our current expectations, which could have an adverse effect on our business, financial condition or results of operation.

Limits on reimbursement imposed by governmental and other programs may adversely affect our business and results of operation.

We sell our products to hospitals and other healthcare providers around the world that typically receive reimbursement for the services provided to patients from third-party payers such as government programs (e.g., Medicare and Medicaid in the U.S.) and private insurance programs. The ability of our customers to obtain appropriate reimbursement for the cost of our products from governmental and private third-party payers is critical to our business. Limits on reimbursement imposed by such programs may adversely affect the ability of hospitals and others to purchase our products, which could adversely affect our business and results of operations.

Third-party payers, whether foreign or domestic, or governmental or commercial, are developing increasingly sophisticated methods of controlling healthcare costs. In general, a third-party payer covers a medical procedure only when the plan administrator is satisfied that the product or procedure is reasonable and necessary to the patient's treatment; however, the cost-effectiveness of the treatment may also be a condition. In addition, in the United States, no uniform policy of coverage and reimbursement for procedures using our products exists among third-party payers. Therefore, coverage and reimbursement for procedures using our products can differ significantly from payer to payer. In addition, payers continually review new and existing technologies for possible coverage and can, without notice, deny or reverse coverage or alter pre-authorization requirements for new or existing products and procedures. We cannot provide assurance that we will be successful in any efforts we may potentially undertake to reverse such non-coverage decisions. If we are not successful in reversing non-coverage policies, or if third-party payers that currently cover or reimburse certain procedures reverse or limit their coverage of such procedures in the future, or if other third-party payers issue similar policies, our business could be adversely impacted.

Further, we believe that future coverage and reimbursement may be subject to increased restrictions, such as additional preauthorization requirements, both in the United States and in international markets. Third-party coverage and reimbursement for procedures using our products or any of our products in development for which we may receive regulatory approval may not be available or adequate in either the United States or international markets, which could have an adverse impact on our business.

Our failure to comply with applicable environmental laws and regulations could affect our business, operations or financial condition.

We manufacture and assemble certain products that require the use of hazardous materials that are subject to various national, federal, state and local laws and regulations governing the protection of the environment, health and safety. While the cost of compliance with such laws and regulations has not had a material adverse effect on our results of operations historically, compliance with future regulations may require additional capital investments. Additionally, because we use hazardous and other regulated materials in our manufacturing processes, we are subject to certain risks of future liabilities, lawsuits and claims resulting from any substances we manufacture, dispose of or release. Any

Table of Contents

accidental release may have an adverse effect on our business, operations or financial condition. We cannot predict what additional environmental, health and safety legislation or regulations will be enacted or become effective in the future or how existing or future laws or regulations will be administered or interpreted with respect to our operations, capital expenditures, results of operations or competitive position. Compliance with more stringent laws or regulations or adverse changes in the interpretation of existing laws or regulations by government agencies could have a material adverse effect on our business, operations or financial condition, and could require substantial expenditures.

Risks Related to the Offering and the Ownership of Our Common Stock

Among the key factors that may have a direct bearing on this offering or your investment in our common stock are the factors identified below.

The market price of our common stock has been, and may continue to be, volatile.

As illustrated in "Description of Common Stock Historic Price Range of Common Stock" in this prospectus supplement, the market price of our common stock has at times been, and may in the future be, volatile for various reasons, including those discussed in these risk factors. Other events that could cause volatility in our stock, include without limitation, variances in our financial results; analysts' and other projections or recommendations regarding our common stock specifically or medical technology stocks generally; any restatement of our financial statements or any investigation of us by the SEC, the FDA, or another regulatory authority; or a decline, or rise, of stock prices in capital markets generally.

We will have discretion in how to use the net proceeds received from this offering.

As described under "Use of Proceeds" in this prospectus supplement, we intend to use the net proceeds we receive from the offering to repay currently outstanding indebtedness under our Second Amended Credit Agreement. However, our management will have flexibility in determining whether to use the net proceeds from the offering to first repay amounts outstanding under the term loan or the outstanding revolving credit loans or some combination thereof. Under one option, we could elect to use the net proceeds from the offering to first repay outstanding revolving credit loans that would result in a corresponding, permanent reduction in our revolving credit commitment under the Second Amended Credit Agreement (which is currently $275.0 million, of which $180.0 million was outstanding as of December 31, 2016, with an additional $38.0 million of revolving credit loans incurred to finance our acquisition of substantially all of the assets of Catheter Connections in January 2017). To the extent we exercise this option, our access to financing under the Second Amended Credit Agreement would be reduced and, if we are subsequently unable to access other sources of liquidity, we may not have sufficient cash to fund our planned future operations. This could, in turn, harm our financial condition and results of operations as well as your investment in our company.

To the extent we use the net proceeds to repay outstanding revolving credit loans under the Second Amended Credit Agreement without a corresponding reduction in our revolving credit commitment and are then permitted to draw additional funds under the Second Amended Credit Agreement, we would be able to incur additional revolving credit loans in the future. Management would have broad discretion in using the proceeds from any such revolving credit loans and may do so in a way that does not improve our operating results or increase our market value.

We do not anticipate declaring any cash dividends on our common stock and capital appreciation, if any, is expected to be your sole return on investment.

We have never declared or paid cash dividends on our common stock. We presently intend to retain any future earnings for use in our business and, therefore, do not anticipate paying any dividends on our common stock in the foreseeable future. Additionally, the payment of cash dividends by us is

Table of Contents

restricted by our Second Amended Credit Agreement, which prohibits us from paying any cash dividends without the lenders' prior approval.

If we do not pay dividends, our stock may be less valuable to you because a return on your investment will only occur if our stock price appreciates.

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

To the extent that we raise additional funds through the sale of equity or convertible debt securities after this offering (including any exercise by the underwriters of their option to purchase additional shares), the issuance of such securities will result in dilution to our stockholders. 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.

Sales of a significant number of shares of our common stock in the public markets, or the perception that such sales could occur, could depress the market price of our common stock.

Sales of a substantial number of shares of our common stock in the public markets could occur at any time. Such sales, or the perception in the market that holders of a large number of shares intend to sell shares, could depress the market price of our common stock and impair our ability to raise capital through the sale of additional equity securities. We cannot predict the effect that future sales of our common stock would have on the market price of our common stock. These sales, or the possibility these sales may occur, might also make it more difficult for us to sell equity securities in the future at a time and at a price that we deem appropriate.

As further described under "Underwriting (Conflicts of Interest)," we and each of our executive officers and directors have agreed, subject to certain exceptions, not to sell or transfer any common stock or securities convertible into, exchangeable for, exercisable for, or repayable with our common stock, for 90 days after the date of this prospectus supplement without first obtaining the written consent of Merrill Lynch, Pierce, Fenner & Smith Incorporated. One pertinent exception will allow three of our directors to collectively sell up to an aggregate amount of 61,500 shares of our common stock to us or in the open market in connection with the exercise of options or warrants held by such directors. The sales may be undertaken from 45 days after the date of this prospectus supplement solely on a "cashless" or "net exercise" basis and to cover tax withholding obligations in connection with the exercise. Additionally, following expiration of these agreements, we and each of our executive officers and directors will be able to sell shares of common stock, in each case, subject to volume limitations and other requirements under U.S. federal securities laws.

Shares of common stock issued under our equity incentive plans will, when registered, be able to be freely sold in the public market upon issuance, subject to volume limitations and the lock-up agreements described elsewhere in this prospectus supplement, in each case, to the extent applicable.

If securities analysts do not publish research or reports about our business or if they downgrade our company or our sector, the price of our common stock could decline.

The trading market for our common stock depends in part on the research and reports that industry or financial analysts publish about us or our business. We do not influence or control the reporting of these analysts. If one or more of the analysts who do cover us downgrade or provide a negative outlook on our company or our industry, change their views regarding the stock of any of our competitors or other healthcare sector companies, or publish inaccurate or unfavorable research about our business, the price of our common stock could decline. If one or more of these analysts ceases coverage of our company or fails to publish reports on us regularly, we could lose visibility in the market, which in turn could cause the price of our common stock to decline.

Table of Contents

USE OF PROCEEDS

We estimate that the net proceeds from the sale of the 4,500,000 shares of common stock we are offering will be approximately $118.6 million (or $136.5 million if the underwriters exercise their option to purchase additional shares in full), after deducting the underwriting discount and estimated offering expenses payable by us.

We intend to use the net proceeds we receive from the offering to repay currently outstanding indebtedness under our Second Amended Credit Agreement. Under the terms of the Second Amended Credit Agreement, we have flexibility in determining whether to use a portion of the net proceeds from the offering to first repay amounts outstanding under the term loan or the outstanding revolving credit loans or some combination thereof. See "Prospectus Supplement Summary Recent Developments Amendment to Credit Agreement" for additional information. As of December 31, 2016, we had $325.0 million in outstanding long-term debt obligations under the Second Amended Credit Agreement (which includes a $145.0 million term loan and $180.0 million in revolving credit loans and does not exclude the $10.0 million current portion of our long-term debt). Our blended, weighted average interest rate on amounts outstanding under the Second Amended Credit Agreement as December 31, 2016 was 2.90%. Our obligations under the Second Amended Credit Agreement mature on July 6, 2021. See also "Underwriting (Conflicts of Interest) Conflicts of Interest."

Until we use the net proceeds of this offering, we may invest the funds in short-term, investment grade, interest-bearing securities.

Table of Contents

CAPITALIZATION

The following table sets forth our cash and cash equivalents and our capitalization as of December 31, 2016:

- on an actual basis; and
- on an as adjusted basis to give effect to the issuance and sale of 4,500,000 shares of common stock offered hereby (after deducting the estimated underwriting discount and estimated offering expenses and assuming no exercise of the underwriters' option to purchase additional shares of our common stock), our receipt of the estimated net proceeds thereof and the use of the proceeds thereof as further described in "Use of Proceeds."

You should read this table in conjunction with our audited consolidated financial statements and the related notes thereto appearing in our 2016 Annual Report, which is incorporated by reference in this prospectus supplement.

	As of December 31, 2016	
	Actual	As adjusted(1)
	(in thousands)	
Cash and cash equivalents(2)	$ 19,171	$ 19,171
Long-term debt(3)	314,373	195,762
Stockholders' equity:		
Preferred stock(4)		
Common stock, no par value(5)	206,186	324,797
Retained earnings	293,885	293,885
Accumulated other comprehensive loss	(1,882)	(1,882)
Total stockholders' equity	498,189	616,800
Total capitalization(6)	$ 812,562	$ 812,562

(1) For purposes of this table, we have assumed that all net proceeds from this offering will be used to repay long-term debt. Any net proceeds received by us following exercise by the underwriters of their option to purchase up to an additional 675,000 shares of common stock would be used to repay additional long-term debt.

(2) We used approximately $10.0 million of cash in connection with our acquisition of the critical care division of Argon in January 2017.

(3) Long-term debt consists of amounts borrowed under the Second Amended Credit Agreement, all of which is secured. For more information on the principal balances under our long-term debt as of December 31, 2016 and the terms of our Second Amended Credit Agreement, see note 7 (Revolving Credit Facility and Long-Term Debt) to our audited consolidated financial statements included in our 2016 Annual Report, which is incorporated by reference herein. This table does not reflect approximately $38.0 million of additional revolving credit loans borrowed under the Second Amended Credit Agreement in connection with our acquisition of substantially all of the assets of Catheter Connections in January 2017.

(4)

We have 5,000,000 shares of preferred stock authorized, none of which have been issued.

(5)

We have 100,000,000 shares of common stock authorized, 44,645,394 shares of which were issued and outstanding as of December 31, 2016. Adjusted for this offering, the

Table of Contents

total issued and outstanding shares of our common stock as of December 31, 2016 is 49,145,394 shares.

(6) Total capitalization includes long-term debt and total stockholders' equity.

Table of Contents

DESCRIPTION OF COMMON STOCK

The following is a summary of our common stock and certain provisions of our amended and restated certificate of incorporation and amended and restated bylaws. This summary does not purport to be complete and is qualified in its entirety by the provisions of our Amended and Restated Articles of Incorporation and our Second Amended and Restated Bylaws (copies of which have been filed with the SEC) and by applicable provisions of Utah law.

General

As of the date of this prospectus supplement, our authorized capital stock consists of 100,000,000 shares of common stock, without par value, and 5,000,000 shares of undesignated preferred stock, without par value. As of March 17, 2017, there were 44,679,658 shares of our common stock outstanding held of record by 119 shareholders, and there were no shares of our preferred stock outstanding. A number of holders of our common stock are "street name" or beneficial holders, whose shares are held by banks, brokers and other financial institutions.

In addition, as of March 17, 2017, there were:

(i) 1,184,307 shares of common stock issuable upon the exercise of outstanding options, warrants and rights, with a weighted average exercise price of $14.09 per share; and

(ii) 1,853,510 shares of common stock reserved for future issuance under our 2006 Long-Term Incentive Plan and our non-qualified Employee Stock Purchase Plan.

Holders of outstanding shares of common stock are entitled to one vote for each share held of record on all matters submitted to a vote of our shareholders and do not have cumulative voting rights. Accordingly, holders of a majority of our shares of common stock entitled to vote in any election of directors may elect all the directors standing for election. Certain fundamental changes, including mergers, liquidation and dissolution, require approval by two-thirds of the holders of outstanding shares of our common stock. Our board of directors is divided into three classes of directors, and the term of service for each expires every third year. This means it would likely take two years for our shareholders to remove a majority of our directors or to vote a majority of our directors into office.

All outstanding shares of common stock are fully paid and non-assessable, and any shares of common stock issued in connection with the offering described in this prospectus supplement will be fully paid and non-assessable. The holders of common stock have no preferences or rights of conversion, exchange, pre-emption or other subscription rights. There are no redemption or sinking fund provisions applicable to the common stock. In the event of any liquidation, dissolution or winding-up of our affairs, holders of outstanding common stock at such time will be entitled to share ratably in our assets that are legally available for such purpose after payment or provision for payment of all of our debts and obligations and after liquidation payments to holders of outstanding shares of preferred stock, if any.

Additional information in respect of our common stock is included in the accompanying prospectus under "The Securities We May Offer Description of Common Stock."

Business Combination Provisions

As a Utah corporation, we are subject to the Utah Revised Business Corporation Act, or the Corporations Act. Utah House Bill 41, which was adopted by the Utah legislature on February 17, 2017, will, if signed into law by the Governor of Utah, add certain provisions to the Corporations Act related to business combinations.

Under these new provisions, we would be prohibited from entering into a business combination, such as a merger, consolidation, recapitalization, asset sale, or disposition of stock, with

Table of Contents

any person that meets the definition of "interested shareholder" (discussed further below), including any entity that is, or after the business combination would be, an affiliate or associate of an interested shareholder, for a period of five years after the date such person became an interested shareholder, unless one of the of the following conditions is met:

- the business combination, or the acquisition of stock that resulted in the person becoming an interested shareholder, was approved by our board of directors prior to the person becoming an interested shareholder;
- the business combination is approved by a majority of our non-interested shareholders at a meeting called no earlier than five years after the date the person first became an interested shareholder; or
- the cash and other consideration to be delivered to the holder of each share of our common stock meets certain minimum value criteria.

For purposes of the new business combination provisions, an "interested shareholder" includes any person who owns (or, in the case of affiliates and associates, did own within the last five years) 20% or more of that corporation's voting stock.

If signed into law, Utah House Bill 41 is scheduled to take effect on December 31, 2017.

Historic Price Range of Common Stock

Our common stock is listed on The NASDAQ Global Select Market, or NASDAQ, under the symbol "MMSI." The following tables set forth for the indicated periods the high and low intra-day sales prices per share for our common stock as reported by NASDAQ.

For the year ended December 31, 2017	High	Low
First Quarter (through March 17, 2017)	$ 31.60	$ 24.23

For the year ended December 31, 2016	High	Low
First Quarter	$ 19.49	$ 15.47
Second Quarter	$ 20.59	$ 17.94
Third Quarter	$ 25.08	$ 19.61
Fourth Quarter	$ 26.85	$ 20.70

For the year ended December 31, 2015	High	Low
First Quarter	$ 19.96	$ 15.20
Second Quarter	$ 22.15	$ 18.28
Third Quarter	$ 26.42	$ 21.00
Fourth Quarter	$ 25.50	$ 17.60

For the year ended December 31, 2014	High	Low
First Quarter	$ 16.49	$ 13.25
Second Quarter	$ 16.76	$ 12.45
Third Quarter	$ 15.77	$ 11.41
Fourth Quarter	$ 17.69	$ 11.61

The last sale price of our common stock on March 22, 2017, as reported on NASDAQ, was $29.60 per share.

Table of Contents

Dividend Policy

Subject to preferences that may be applicable to any outstanding shares of preferred stock, holders of our common stock are entitled to receive ratably such dividends, if any, as may be declared from time to time by our board of directors out of funds legally available for dividend payments.

We have never declared or paid cash dividends on our common stock. We presently intend to retain any future earnings for use in our business and, therefore, do not anticipate paying any dividends on our common stock in the foreseeable future. In addition, our Second Amended Credit Agreement contains covenants prohibiting the declaration and distribution of a cash dividend at any time prior to the termination of the Second Amended Credit Agreement without the lenders' prior approval.

Any future determination to declare cash dividends will be made at the discretion of our board of directors, subject to applicable laws and compliance with any then-applicable credit agreements and other loan arrangements, which may restrict or limit our ability to pay dividends. Any such determination will depend on our financial condition, results of operations, capital requirements, general business conditions and other factors that our board of directors may deem relevant.

Table of Contents

MATERIAL U.S. FEDERAL INCOME TAX CONSEQUENCES TO NON-U.S. HOLDERS

The following is a general discussion of certain material U.S. federal income tax consequences with respect to the ownership and disposition of our common stock applicable to Non-U.S. Holders (as defined below).

This discussion is based on current provisions of the Internal Revenue Code of 1986, as amended, or the Code, existing and proposed U.S. Treasury regulations promulgated thereunder, judicial decisions, and published rulings and administrative pronouncements of the U.S. Internal Revenue Service, or the IRS, in each case in effect as of the date hereof, all of which are subject to change at any time, possibly with retroactive effect. We have not obtained any opinion of counsel and have not sought, and do not intend to seek, any ruling from the IRS as to any of the tax considerations discussed below. There can be no assurance that the IRS or a court will not challenge one or more of the points discussed below, which are subject to differing interpretations.

This discussion only addresses beneficial owners of our common stock who are Non-U.S. Holders, and it is assumed for purposes of this discussion that Non-U.S. Holders hold shares of our common stock as "capital assets" within the meaning of Section 1221 of the Code (generally, property held for investment). This discussion does not address all U.S. federal income tax consequences that may be important to a Non-U.S. Holder in light of such Non-U.S. Holder's particular circumstances, including the impact of the Medicare contribution tax on net investment income. In addition, it does not address consequences relevant to Non-U.S. Holders subject to special rules, including, without limitation:

U.S. expatriates and former citizens or long-term residents of the United States;

Non-U.S. Holders subject to the alternative minimum tax;

Non-U.S. Holders holding our common stock as part of a hedge, straddle, constructive sale, or other risk reduction strategy or as part of a conversion transaction or other integrated investment;

banks, insurance companies, and other financial institutions;

brokers, dealers, or traders in securities (including those that elect mark-to-market treatment);

controlled foreign corporations, passive foreign investment companies, and companies that accumulate earnings to avoid U.S. federal income tax;

partnerships or other entities or arrangements treated as partnerships for U.S. federal income tax purposes (and investors therein);

tax-exempt entities or governmental organizations;

Non-U.S. Holders who hold more than 5% of our common stock, directly or by attribution;

Non-U.S. Holders deemed to sell our common stock under the constructive sale provisions of the Code;

Non-U.S. Holders who hold or receive our common stock pursuant to the exercise of employee stock options or otherwise as compensation; and

qualified foreign pension funds, as defined in Section 897(l)(2) of the Code, and entities whose interests are held by qualified foreign pension funds.

Importantly, this discussion does not purport to be a complete analysis of all potential tax effects of investing in our common stock and does not address the effects of other U.S. federal tax laws, such as estate and gift tax laws, nor does it address U.S. state or local taxes or non-U.S. taxes.

Table of Contents

Non-U.S. Holders are urged to consult with their own tax advisors regarding the possible application of those taxes.

For purposes of this discussion, the term "Non-U.S. Holder" means a beneficial owner of our common stock that is an individual, corporation, estate or trust, other than:

- an individual who is a citizen or resident of the United States, for U.S. federal income tax purposes;
- a corporation, or other entity taxable as a corporation for U.S. federal income tax purposes, created or organized in the United States or under the laws of the United States, any state thereof, or the District of Columbia;
- an estate, the income of which is includible in gross income for U.S. federal income tax purposes, regardless of its source; or
- a trust if (1) a court within the United States is able to exercise primary supervision over the administration of the trust, and one or more U.S. persons (as defined in the Code) have the authority to control all substantial decisions of the trust, or (2) it has a valid election in effect under applicable U.S. Treasury regulations to be treated as a domestic trust.

If an entity or arrangement treated as a partnership for U.S. federal income tax purposes holds shares of our common stock, the tax treatment of a person treated as a partner will depend on the status of the partner, the activities of the partnership and certain determinations made at the partner level. Accordingly, partnerships holding our common stock and persons that, for U.S. federal income tax purposes, are treated as a partner in such partnerships should consult their own tax advisors.

THIS SUMMARY IS FOR GENERAL INFORMATION ONLY AND IS NOT INTENDED TO CONSTITUTE A COMPLETE DESCRIPTION OF ALL TAX CONSEQUENCES RELATING TO THE OWNERSHIP AND DISPOSITION OF OUR COMMON STOCK. HOLDERS OF OUR COMMON STOCK ARE URGED TO CONSULT WITH THEIR OWN TAX ADVISORS REGARDING THE TAX CONSEQUENCES TO THEM (INCLUDING THE APPLICATION AND EFFECT OF OTHER U.S. FEDERAL TAX LAWS AND ANY STATE, LOCAL, NON-U.S. INCOME AND OTHER TAX LAWS) OF THE OWNERSHIP AND DISPOSITION OF OUR COMMON STOCK.

Distributions

As described in the section of this prospectus supplement entitled "Description of Common Stock Dividend Policy," we do not anticipate declaring or paying dividends to holders of our common stock in the foreseeable future. However, if we do make distributions of cash or property on our common stock, such distributions will constitute dividends for U.S. federal income tax purposes to the extent paid from our current or accumulated earnings and profits, as determined under U.S. federal income tax principles. Under certain circumstances, distributions to Non-U.S. Holders to redeem a portion of our common stock held by such Non-U.S. Holders may also be treated as dividends for U.S. federal income tax purposes. Amounts not treated as dividends for U.S. federal income tax purposes will first constitute a tax-free return of capital to the extent thereof and will correspondingly reduce the recipient Non-U.S. Holder's adjusted tax basis in our common stock, but not below zero. Any excess will be treated as capital gain and will be treated as described below under " Gains on Disposition of Our Common Stock."

Except as described below under " Effectively Connected Income" and subject to the discussions of backup withholding and FATCA, dividends paid to a Non-U.S. Holder of our common stock generally will be subject to U.S. federal withholding tax at a rate of 30% (or at a reduced rate prescribed by an applicable income tax treaty). In order to obtain a reduced rate of U.S. federal withholding tax under an applicable income tax treaty, a Non-U.S. Holder will be required to provide a

Table of Contents

properly executed IRS Form W-8BEN or Form W-8BEN-E (or successor form) to the applicable financial institution or other intermediary through which the Non-U.S. Holder holds our common stock (and such intermediary will, in turn, be required to provide such documents to the applicable withholding agent, either directly or through other intermediaries) to certify such stockholder's entitlement to benefits under the treaty. A Non-U.S. Holder that does not timely furnish the required documentation, but that qualifies for a reduced treaty rate, may obtain a refund or credit of any excess amounts withheld by timely filing an appropriate claim for refund with the IRS. Non-U.S. Holders should consult their tax advisors regarding their entitlement to benefits under any applicable income tax treaty.

Effectively Connected Income

If dividends paid to a Non-U.S. Holder are effectively connected with the Non-U.S. Holder's conduct of a trade or business within the United States (and, if required by an applicable income tax treaty, the Non-U.S. Holder maintains a permanent establishment in the United States to which such dividends are attributable), the Non-U.S. Holder will be exempt from the U.S. federal withholding tax described above. To claim the exemption, the Non-U.S. Holder must furnish to the applicable withholding agent a valid IRS Form W-8ECI, certifying that the dividends are effectively connected with the Non-U.S. Holder's conduct of a trade or business within the United States.

Instead, such effectively connected dividends will be subject to U.S. federal income tax on a net income basis at the regular graduated rates applicable to U.S. persons. A Non-U.S. Holder that is a corporation also may be subject to a branch profits tax at a rate of 30% (or such lower rate specified by an applicable income tax treaty) on such effectively connected dividends, as adjusted for certain items. Non-U.S. Holders should consult their tax advisors regarding any applicable tax treaties that may provide for different rules.

Gain on Disposition of Our Common Stock

Subject to the discussion under " Information Reporting and Backup Withholding" and " FATCA" below, a Non-U.S. Holder generally will not be subject to U.S. federal income tax, except in the case of certain distributions by us in partial redemption of shares that are treated as dividends, or withholding tax on any gain realized upon the sale or other taxable disposition of our common stock unless:

- the gain is effectively connected with the Non-U.S. Holder's conduct of a trade or business within the United States and, if required by an applicable income tax treaty, the Non-U.S. Holder maintains a permanent establishment in the United States to which such gain is attributable;

- the Non-U.S. Holder is an individual who is present in the United States for a period or periods aggregating 183 days or more during the calendar year in which the sale or disposition occurs and certain other conditions are met; or

- we are, or have been, a United States real property holding corporation, or USRPHC, for U.S. federal income tax purposes, at any time during the shorter of the five-year period preceding such disposition and the Non-U.S. Holder's holding period in our common stock and as a result of our being, or having been, a USRPHC, our common stock constitutes a United States real property interest, or USRPI.

Gain described in the first bullet point above generally will be subject to U.S. federal income tax on a net income basis at the regular graduated rates applicable to U.S. persons. A Non-U.S. Holder that is a corporation also may be subject to a branch profits tax at a rate of 30% (or such lower rate

Table of Contents

specified by an applicable income tax treaty) on such effectively connected gain, as adjusted for certain items.

Gain described in the second bullet point above will be subject to U.S. federal income tax at a rate of 30% (or such lower rate specified by an applicable income tax treaty), which may be offset by U.S. source capital losses of the Non-U.S. Holder (even though the individual is not considered a resident of the United States) so long as the Non-U.S. Holder has timely filed U.S. federal income tax returns with respect to such losses.

With respect to the third bullet point above, we will be a USRPHC for U.S. federal income tax purposes if at least 50% of the fair market value of our assets consists, at the applicable times, of USRPIs. We believe we currently are not, and do not anticipate becoming, a USRPHC. However, because the determination of whether we are a USRPHC depends on the fair market value of our USRPIs relative to the fair market value of our non-U.S. real property interests and our other business assets, there can be no assurance that we currently are not a USRPHC or that will not become a USRPHC in the future. Even if we are or were to become a USRPHC, however, a Non-U.S. Holder will not be subject to U.S. federal income tax on any gain not otherwise taxable if (1) our common stock is "regularly traded" (as defined by applicable U.S. Treasury regulations) on an established securities market, and (2) the applicable Non-U.S. Holder owned, directly or by attribution, 5% or less of our common stock throughout the five-year or shorter period ending on the date of the sale or other taxable disposition of, or the Non-U.S. Holder's holding period for, our common stock.

Non-U.S. Holders are urged to consult with their own tax advisors on the treatment of any gain on the disposition of our shares based on their particular circumstances.

Information Reporting and Backup Withholding

Generally, we must report to our Non-U.S. Holders and the IRS the amount of dividends paid during each calendar year, if any, and the amount of any tax withheld. These information reporting requirements apply even if no withholding is required (for example, because the distributions are effectively connected with the Non-U.S. Holder's conduct of a United States trade or business, or withholding is eliminated by an applicable income tax treaty). This information may also be made available under a specific treaty or agreement with the tax authorities in the country in which the Non-U.S. Holder resides or is established.

Backup withholding, however, generally will not apply to distributions payable to a Non-U.S. Holder of shares of our common stock so long as the Non-U.S. Holder furnishes to us or our paying agent the required certification as to its non-U.S. status, such as by providing a valid IRS Form W-8BEN, Form W-8BEN-E or Form W-8ECI, or certain other requirements are met. Notwithstanding the foregoing, backup withholding may apply if either we or our paying agent has actual knowledge, or reason to know, that the Non-U.S. Holder is a U.S. person (as defined in the Code) that is not an exempt recipient.

Payments on the sale or other taxable disposition of our common stock made to or through a foreign office of a foreign broker generally will not be subject to backup withholding or information reporting. However, if such broker is, for U.S. federal income tax purposes:

a U.S. person;

a controlled foreign corporation;

a foreign person 50% or more of whose gross income is effectively connected with a U.S. trade or business for a specified three-year period; or

a foreign partnership with certain connections to the United States,

Table of Contents

then information reporting will be required unless the broker has in its records documentary evidence that the Non-U.S. Holder is not a U.S. person (as defined in the Code) and certain other conditions are met or the Non-U.S. Holder otherwise establishes an exemption. Backup withholding may apply to any payment that such broker is required to report if the broker has actual knowledge, or reason to know, that the payee is a U.S. person. Payments to or through the U.S. office of a broker will be subject to backup withholding and information reporting unless the Non-U.S. Holder certifies, under penalties of perjury, that it is not a U.S. person, or otherwise establishes an exemption.

Backup withholding is not an additional tax but merely an advance payment, which may be credited against a Non-U.S. Holder's U.S. federal income tax liability or refunded to the extent it results in an overpayment of tax and the appropriate information is timely supplied by the Non-U.S. Holder to the IRS.

FATCA

Pursuant to Sections 1471 through 1474 of the Code and related U.S. Treasury guidance commonly referred to as the Foreign Account Tax Compliance Act, or FATCA, foreign financial institutions (which include banks and traditional financial institutions as well as most foreign hedge funds, private equity funds, mutual funds, securitization vehicles and any other investment vehicles) and certain other foreign entities generally must comply with information reporting rules and due diligence requirements with respect to their U.S. account holders and investors or be subject to a withholding tax on U.S.-source payments made to them (whether received as a beneficial owner or as an intermediary for another party). More specifically, a foreign financial institution or other foreign entity that does not comply with the FATCA reporting requirements and due diligence generally will be subject to a 30% withholding tax with respect to any "withholdable payments," which generally include U.S.-source payments otherwise subject to nonresident withholding tax, such as U.S.-source dividends, and the gross proceeds from the sale or other disposition of any equity or debt instruments of U.S. issuers. The FATCA withholding tax will apply even if the payment would otherwise not be subject to U.S. nonresident withholding tax (for example, because it is capital gain). Under the applicable U.S. Treasury regulations and related administrative guidance published by the IRS, withholding under FATCA generally applies currently to payments of dividends on our common stock and will apply to payments of gross proceeds from the sale or other disposition of such stock on or after January 1, 2019. Foreign financial institutions located in jurisdictions that have entered into an intergovernmental agreement with the United States governing these withholding taxes and reporting requirements may be subject to different rules.

Non-U.S. Holders are urged to consult with their own tax advisors regarding the effect, if any, of the FATCA provisions to them based on their particular circumstances.

Table of Contents

UNDERWRITING (CONFLICTS OF INTEREST)

Merrill Lynch, Pierce, Fenner & Smith Incorporated and Piper Jaffray & Co. are acting as representatives of each of the underwriters named below. Subject to the terms and conditions set forth in an underwriting agreement among us and the underwriters, we have agreed to sell to the underwriters, and each of the underwriters has agreed, severally and not jointly, to purchase from us, the number of shares of common stock set forth opposite its name below:

	Number of Shares
Merrill Lynch, Pierce, Fenner & Smith Incorporated	1,462,500
Piper Jaffray & Co.	1,237,500
Wells Fargo Securities, LLC	900,000
Canaccord Genuity Inc.	337,500
Raymond James & Associates, Inc.	337,500
SunTrust Robinson Humphrey, Inc.	225,000
Total	**4,500,000**

Subject to the terms and conditions set forth in the underwriting agreement, the underwriters have agreed, severally and not jointly, to purchase all the shares sold under the underwriting agreement if any of the shares are purchased. If an underwriter defaults, the underwriting agreement provides that the purchase commitments of the nondefaulting underwriters may be increased or the underwriting agreement may be terminated.

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

The underwriters are offering the shares, subject to prior sale, when, as and if issued to and accepted by them, subject to approval of legal matters by their counsel, including the validity of the shares, and other conditions contained in the underwriting agreement, such as the receipt by the underwriters of officer's certificates and legal opinions. The underwriters reserve the right to withdraw, cancel or modify offers to the public and to reject orders in whole or in part.

Commissions, Discounts and Estimated Expenses

The representatives have advised us that the underwriters propose initially to offer the shares to the public at the public offering price set forth on the cover page of this prospectus supplement and to dealers at that price less a concession not in excess of $1.01 per share. After the initial offering, the public offering price, concession or any other term of the offering may be changed.

The following table shows the public offering price, underwriting discount and proceeds before expenses to us. The information assumes, as applicable, either no exercise or full exercise by the underwriters of their option to purchase additional shares, which is described further below.

	Per Share	Without Option	With Option
Public offering price	$ 28.25	$ 127,125,000	$ 146,193,750
Underwriting discount	$ 1.695	$ 7,627,500	$ 8,771,625
Proceeds, before expenses, to us	$ 26.555	$ 119,497,500	$ 137,422,125

The expenses of this offering, not including the underwriting discount, which are payable by us are estimated at $886,000 and include SEC registration fees of $16,000, estimated accounting fees of approximately $120,000, estimated legal fees of approximately $275,000, estimated printing expenses of

Table of Contents

$25,000, certain expenses of the underwriters up to $100,000, estimated fees of two financial advisory firms of approximately $300,000 and other estimated miscellaneous expenses of approximately $50,000.

Option to Purchase Additional Shares

We have granted an option to the underwriters, exercisable for 30 days after the date of this prospectus supplement, to purchase up to an additional 675,000 shares at the public offering price, less the underwriting discount. If the underwriters exercise this option, each will be obligated, subject to conditions contained in the underwriting agreement, to purchase a number of additional shares proportionate to that underwriter's initial amount reflected in the above table.

No Sales of Similar Securities

We and each of our executive officers and directors have agreed not to sell or transfer any common stock or securities convertible into, exchangeable for, exercisable for, or repayable with our common stock, for 90 days after the date of this prospectus supplement without first obtaining the written consent of Merrill Lynch, Pierce, Fenner & Smith Incorporated. Specifically, we and these other persons have agreed, with certain limited exceptions, not to directly or indirectly:

offer, pledge, sell or contract to sell any common stock;

sell any option or contract to purchase any common stock,

purchase any option or contract to sell any common stock;

grant any option, right or warrant for the sale of any common stock;

transfer or otherwise dispose of any common stock;

file a registration statement, or request or demand that we file a registration statement, in each case, related to the common stock; or

enter into any swap or other agreement that transfers all or any part of the economic consequence of ownership of any common stock, whether any such swap or transaction is to be settled by delivery of shares or other securities, in cash or otherwise.

This lock-up provision applies to our common stock and to securities convertible into or exchangeable or exercisable for or repayable with our common stock. It also applies to common stock owned now or acquired later by the person executing the agreement or for which the person executing the agreement later acquires the power of disposition.

Notably, three of our directors are allowed under the terms of their respective lock-up agreements to collectively sell up to an aggregate amount of 61,500 shares of our common stock to us or in the open market in connection with the exercise of options or warrants held by such directors. Sales of such shares may be undertaken from 45 days after the date of this prospectus supplement solely on a "cashless" or "net exercise" basis and to cover tax withholding obligations in connection with the exercise. Additionally, as our current shelf registration statement on Form S-3 expires on May 21, 2017, the terms of the Underwriting Agreement permit us to prepare and file five business days before such expiration or at any time thereafter a new shelf registration statement on Form S-3 that includes equity securities. Nevertheless, we may not sell any equity securities during the 90 day lock-up period discussed above.

NASDAQ Listing

The shares of common stock being offered hereby will be listed on The NASDAQ Global Select Market under the symbol "MMSI."

Table of Contents

Price Stabilization and Short Positions

Until the distribution of the shares is completed, SEC rules may limit underwriters and selling group members from bidding for and purchasing our common stock. However, the representatives of the underwriters may engage in transactions that stabilize the price of the common stock, such as bids or purchases to peg, fix or maintain that price.

In connection with the offering, the underwriters may purchase and sell our common stock in the open market. These transactions may include short sales, purchases on the open market to cover positions created by short sales and stabilizing transactions. Short sales involve the sale by the underwriters of a greater number of shares than they are required to purchase in the offering. "Covered" short sales are sales made in an amount not greater than the underwriters' option to purchase additional shares described above. The underwriters may close out any covered short position by either exercising their option to purchase additional shares or purchasing shares in the open market. In determining the source of shares to close out the covered short position, the underwriters will consider, among other things, the price of shares available for purchase in the open market as compared to the price at which they may purchase shares through the option granted to them. "Naked" short sales are sales in excess of such option. The underwriters must close out any naked short position by purchasing shares in the open market. A naked short position is more likely to be created if the underwriters are concerned that there may be downward pressure on the price of our common stock in the open market after pricing that could harm investors who purchase in the offering. Stabilizing transactions consist of various bids for or purchases of shares of common stock made by the underwriters in the open market prior to the completion of the offering.

Similar to other purchase transactions, the underwriters' purchases to cover the syndicate short sales may have the effect of raising or maintaining the market price of our common stock or preventing or retarding a decline in the market price of our common stock. As a result, the price of our common stock may be higher than the price that might otherwise exist in the open market. The underwriters may conduct these transactions on NASDAQ, in the over-the-counter market or otherwise.

Neither we nor any of the underwriters make any representation or prediction as to the direction or magnitude of any effect that the transactions described above may have on the price of our common stock. In addition, neither we nor any of the underwriters make any representation that the representatives will engage in these transactions or that these transactions, once commenced, will not be discontinued without notice.

Passive Market Making

In connection with this offering, underwriters and selling group members may engage in passive market making transactions in the common stock on NASDAQ in accordance with Rule 103 of Regulation M under the Exchange Act during a period before the commencement of offers or sales of common stock and extending through the completion of distribution. A passive market maker must display its bid at a price not in excess of the highest independent bid of that security. However, if all independent bids are lowered below the passive market maker's bid, that bid must then be lowered when specified purchase limits are exceeded. Passive market making may cause the price of our common stock to be higher than the price that otherwise would exist in the open market in the absence of those transactions. The underwriters and dealers are not required to engage in passive market making and may end passive market making activities at any time.

Electronic Distribution

In connection with the offering, certain of the underwriters or securities dealers may distribute prospectuses by electronic means, such as e-mail.

Table of Contents

Conflicts of Interest

As described under "Use of Proceeds," we intend to use the net proceeds from the offering to repay currently outstanding indebtedness under our Second Amended Credit Agreement. Affiliates of Merrill Lynch, Pierce, Fenner & Smith Incorporated and Wells Fargo Securities, LLC, underwriters in this offering, are lenders under our Second Amended Credit Agreement. Because such affiliates are thus expected to receive 5% or more of the net proceeds of this offering, not including underwriting compensation, Merrill Lynch, Pierce, Fenner & Smith Incorporated and Wells Fargo Securities, LLC are deemed to have a "conflict of interest", within the meaning of Rule 5121.

Accordingly, this offering is being made in compliance with the applicable provisions of Rule 5121. The appointment of a qualified independent underwriter (as defined in the rule) is not necessary for this offering because the shares of common stock being offered hereby have a bona fide public market (as defined in the rule). No underwriter with a conflict of interest will confirm sales to any account over which it exercises discretionary authority without the specific prior written approval of the account holder.

Other Relationships

Some of the underwriters and their affiliates have engaged in, and may in the future engage in, investment banking and other commercial dealings in the ordinary course of business with us or our affiliates. Such persons have received, or may in the future receive, customary fees and commissions for these transactions.

In addition, in the ordinary course of their business activities, the underwriters and their affiliates may make or hold a broad array of investments and actively trade debt and equity securities (or related derivative securities) and financial instruments (including bank loans) for their own account and for the accounts of their customers. Such investments and securities activities may involve securities and instruments of ours or our affiliates. The underwriters and their affiliates may also make investment recommendations and publish or express independent research views in respect of such securities or financial instruments and may hold, or recommend to clients that they acquire, long or short positions in such securities and instruments.

Notice to Prospective Investors in the European Economic Area

In relation to each member state of the European Economic Area, or EEA, no offer of ordinary shares which are the subject of the offering has been, or will be made to the public in that member state of the European Union, or Member State, other than under the following exemptions under the Prospectus Directive:

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

(b) to fewer than 150 natural or legal persons (other than qualified investors as defined in the Prospectus Directive), subject to obtaining the prior consent of the Representatives for any such offer; or

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

provided that no such offer of ordinary shares referred to in (a) to (c) above shall result in a requirement that we or any underwriter publish a prospectus pursuant to Article 3 of the Prospectus Directive, or supplement a prospectus pursuant to Article 16 of the Prospectus Directive.

Each person located in a Member State to whom any offer of ordinary shares is made or who receives any communication in respect of an offer of ordinary shares, or who initially acquires any ordinary shares will be deemed to have represented, warranted, acknowledged and agreed to and with us and each underwriter that (1) it is a "qualified investor" within the meaning of the law in that

Table of Contents

Member State implementing Article 2(1)(e) of the Prospectus Directive and (2) in the case of any ordinary shares acquired by it as a financial intermediary as that term is used in Article 3(2) of the Prospectus Directive, the ordinary shares acquired by it in the offer have not been acquired on behalf of, nor have they been acquired with a view to their offer or resale to, persons in any Member State other than qualified investors, as that term is defined in the Prospectus Directive, or in circumstances in which the prior consent of the representatives of the underwriters has been given to the offer or resale; or where ordinary shares have been acquired by it on behalf of persons in any Member State other than qualified investors, the offer of those ordinary shares to it is not treated under the Prospectus Directive as having been made to such persons.

We, the underwriters and our and their respective affiliates will rely upon the truth and accuracy of the foregoing representations, acknowledgments and agreements.

This prospectus has been prepared on the basis that any offer of shares in any Member State will be made pursuant to an exemption under the Prospectus Directive from the requirement to publish a prospectus for offers of shares. Accordingly any person making or intending to make an offer in that Member State of shares which are the subject of the offering contemplated in this prospectus may only do so in circumstances in which no obligation arises for us or the underwriters to publish a prospectus pursuant to Article 3 of the Prospectus Directive in relation to such offer. Neither we nor the underwriters have authorized, nor do we or they authorize, the making of any offer of shares in circumstances in which an obligation arises for us or the underwriters to publish a prospectus for such offer.

For the purposes of this section, the expression an "offer of ordinary shares to the public" in relation to any ordinary shares in any Member State means the communication in any form and by any means of sufficient information on the terms of the offer and the ordinary shares to be offered so as to enable an investor to decide to purchase or subscribe the ordinary shares, as the same may be varied in that Member State by any measure implementing the Prospectus Directive in that Member State, the expression "Prospectus Directive" means Directive 2003/71/EC (as amended) and includes any relevant implementing measure in each Member State.

The above selling restriction is in addition to any other selling restrictions set out below.

Notice to Prospective Investors in the United Kingdom

In the United Kingdom, this prospectus is being distributed only to, and is directed only at, and any offer subsequently made may only be directed at persons who are "qualified investors" (as defined in the Prospectus Directive) (i) who have professional experience in matters relating to investments falling within Article 19 (5) of the Financial Services and Markets Act 2000 (Financial Promotion) Order 2005, as amended, or the Order and/or (ii) who are high net worth companies (or persons to whom it may otherwise be lawfully communicated) falling within Article 49(2)(a) to (d) of the Order (all such persons together are referred to as "relevant persons"). This prospectus must not be acted on or relied on in the United Kingdom by persons who are not relevant persons. In the United Kingdom, any investment or investment activity to which this document relates is only available to, and will be engaged in with, relevant persons.

Notice to Prospective Investors in Switzerland

The shares may not be publicly offered in Switzerland and will not be listed on the SIX Swiss Exchange, or SIX, or on any other stock exchange or regulated trading facility in Switzerland. This prospectus has been prepared without regard to the disclosure standards for issuance prospectuses under art. 652a or art. 1156 of the Swiss Code of Obligations or the disclosure standards for listing prospectuses under art. 27 ff. of the SIX Listing Rules or the listing rules of any other stock exchange or regulated trading facility in Switzerland. Neither this prospectus nor any other offering or marketing

Table of Contents

material relating to the shares or the offering may be publicly distributed or otherwise made publicly available in Switzerland.

Neither this prospectus nor any other offering or marketing material relating to the offering, us or our shares have been or will be filed with or approved by any Swiss regulatory authority. In particular, this prospectus will not be filed with, and the offer of shares will not be supervised by, the Swiss Financial Market Supervisory Authority (FINMA) and the offer of shares has not been and will not be authorized under the Swiss Federal Act on Collective Investment Schemes, or the CISA. The investor protection afforded to acquirers of interests in collective investment schemes under the CISA does not extend to acquirers of shares.

Notice to Prospective Investors in the Dubai International Financial Centre

This prospectus relates to an Exempt Offer as defined in, and in accordance with, the Offered Securities Rules of the Dubai Financial Services Authority, or the DFSA. This prospectus is intended for distribution only to persons of a type specified in the Offered Securities Rules of the DFSA. This prospectus must not be delivered to, or relied on by, any other person. The DFSA has no responsibility for reviewing or verifying any documents in connection with Exempt Offers. The DFSA has not approved this prospectus nor taken steps to verify the information set forth herein and has no responsibility for such documents. The shares to which this prospectus relates may be illiquid and/or subject to restrictions on their resale. Prospective purchasers of the shares offered should conduct their own due diligence on the shares. If you do not understand the contents of this prospectus you should consult an authorized financial advisor.

Notice to Prospective Investors in Australia

No placement document, prospectus, product disclosure statement or other disclosure document has been lodged with the Australian Securities and Investments Commission, or ASIC, in relation to the offering. Neither this prospectus supplement nor the accompany prospectus constitute a prospectus, product disclosure statement or other disclosure document under the Corporations Act 2001, or the Corporations Act, nor do such documents purport to include the information required for a prospectus, product disclosure statement or other disclosure document under the Corporations Act.

Any offer of the shares in Australia may only be made to persons, referred to herein as Exempt Investors, who are "sophisticated investors" (within the meaning of section 708(8) of the Corporations Act), "professional investors" (within the meaning of section 708(11) of the Corporations Act) or otherwise pursuant to one or more exemptions contained in section 708 of the Corporations Act so that it is lawful to offer the shares without disclosure to investors under Chapter 6D of the Corporations Act.

The shares applied for by Exempt Investors in Australia must not be offered for sale in Australia in the period of 12 months after the date of allotment under the offering, except in circumstances where disclosure to investors under Chapter 6D of the Corporations Act would not be required pursuant to an exemption under section 708 of the Corporations Act or otherwise or where the offer is pursuant to a disclosure document which complies with Chapter 6D of the Corporations Act. Any person acquiring shares must observe such Australian on-sale restrictions.

This prospectus contains general information only and does not take account of the investment objectives, financial situation or particular needs of any particular person. This prospectus does not contain any securities recommendations or financial product advice. Before making an investment decision, investors need to consider whether the information in this prospectus is appropriate to their needs, objectives and circumstances, and, if necessary, seek expert advice on those matters.

Table of Contents

Notice to Prospective Investors in Hong Kong

The securities have not been offered or sold and will not be offered or sold in Hong Kong, by means of any document, other than (a) to "professional investors" as defined in the Securities and Futures Ordinance (Cap. 571) of Hong Kong and any rules made under that Ordinance; or (b) in other circumstances which do not result in the document being a "prospectus" as defined in the Companies Ordinance (Cap. 32) of Hong Kong or which do not constitute an offer to the public within the meaning of that Ordinance. No advertisement, invitation or document relating to the securities has been or may be issued or has been or may be in the possession of any person for the purposes of issue, whether in Hong Kong or elsewhere, which is directed at, or the contents of which are likely to be accessed or read by, the public of Hong Kong (except if permitted to do so under the securities laws of Hong Kong) other than with respect to securities which are or are intended to be disposed of only to persons outside Hong Kong or only to "professional investors" as defined in the Securities and Futures Ordinance and any rules made under that Ordinance.

Notice to Prospective Investors in Japan

The securities have not been and will not be registered under the Financial Instruments and Exchange Law of Japan (Law No. 25 of 1948, as amended) and, accordingly, will not be offered or sold, directly or indirectly, in Japan, or for the benefit of any Japanese Person or to others for re-offering or resale, directly or indirectly, in Japan or to any Japanese Person, except in compliance with all applicable laws, regulations and ministerial guidelines promulgated by relevant Japanese governmental or regulatory authorities in effect at the relevant time. For the purposes of this paragraph, Japanese Person means any person resident in Japan, including any corporation or other entity organized under the laws of Japan.

Notice to Prospective Investors in Singapore

This prospectus has not been registered as a prospectus with the Monetary Authority of Singapore. Accordingly, this prospectus and any other document or material in connection with the offer or sale, or invitation for subscription or purchase, of the securities may not be circulated or distributed, nor may the securities be offered or sold, or be made the subject of an invitation for subscription or purchase, whether directly or indirectly, to persons in Singapore other than (i) to an institutional investor under Section 274 of the Securities and Futures Act, Chapter 289 of Singapore, or the SFA, (ii) to a relevant person pursuant to Section 275(1), or any person pursuant to Section 275(1A), and in accordance with the conditions specified in Section 275, of the SFA, or (iii) otherwise pursuant to, and in accordance with the conditions of, any other applicable provision of the SFA.

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

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

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

securities (as defined in Section 239(1) of the SFA) of that corporation or the beneficiaries' rights and interest (howsoever described) in that trust shall not be transferred within six months after that

Table of Contents

corporation or that trust has acquired any of our shares pursuant to an offer made under Section 275 of the SFA except:

- to an institutional investor or to a relevant person defined in Section 275(2) of the SFA, or to any person arising from an offer referred to in Section 275(1A) or Section 276(4)(i)(B) of the SFA;
- where no consideration is or will be given for the transfer;
- where the transfer is by operation of law;
- as specified in Section 276(7) of the SFA; or
- as specified in Regulation 32 of the Securities and Futures (Offers of Investments) (Shares and Debentures) Regulations 2005 of Singapore.

Notice to Prospective Investors in Canada

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

Securities legislation in certain provinces or territories of Canada may provide a purchaser with remedies for rescission or damages if this prospectus (including any documents incorporated by reference herein and any amendment thereto) contains a misrepresentation, provided that the remedies for rescission or damages are exercised by the purchaser within the time limit prescribed by the securities legislation of the purchaser's province or territory. The purchaser should refer to any applicable provisions of the securities legislation of the purchaser's province or territory for particulars of these rights or consult with a legal advisor.

Pursuant to section 3A.3 (or, in the case of securities issued or guaranteed by the government of a non-Canadian jurisdiction, section 3A.4) of National Instrument 33-105 Underwriting Conflicts, or NI 33-105, the underwriters are not required to comply with the disclosure requirements of NI 33-105 regarding underwriter conflicts of interest in connection with this offering.

Table of Contents

LEGAL MATTERS

Certain legal matters with respect to the validity of common stock offered by this prospectus supplement will be passed upon for us by Parr Brown Gee & Loveless PC, Salt Lake City, Utah. Shearman & Sterling LLP, New York, New York, is counsel to the underwriters in connection with this offering.

EXPERTS

Our consolidated financial statements incorporated in this prospectus supplement and the accompanying prospectus by reference from our Annual Report on Form 10-K for the year ended December 31, 2016 and the effectiveness of our internal control over financial reporting have been audited by Deloitte & Touche LLP, an independent registered public accounting firm, as stated in their reports, which are incorporated herein by reference. Such financial statements have been so incorporated in reliance upon the reports of such firm given upon their authority as experts in accounting and auditing.

The audited historical financial statements of DFINE, Inc. included in Exhibit 99.3 of our Current Report on Form 8-K/A dated September 21, 2016 have been incorporated by reference herein in reliance on the report (which contains an explanatory paragraph related to the Company's ability to continue as a going concern) of PricewaterhouseCoopers LLP, independent accountants, given on the authority of said firm as experts in auditing and accounting.

PROSPECTUS

MERIT MEDICAL SYSTEMS, INC.

$200,000,000

COMMON STOCK
DEBT SECURITIES
WARRANTS
UNITS

From time to time, we may offer up to $200,000,000 of the securities described in this prospectus separately or together in any combination, in one or more classes or series, in amounts, at prices and on terms that we will determine at the time of the offering:

We may sell any combination of these securities in one or more offerings, up to an aggregate offering price of $200,000,000, on terms to be determined at the time of offering. Additionally, selling security holders named in an accompanying prospectus supplement who acquire these securities from us may offer the securities for resale, separately or in units, under this prospectus.

This prospectus describes the general terms that may apply to these securities. When we or the selling security holders decide to sell securities under this prospectus, we will describe in a prospectus supplement, which must accompany this prospectus, the securities to be offered and sold, as well as the specific amounts, prices and terms thereof. The prospectus supplements also may add, update or change information in this prospectus. You should read this prospectus and any applicable prospectus supplement before you make your investment decision.

Our common stock is listed on the Nasdaq Global Select Market under the symbol "MMSI." On March 10, 2014, the last reported sale price of our common stock was $14.76 per share. As of the date of this prospectus, none of the other securities that we may offer by this prospectus are listed on any national securities exchange or automated quotation system. The mailing address and telephone number of our principal executives offices are 1600 West Merit Parkway, South Jordan, Utah 84095; (801) 253-1600.

The proceeds that we receive from any sales by us of the securities offered under this prospectus will be reduced by any registration and offering fees and expenses. We will receive no proceeds from any sale by selling security holders of the securities covered by this prospectus and any accompanying prospectus supplement, but we may, in some cases, pay certain registration and offering fees and expenses.

The securities may be offered and sold directly to you, through one or more underwriters, dealers and agents, or through underwriting syndicates managed or co-managed by one or more underwriters, on a continuous basis or a delayed basis. If we use any underwriters, dealers or agents to sell the securities, their names and information about their compensation will be set forth in a prospectus supplement.

This prospectus may not be used to offer or sell any securities unless accompanied by a prospectus supplement.

Investing in the securities offered by this prospectus and the accompanying prospectus supplement involves risks. See "Forward-Looking Statements" beginning on page 3 and "Risk Factors," beginning on page 5, and similarly titled sections that may appear in or may be incorporated by reference into the prospectus supplement accompanying this prospectus prior to investing in our securities.

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 May 22, 2014

TABLE OF CONTENTS

IMPORTANT NOTICE ABOUT THE INFORMATION PRESENTED IN THIS PROSPECTUS

You should rely only on the information we have provided or incorporated by reference in this prospectus or any prospectus supplement. We have not authorized anyone to provide you with different information. If anyone provides you with different or inconsistent information, you should not rely on it. This prospectus does not constitute an offer to sell, or a solicitation of an offer to purchase, the securities offered by this prospectus in any jurisdiction to or from any person to whom or from whom it is unlawful to make such offer or solicitation of an offer in such jurisdiction. You should assume that the information in this prospectus or any prospectus supplement is accurate only as of the date on the front of the document and that any information we have incorporated by reference is accurate only as of the date of the document incorporated by reference, regardless of the time of delivery of this prospectus or any sale of a security. Our business, financial condition and results of operations may have changed since that date.

ABOUT THIS PROSPECTUS

This prospectus is part of a registration statement that we filed with the Securities and Exchange Commission (the "SEC") using a "shelf" registration process. Under this shelf registration process, we are registering an unspecified amount of each class of the securities described in this prospectus, and we may sell any combination of the securities described in this prospectus in one or more offerings. This prospectus provides you with a general description of the securities we may offer. Each time we use this prospectus to offer securities, we will provide a prospectus supplement that will contain specific information about the terms of that offering. To the extent that this prospectus is used by any security holder to resell any securities, information with respect to the security holder and the terms of the securities being offered will be contained in a prospectus supplement. Any prospectus supplement may also add, update or change information contained in this prospectus or in documents we have incorporated by reference into this prospectus. If there is any inconsistency between the information in this prospectus and any applicable prospectus supplement, you should rely on the information in the prospectus supplement. This prospectus, together with the applicable prospectus supplements, any applicable free writing prospectuses and the documents incorporated by reference into this prospectus, includes all material information relating to the securities we may offer. Please carefully read both this prospectus and the applicable prospectus supplement and any applicable free writing prospectus, including the risks of investing in our securities discussed under "Risk Factors," together with the documents incorporated by reference into this prospectus described below under the heading "Where You Can Find More Information," before making a decision to purchase any of our securities.

The prospectus supplement will describe: the specific terms of the securities offered, the offering price, the price paid to us for the securities, the net proceeds to us, the manner of distribution and any underwriting compensation, and the other specific material terms related to the offering of the securities. The prospectus supplement may also contain information, where applicable, about U.S. federal income tax considerations relating to the securities.

This prospectus contains summaries of certain provisions contained in some of the documents described herein, but reference is made to the actual documents for complete information. All of the summaries are qualified in their entirety by the actual documents. Copies of the documents referred to herein have been filed, or will be filed or incorporated by reference as exhibits to the registration statement of which this prospectus is a part, and you may obtain copies of those documents as described below under "Where You Can Find More Information."

Unless otherwise indicated in this prospectus or any prospectus supplement, or the context otherwise requires, all references to "Merit Medical," "our company," "we," "us," or "our" mean Merit Medical Systems, Inc. and its subsidiaries as a combined entity, except where it is made clear that the term only means the parent company or an identified subsidiary. Information contained on our website is not a part of our registration statement, this prospectus or any prospectus supplement.

ABOUT MERIT MEDICAL SYSTEMS

Merit Medical Systems, Inc. designs, develops, manufactures and markets single-use medical products for interventional and diagnostic procedures. Our mission is to provide innovative high-quality products to physicians and healthcare professionals to enhance patient care and enable them to perform procedures safely and effectively.

Our operations are divided into the following markets: diagnostic and interventional cardiology, interventional radiology, interventional gastroenterology, interventional pulmonology, vascular surgery, interventional nephrology and thoracic surgery. We believe we have been able to introduce new products and capture significant market share because of our expertise in product design, our proprietary technology and our skills in injection and insert molding. Our innovative products are designed to enable physicians and other healthcare professionals to perform interventional and diagnostic procedures with enhanced patient care and efficiency.

Our cardiology and radiology products are designed to assist in diagnosing and treating coronary artery disease and peripheral vascular disease. These innovative products aid in conducting dialysis treatment for kidney failure, performing drainage procedures and clearing clots, as well as removing foreign objects from the vasculature, providing access into vasculature and recording hemo-dynamic pressure. Our cardiology and radiology products, which are distributed through our direct sales force and third-party distributors, include inflation devices, snares, non-vascular stents, aspiration extraction catheters, angiographic catheters, dialysis catheters, micro catheters, steerable catheters, micro access products, guide wires, needles, safety products, therapeutic infusion catheters and accessories, drainage catheters and accessories, sheath introducers, splittable sheaths, pressure infusion bags, syringes, safety scalpels, coagulation probes, kits, procedure trays, radial access products, embolotherapeutic products and electrophysiology products.

Our gastroenterology and pulmonology products assist physicians, nurses and technicians in the palliative treatment of expanding esophageal, tracheobronchial and biliary strictures caused by malignant tumors. These products, which are distributed through our direct sales force and third-party distributors, include esophageal and tracheobronchial stents pre-loaded on a catheter-based delivery system, guide wires, inflation devices and sizing devices.

Our Original Equipment Manufacturers ("OEM") division also expands the markets in which our products are distributed on a world-wide basis. We sell molded components, sub-assembled goods and bulk non-sterile goods, which are combined with other components and/or goods from other companies and then sold under a Merit Medical or non-Merit Medical label. Our OEM division sells products in international and domestic markets.

Merit Medical Systems, Inc. was organized in July 1987 as a Utah corporation. We also conduct our operations through a number of domestic and foreign subsidiaries. Our principal offices are located at 1600 West Merit Parkway, South Jordan, Utah, 84095, and our telephone number is (801) 253-1600. Our website is www.merit.com. Information contained on our website is not a part of our registration statement, this prospectus or any prospectus supplement.

FORWARD-LOOKING STATEMENTS

This prospectus and documents incorporated by reference into this prospectus and any prospectus supplement or free writing prospectus may include "forward-looking statements" within the meaning of Section 27A of the Securities Act of 1933, as amended (the "Securities Act"), and Section 21E of the Securities Exchange Act of 1934, as amended (the "Exchange Act"). All statements other than statements of historical fact are "forward-looking statements" for purposes of these provisions, including any projections of earnings, revenues or other financial items, any statements of the plans and objectives of management for future operations, any statements concerning proposed new products or services, any statements regarding the integration, development or commercialization of the business or assets acquired from other parties, any statements regarding future economic conditions or performance, and any statements of assumptions underlying any of the foregoing. We have based these forward-looking statements largely on our current expectations and projections about future events and financial trends affecting the financial condition of our business. Forward-looking statements should not be read as a guarantee of future performance or results, and will not necessarily be accurate indications of the times at, or by, which such performance or results will be achieved. In some cases, forward-looking statements can be identified by the use of terminology such as "may," "will," "expects," "plans," "anticipates," "intends," "believes," "estimates," "potential," or "continue," or the negative thereof or other comparable terminology. Although we believe that the expectations reflected in the forward-looking statements contained herein are reasonable, there can be no assurance that such expectations or any of the forward-looking statements will prove to be correct, and actual results will differ, and could differ materially, from those projected or assumed in the forward-looking statements. Our future financial condition and results of operations, as well as any forward-looking statements, are subject to inherent risks and uncertainties, including risks relating to:

possible infringement of our technology or the assertion that our technology infringes the rights of other parties;

product recalls or product liability claims;

potential restrictions on our liquidity or our ability to operate our business by our current debt agreements, and the consequences of any default under those agreements;

changes in, or the consequences of our failure to comply with, government regulations;

reformation of U.S. healthcare regulations and corresponding changes in the healthcare industry;

greater governmental scrutiny and increasing regulation of the medical device industry;

expenditures relating to research, development, testing and regulatory approval or clearance of our products and the risk that such products may not be developed successfully or approved for commercial use;

reforms to the 510(k) process administered by the U.S. Food and Drug Administration (the "FDA");

modification or limitation of governmental or private insurance reimbursement policies;

laws targeting fraud and abuse in the healthcare industry;

the potential imposition of fines, penalties, or other adverse consequences if our employees or agents violate the U.S. Foreign Corrupt Practices Act or other laws or regulations;

increases in the price of commodity components;

negative changes in economic and industry conditions in the United States and other countries;

termination or interruption of relationships with our suppliers or failure of such suppliers to perform;

our potential inability to successfully manage growth through acquisitions, including the inability to commercialize technology acquired through recent, proposed, or future acquisitions;

fluctuations in exchange rates;

our need to generate sufficient cash flow to fund our debt obligations, capital expenditures and ongoing operations;

concentration of a substantial portion of our revenues among a few products and procedures;

development of new products and technology that could render our existing products obsolete;

volatility in the market price of our common stock;

potential disruption of our operations due to severe weather conditions or natural disasters;

damage to, or interruption of our operations at, our manufacturing facilities resulting from severe weather conditions, natural disasters or other factors beyond our control;

changes in key personnel;

work stoppage, transportation and related risks;

domestic and international economic conditions;

failure to comply with applicable environmental laws and regulations; and

operational and legal risks.

All forward-looking statements attributable to us or to persons acting on our behalf are expressly qualified in their entirety by these cautionary statements. Additional factors that may have a direct bearing on our operating results are referenced under the "Risk Factors" discussion following this section.

Given these risks and uncertainties, you are cautioned not to place undue reliance on any forward-looking statement set forth in this prospectus, any prospectus supplement or any free writing prospectus. All forward-looking statements are made only as of the date of the document in which they are contained and are based on information available to us as of such date. We assume no obligation to update any forward-looking statement or to publicly announce any revision of any forward-looking statement to reflect the occurrence of any future developments or events.

RISK FACTORS

Investing in our securities involves a high degree of risk. You should carefully consider the risks, uncertainties and assumptions discussed under the heading "Risk Factors" in our Annual Report on Form 10-K for the fiscal year ended December 31, 2013, filed on March 12, 2014 with the SEC, which is incorporated herein by reference, and may be amended, supplemented or superseded from time to time by other reports we file with the SEC in the future. The risks and uncertainties we have described are not the only ones we face. If any of these risks were to occur, our business, financial condition and results of operations could be severely harmed. This could cause the trading price of our common stock to decline, and you could lose all or part of your investment in our securities.

In addition, any prospectus supplement applicable to each offering of our securities will contain a discussion of the risks applicable to an investment in such securities. Prior to making a decision about investing in our securities, you should carefully consider the specific factors discussed under the heading "Risk Factors" in the applicable prospectus supplement, together with all of the other information contained or incorporated by reference in such prospectus supplement or appearing or incorporated by reference in this prospectus.

RATIO OF EARNINGS TO FIXED CHARGES

The following table presents the ratio of earnings to fixed charges of our company, which includes our subsidiaries, on a consolidated basis. We had no preferred stock outstanding for any period presented, and accordingly our ratio of earnings to combined fixed charges and preferred stock dividends is the same as our ratio of earnings to fixed charges. For purposes of computing the ratio of earnings to fixed charges, earnings were calculated by adding (1) pre-tax earnings from continuing operations; and (2) fixed charges (excluding capitalized interest). Fixed charges consist of the sum of (i) interest expense on long-term and short-term debt (including capitalized interest); (ii) estimated interest within rental expense; and (iii) amortization of capitalized interest.

	Year Ended December 31,				
	2013	**2012**	**2011**	**2010**	**2009**
Ratio of earnings to fixed charges	2.6	12.0	14.4	10.7	46.9

USE OF PROCEEDS

We cannot assure you that we will receive any proceeds in connection with securities which may be offered pursuant to this prospectus. Unless an applicable prospectus supplement states otherwise, the net proceeds from the securities sold by us will be added to our general corporate funds and be used for business and product acquisitions, debt repayment, working capital and general corporate purposes. We will have significant discretion in the use of any net proceeds. Investors will be relying on the judgment of our management regarding the application of proceeds from any sale of our securities. Until the net proceeds have been used, they will be invested in short-term marketable securities in accordance with our investment policy. If we elect at the time of the issuance of the securities to make different or more specific use of proceeds other than as described in this prospectus, the change in use of proceeds will be described in the applicable prospectus supplement. We will not receive any proceeds from securities offered for resale by selling security holders.

DILUTION

To the extent required, we will set forth in any prospectus supplement the following information regarding any material dilution of the equity interests of investors purchasing securities in an offering under this prospectus:

the net tangible book value per share of our equity securities before and after the offering;

the amount of the increase in such net tangible book value per share attributable to the cash payments made by purchasers in the offering; and

the amount of the immediate dilution from the public offering price which will be absorbed by such purchasers.

PLAN OF DISTRIBUTION

We may offer and sell securities under this prospectus from time to time pursuant to underwritten public offerings, negotiated transactions, block trades or a combination of these methods or through underwriters or dealers, through agents or directly to one or more purchasers. The securities may be distributed from time to time in one or more transactions:

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

at market prices prevailing at the time of sale;

at prices related to such prevailing market prices; or

at negotiated prices.

Each time we sell securities under this prospectus, we will provide a prospectus supplement or supplements that will describe the method of distribution and set forth the terms and conditions of the offering of such securities, including the offering price of the securities and the proceeds to us, if applicable.

Offers to purchase the securities being offered by this prospectus may be solicited directly. Agents may also be designated to solicit offers to purchase the securities from time to time. Any agent involved in the offer or sale of our securities will be identified in a prospectus supplement.

If a dealer is utilized in the sale of the securities being offered by this prospectus, the securities will be sold to the dealer, as principal. The dealer may then resell the securities to the public at varying prices to be determined by the dealer at the time of resale.

If an underwriter is utilized in the sale of securities under this prospectus, an underwriting agreement will be executed with the underwriter at the time of sale and the name of any underwriter will be provided in the prospectus supplement that the underwriter will use to make resales of the securities to the public. In connection with the sale of the securities, we or the purchasers of securities for whom the underwriter may act as agent, may compensate the underwriter in the form of underwriting discounts or commissions. The underwriter may sell the securities to or through dealers, and those dealers may receive compensation in the form of discounts, concessions or commissions from the underwriters and/or commissions from the purchasers for which they may act as agent. Unless otherwise indicated in a prospectus supplement, an agent will be acting on a best efforts basis and a dealer will purchase securities as a principal, and may then resell the securities at varying prices to be determined by the dealer.

Any compensation paid to underwriters, dealers or agents in connection with the offering of the securities, and any discounts, concessions or commissions allowed by underwriters to participating dealers will be provided in the applicable prospectus supplement. Underwriters, dealers and agents participating in the distribution of the securities may be deemed to be underwriters within the meaning of the Securities Act, and any discounts and commissions received by them and any profit realized by them on resale of the securities may be deemed to be underwriting discounts and commissions. We may enter into agreements to indemnify underwriters, dealers and agents against civil liabilities, including liabilities under the Securities Act, or to contribute to payments they may be required to make in respect thereof and to reimburse those persons for certain expenses.

Any common stock will be listed on The NASDAQ Global Select Market, but any other securities may or may not be listed on a national securities exchange. To facilitate the offering of securities, certain persons participating in the offering may engage in transactions that stabilize, maintain or otherwise affect the price of the securities. Such transactions may include over-allotments or short sales of the securities, which involve the sale by persons participating in the offering of more securities than were sold to them. In these circumstances, these persons would cover such over-allotments or short

positions by making purchases in the open market or by exercising their over-allotment option, if any. In addition, these persons may stabilize or maintain the price of the securities by bidding for or purchasing securities in the open market or by imposing penalty bids, whereby selling concessions allowed to dealers participating in the offering may be reclaimed if securities sold by them are repurchased in connection with stabilization transactions. The effect of these transactions may be to stabilize or maintain the market price of the securities at a level above that which might otherwise prevail in the open market. These transactions may be discontinued at any time.

If indicated in the applicable prospectus supplement, underwriters or other persons acting as agents may be authorized to solicit offers by institutions or other suitable purchasers to purchase the securities at the public offering price set forth in the prospectus supplement, pursuant to delayed delivery contracts providing for payment and delivery on the date or dates stated in the prospectus supplement. These purchasers may include, among others, commercial and savings banks, insurance companies, pension funds, investment companies and educational and charitable institutions. We anticipate that delayed delivery contracts will be subject to the condition that the purchase of the securities covered by the delayed delivery contracts will not at the time of delivery be prohibited under the laws of any jurisdiction in the United States to which the purchaser is subject. We expect that any underwriters and agents engaged with respect to such delayed delivery contracts will not have any responsibility with respect to the validity or performance of such contracts.

We may engage in at-the-market offerings into an existing trading market in accordance with Rule 415(a)(4) under the Securities Act. In addition, we may enter into derivative transactions with third parties, or sell securities not covered by this prospectus to third parties in privately negotiated transactions. If the applicable prospectus supplement so indicates, in connection with those derivatives, the third parties may sell securities covered by this prospectus and the applicable prospectus supplement, including in short sale transactions. If so, the third party may use securities pledged by us or borrowed from us or others to settle those sales or to close out any related open borrowings of stock, and may use securities received from us in settlement of those derivatives to close out any related open borrowings of stock. The third party in such sale transactions will be an underwriter and, if not identified in this prospectus, will be named in the applicable prospectus supplement (or a post-effective amendment). In addition, we may otherwise loan or pledge securities to a financial institution or other third party that in turn may sell the securities short using this prospectus and an applicable prospectus supplement. Such financial institution or other third party may transfer its economic short position to investors in our securities or in connection with a concurrent offering of other securities.

The specific terms of any lock-up provisions in respect of any given offering will be described in the applicable prospectus supplement.

In compliance with the guidelines of the Financial Industry Regulatory Authority, Inc. ("FINRA"), the maximum consideration or discount to be received by any FINRA member or independent broker dealer may not exceed 8% of the aggregate proceeds of the offering.

Underwriters, dealers and agents may engage in transactions with us, or perform services for us, in the ordinary course of business for which they receive compensation.

Although we expect that delivery of securities generally will be made against payment on or about the third business day following the date of any contract for sale, we may specify a longer settlement cycle in the applicable prospectus supplement. Under Rule 15c6-1 of the Exchange Act, trades in the secondary market generally are required to settle in three business days, unless the parties to a trade expressly agree otherwise. Accordingly, if we have specified a longer settlement cycle in the applicable prospectus supplement for an offering of securities, purchasers who wish to trade those securities on the date of the contract for sale, or on one or more of the next succeeding business days as we will specify in the applicable prospectus supplement, will be required, by virtue of the fact that those securities will settle in more than three business days (T+3), to specify an alternative settlement cycle at the time of the trade to prevent a failed settlement and should consult their own advisors in connection with that election.

THE SECURITIES WE MAY OFFER

We may use this prospectus to offer, and selling security holders may use this prospectus to offer for resale, shares of common stock, debt securities, warrants to purchase shares of common stock and/or debt securities and units consisting of a combination of two or more of these classes of securities.

The following briefly summarizes the general terms and provisions of the securities that we may offer or that selling security holders may offer for resale. A prospectus supplement will describe the specific types, amounts, prices and detailed terms of any of these offered securities. You should read the particular terms of the securities as described in any prospectus supplement, together with the provisions of our Articles of Incorporation, as amended (our "Articles"), our Amended and Restated Bylaws (our "Bylaws") and any relevant instrument and agreement relating to such securities. The specific terms of the securities offered may differ from the terms discussed below and you should always read the entire instruments and agreements defining the terms of the securities before you make an investment decision with respect to such securities.

These securities may be offered and sold from time to time for an aggregate offering price not to exceed $200,000,000. This prospectus may not be used to consummate a sale of securities unless it is accompanied by a prospectus supplement.

Description of Common Stock

We may issue, and selling security holders may offer for resale, shares of our common stock. We are authorized to issue 100,000,000 shares of common stock, no par value per share. We are also authorized to issue 5,000,000 shares of preferred stock, no par value per share. If issued, these preferred shares would likely have preference over our common stock in various ways, which would be set forth in our Articles in effect at the time of any issuance of such preferred shares. Subject to the provisions and limitations set forth in our Articles, our board of directors has authority to issue these preferred shares at such time, in such amount, at such price, and with such preferences over our common stock, as it desires. As of March 10, 2014, approximately 42,862,172 shares of our common stock, and no shares of our preferred stock, were issued and outstanding. The following description of the provisions of our Articles and Bylaws related to our common stock are only summaries, and we encourage you to review complete copies of these documents, which have been filed as exhibits to our periodic reports with the SEC.

Dividends, Voting Rights and Liquidation

Holders of outstanding shares of common stock are entitled to one vote for each share held of record on all matters submitted to a vote of our shareholders. Subject to preferences that may be applicable to any outstanding shares of preferred stock, holders of common stock are entitled to receive ratably such dividends, if any, as may be declared from time to time by our board of directors out of funds legally available for dividend payments. We have never issued a cash dividend on our common stock and do not anticipate doing so in the foreseeable future. All outstanding shares of common stock are fully paid and non-assessable, and any shares of common stock issued under this prospectus will be fully paid and non-assessable. The holders of common stock have no preferences or rights of conversion, exchange, pre-emption or other subscription rights. Our common stock does not have cumulative voting rights, meaning holders of a majority of our common stock can elect all of our directors. Our board of directors is divided into three classes of directors, and the term of service for each expires every third year. This means that it would likely take two years for our shareholders to remove a majority of our directors or to vote a majority of our directors into office. There are no redemption or sinking fund provisions applicable to the common stock. In the event of any liquidation, dissolution or winding-up of our affairs, holders of outstanding common stock at such time will be

entitled to share ratably in our assets that are legally available for such purpose after payment or provision for payment of all of our debts and obligations and after liquidation payments to holders of outstanding shares of preferred stock, if any.

Anti-Takeover Effects of Provisions of Utah Law and Our Charter Documents.

The following paragraphs summarize certain provisions of the Utah Code, our Articles and our Bylaws. This summary does not purport to be complete and is subject to and qualified in its entirety by reference to the Utah Code and to our Articles and Bylaws, copies of which are on file with the SEC and are exhibits to documents previously filed by us. See "Where You Can Find More Information." Our Articles and our Bylaws contain provisions that, together with the ownership position of our officers, directors and their affiliates, could discourage potential takeover attempts and make it more difficult for shareholders to change management, which could adversely affect the market price of our common stock.

Director Liability. Our Articles limit the personal liability of our directors to our company and our shareholders to the fullest extent permitted by applicable law. The inclusion of this provision in our Articles may reduce the likelihood of derivative litigation against our directors and may discourage or deter shareholders or management from bringing a lawsuit against our directors for breach of their duty of care.

Shareholder Action and Meetings of Shareholders. Our Bylaws provide that shareholders wishing to propose business to be brought before a meeting of shareholders will be required to comply with various advance notice requirements. The inclusion of this provision in our Bylaws may deter our shareholders from submitting proposals for consideration at a meeting of shareholders.

Classified Board of Directors. Our Articles provide for our board of directors to be divided into three classes of directors, with each class as nearly equal in number as possible, serving staggered three-year terms. As a result, approximately one-third of the board of directors will be elected each year. We believe the classified board provision will help to assure the continuity and stability of the board of directors and the business strategies and policies of our company as determined by the board of directors. The classified board provision could have the effect of discouraging a third party from making a tender offer or attempting to obtain control of our company. In addition, the classified board provision could delay shareholders who do not agree with the policies of the board of directors from removing a majority of the board of directors for two years.

Authorized but Unissued Shares. Our authorized capital stock consists of 100,000,000 shares of common stock and 5,000,000 shares of preferred stock. As of March 10, 2014, we had 42,862,172 shares of common stock outstanding and no shares of preferred stock outstanding. Accordingly, our Articles would permit us to issue up to 52,741,756 additional shares of common stock (after taking into account 4,396,072 shares reserved for issuance under existing employee benefit plans or pursuant to exercise of existing options), and up to 5,000,000 shares of preferred stock. However, such issuances would be subject to the rules of the Nasdaq Global Select Market, which in some cases may require shareholder approval or impose other limitations. These additional shares may be utilized for a variety of corporate purposes, including future public offerings to raise additional capital, corporate acquisitions and employee benefit plans. The existence of authorized but unissued shares of common stock and preferred stock could make it more difficult or discourage an attempt to obtain control of us by means of a proxy contest, tender offer, merger or otherwise.

Utah Control Shares Acquisitions Act. We are subject to the Control Shares Acquisitions Act, as set forth in Section 61-6-1, *et seq*., of the Utah Code (the "Control Shares Act"). The Control Shares Act provides that any person or entity that acquires "control shares" of an "issuing public corporation" in a "control share acquisition" is denied voting rights with respect to the acquired shares, unless a

majority of the disinterested shareholders of the issuing public corporation elects to restore such voting rights. The Control Shares Act provides that a person or entity acquires "control shares" whenever it acquires shares that, but for the operation for the Control Shares Act, would bring its voting power following such acquisition within any of the following three ranges of all voting power of the issuing public corporation: (i) between 1/5 and 1/3; (ii) between 1/3 and a majority; or (iii) a majority or more. An "issuing public corporation" is any Utah corporation, other than a depository institution, that (a) has 100 or more shareholders, (b) has its principal place of business, principal office or substantial assets within the State of Utah and (c) has more than 10% of its shareholders resident in the State of Utah, more than 10% of its shares owned by Utah residents or 10,000 shareholders resident in the State of Utah. A "control share acquisition" is generally defined as the direct or indirect acquisition (including through a series of acquisitions) of either ownership or voting power associated with issued and outstanding control shares.

Under the Control Shares Act, a person or entity that acquires control shares pursuant to a control share acquisition acquires voting rights with respect to those shares only to the extent granted by a majority of the disinterested shareholders of each class of capital stock outstanding prior to the acquisition. The acquiring person may file an "acquiring person statement" with the issuing public corporation setting forth the number of shares acquired and certain other specified information. Upon delivering the statement together with an undertaking to pay the issuing public corporation's expenses of a special shareholders' meeting, the issuing public corporation is required to call a special shareholders' meeting for the purpose of considering the voting rights to be accorded the shares acquired or to be acquired in the control shares acquisition. If no request for a special meeting is made, the voting rights to be accorded the control shares are to be presented at the issuing public corporation's next special or annual meeting of shareholders. If either (i) the acquiring person does not file an acquiring person statement with the issuing public corporation or (ii) the shareholders do not vote to restore voting rights to the control shares, the issuing public corporation may, if its articles of incorporation or bylaws so provide, redeem the control shares from the acquiring person at fair market value. Our Articles and Bylaws do not currently provide for such a redemption right. Unless otherwise provided in the articles of incorporation or bylaws of an issuing public corporation, all shareholders are entitled to dissenters' rights if the control shares are accorded full voting rights and the acquiring person has obtained majority or more control shares. Our Articles and Bylaws do not currently deny such dissenters' rights.

The directors or shareholders of a corporation may elect to exempt the stock of the corporation from the provisions of the Control Shares Act through adoption of a provision to that effect in the corporation's articles of incorporation or bylaws. To be effective, such an exemption must be adopted prior to the control shares acquisition. Our shareholders have not yet taken any such action.

We expect the Control Shares Act to have an anti-takeover effect with respect to transactions our board of directors does not approve in advance. The Control Shares Act may also discourage takeover attempts that might result in a premium over the market price for the shares of common stock held by our shareholders.

Listing

Our common stock is listed on the Nasdaq Global Select Market under the symbol "MMSI."

Transfer Agent and Registrar

The transfer agent and registrar for our common stock is Zion's Bank, a division of ZB, N.A.

Description of Debt Securities

This section describes the general terms and provisions of the debt securities to which any prospectus supplement we may issue from time to time relates. As used in this prospectus, debt securities means the debentures, notes, bonds and other evidences of indebtedness that we may issue from time to time as either convertible senior debt securities or convertible subordinated debt securities. If issued, our debt securities would be issued under an indenture between us and a trustee to be identified prior to the issuance of such debt securities. A form of such indenture is filed as an exhibit to this prospectus. The indenture applicable to any issuance of our debt securities may differ from such form. Consequently, any indenture applicable to the issuance of our debt securities will be filed as an exhibit to the prospectus supplement relating to such issuance and any differences between the form of indenture filed with this prospectus and the indenture filed with a prospectus supplement will be disclosed in such prospectus supplement. Any indenture we issue will be subject to, and governed by, the Trust Indenture Act of 1939, as amended (the "Trust Indenture Act").

The following description sets forth certain anticipated general terms and provisions of the debt securities to which any prospectus supplement may relate. Consequently, the statements and descriptions in this prospectus or in any prospectus supplement regarding provisions of the indentures and debt securities are only summaries thereof, do not purport to be complete and are subject to, and are qualified in their entirety by reference to, all of the provisions of the indentures and the debt securities, including the definitions of certain terms provided therein. Particular terms of the debt securities offered by any prospectus supplement and the extent to which the general provisions described below apply to any series of debt securities will be described in the relevant prospectus supplement. Accordingly, you should review the indenture and any supplemental indenture because they, and not this description, define the rights of prospective holders of debt securities we may issue.

General

Unless otherwise specified in the indenture and the prospectus supplement relating thereto, the debt securities will likely be direct unsecured obligations of Merit Medical. We anticipate that the senior debt securities, if any, will rank on parity with any of our other unsecured senior and unsubordinated debt, and the subordinated debt securities, if any, will be subordinate and junior in right of payment to any senior debt. Unsecured debt securities, if any, will be effectively junior to any existing or future secured debt. *See " Subordination."*

Unless otherwise specified in the indenture and the prospectus supplement relating thereto, the debt securities will likely be issued without limit as to aggregate principal amount (other than the aggregate limit of $200,000,000 set forth in this prospectus), in one or more series, secured or unsecured, in each case as established from time to time in or pursuant to authority granted by a resolution of the board of directors or as established in the applicable indenture. We anticipate that all debt securities of one series will not be issued at the same time and, unless otherwise provided, a series will likely be able to be reopened without the consent of the holders of the debt securities of such series for issuance of additional debt securities of such series.

You should refer to the prospectus supplement relating to the particular series of debt securities for a description of the following terms of the debt securities offered thereby and by this prospectus:

- the form and title of those debt securities, and whether they are senior debt securities or subordinated debt securities;
- the aggregate principal amount of that series of debt securities;
- the date or dates upon which the debt securities are payable and whether the stated maturity may be extended or the method used to determine or extend those dates;

the purchase price or prices at which the debt securities are being offered or the method of determining those prices;

the rate or rates, if any, at which the debt securities will bear interest, which may be fixed or variable, the method by which such rate or rates shall be determined, the date or dates from which that interest will accrue, the interest payment dates on which that interest will be payable, or the method by which any of the foregoing will be determined;

our right, if any, to defer or extend an interest payment date and the regular record date, if any, for interest payable on any registered security on any interest payment date, or the method by which such will be determined;

the basis upon which interest will be calculated if other than on the basis of a 360-day year of twelve 30-day months;

the place or places where payments on the debt securities will be payable, where any securities may be surrendered for registration of transfer, exchange or conversion, as applicable, and notices and demands may be delivered to or upon us pursuant to the applicable indenture;

the period or periods within which, the price or prices at which, the currency or currencies in which, and the other terms and conditions upon which the debt securities may be redeemed, in whole or in part, at our option or the option of a holder (as defined in the indenture), if we or a holder is to have that option;

our obligation or right, if any, to redeem, repay or purchase the debt securities pursuant to any sinking fund or analogous provision or at the option of a holder, and the terms and conditions upon which the debt securities will be redeemed, repaid or purchased, in whole or in part, pursuant to that obligation;

if other than as expressed in the indenture, the denomination or denominations in which any registered securities or bearer securities of that series will be issuable;

if other than the trustee, the identity of each security registrar and/or paying agent;

any restriction or condition on the transferability of the debt securities of a particular series;

if other than the principal amount thereof, the portion of the principal amount of the debt securities that will be payable upon declaration of acceleration of the maturity thereof under the indenture, or the method by which that portion will be determined;

if other than United States dollars, the currency or currencies in which principal, any premium and any interest on the debt securities will be payable or in which the debt securities will be denominated;

whether payments on the debt securities may be determined with reference to an index, formula or other method and the manner in which those payments will be determined;

the applicability, if any, of the defeasance provisions, and any modifications to the related provisions of the indenture;

provisions, if any, granting special rights to holders of debt securities upon the occurrence of specified events;

any changes to the events of default or our covenants specified in the indenture with respect to the debt securities or any provision for the suspension of certain covenants based on credit ratings or other criteria applicable to us or securities issued by us;

if convertible, the terms upon which the debt securities may be converted or exchanged for our common stock or other securities or property;

if convertible, any applicable limitations on the ownership or transferability of the common stock or other security into which they are convertible;

whether we are issuing the debt securities in whole or in part in global form and the depository for global or certificated debt securities;

to whom any interest on any debt security shall be payable, if other than the person in whose name the security is registered on the record date for such interest, and the extent to which, or the manner in which, any interest payable on a temporary global debt security will be paid if other than in the manner provided in the applicable indenture;

if the debt securities are to be issuable in definitive form and any related conditions;

whether, under what circumstances and the currency in which we will pay any additional amounts on the debt securities as contemplated in the applicable indenture in respect of any tax, assessment or governmental charge and, if so, whether we will have the option to redeem the debt securities rather than pay such additional amounts (and the terms of any such option);

whether and the extent to which the debt securities are entitled to the benefits of any guarantees;

any provisions for collateral security for the debt securities repayment;

whether the subordination provisions summarized below or different subordination provisions will apply to the debt securities; and

any other specific terms, conditions, rights and preferences relating to the debt securities.

Unless otherwise specified in a prospectus supplement, we anticipate that the debt securities will not be listed on any securities exchange and will be issued in fully-registered form without coupons.

Debt securities may bear interest at a fixed rate or a variable rate, as specified in the prospectus supplement. In addition, if specified in the prospectus supplement, we may sell debt securities bearing no interest or interest at a rate that at the time of issuance is below the prevailing market rate, or at a discount below their stated principal amount. We will describe in the prospectus supplement any special federal income tax considerations applicable to these discounted debt securities.

Events of Default

Unless a prospectus supplement provides otherwise, we anticipate that the following will constitute "events of default" under the applicable indenture with respect to each series of debt securities:

our failure to pay any interest on any debt security of such series when due and payable, continued for 30 days;

our failure to pay principal (or premium, if any) on any debt security of such series when due, regardless of whether such payment became due because of maturity, redemption, acceleration or otherwise;

default in the deposit of any sinking fund payment, when and as due by the terms of the debt securities of that series and the applicable indenture;

our failure to observe or perform any other of its covenants or warranties with respect to such debt securities for 90 days after we receive notice of such failure;

certain events relating to our bankruptcy, insolvency or reorganization; and

any other event of default provided with respect to debt securities of that series.

It is also likely that if an event of default with respect to any debt securities of any series outstanding under an applicable indenture shall occur and be continuing, the trustee under such indenture or the holders of at least 25% in aggregate principal amount of the debt securities of that series outstanding will be able to declare, by notice as provided in the applicable indenture, the principal amount (or such lesser amount as may be provided for in the debt securities of that series) of all the debt securities of that series then outstanding to be due and payable immediately; provided that, in the case of an event of default involving certain events in bankruptcy, insolvency or reorganization, acceleration will likely be automatic; and, provided further, that after such acceleration, but before a judgment or decree based on acceleration, the holders of a majority in aggregate principal amount of the outstanding debt securities of that series will likely be able to, under certain circumstances, rescind and annul such acceleration if all events of default, other than the nonpayment of accelerated principal, have been cured or waived.

Indentures issued under a prospectus supplement will likely provide that the trustee will not be liable for any action taken, suffered or omitted by it in good faith and believed by it to be authorized or within the discretion or rights or powers conferred upon it by the indenture. We also anticipate that the trustee, subject to its duties during an event of default to act with the required standard of care, will also be able to require indemnification by the holders of the debt securities of any series with respect to which an event of default has occurred before proceeding to exercise any right or power under the indentures at the request of the holders of the debt securities of such series. Subject to such right of indemnification and to certain other limitations, the holders of a majority in principal amount of the outstanding debt securities of any series under an indenture will likely be able to direct the time, method and place of conducting any proceeding for any remedy available to the trustee, or exercising any trust or power conferred on the trustee with respect to the debt securities of such series, provided that the trustee can refuse to follow any direction that it determines may not lawfully be taken or would be illegal or in conflict with the indenture or involve it in personal liability or which would be unjustly prejudicial to holders not joining in that proceeding.

The trustee may also be required within 90 days after the occurrence of an event of default with respect to the debt securities of any series to give to the holders of the debt securities of such series notice of such event of default. Holders of a majority in principal amount of all debt securities of such series outstanding under an indenture will also likely be able to waive any past default under such indenture with respect to debt securities of any series, and any event of default arising therefrom, except in the case of (1) default in the payment of the principal of (or premium, if any) or interest on any debt securities of such series or (2) default in respect of a covenant or provision which may not be amended or modified without the consent of the holder of each outstanding debt security of such series affected.

We anticipate that no individual holder of a debt security of any series will be able to institute any action against us under any indenture issued under a prospectus supplement (except actions for payment of overdue principal of (and premium, if any) or interest on such debt security or for the conversion or exchange of such debt security in accordance with its terms) unless:

the holder has given to the trustee written notice of an event of default and of the continuance thereof with respect to the debt securities of such series specifying an event of default, as required under the applicable indenture;

the holders of at least 25% in aggregate principal amount of the debt securities of that series then outstanding under such indenture shall have requested the trustee to institute such action and offered to the trustee an indemnity reasonably satisfactory to it against the costs, expenses and liabilities to be incurred in compliance with such request;

the trustee shall not have instituted such action within 60 days of such request; and

no direction inconsistent with such written request has been given to the trustee during such 60-day period by the holders of a majority in principal amount of the debt securities of that series.

We also anticipate that the applicable indentures will require us to file annually with the trustee an officers' certificate certifying our compliance with all conditions and covenants under the terms of such indenture.

Modification and Waiver

The indenture will likely allow us and the applicable trustee to amend and/or supplement the indenture for certain purposes which would not have a material adverse effect on the interests or rights of the holders of debt securities of a series without the consent of those holders. Modifications of and amendments to the indenture that would have a material adverse effect may be allowed with the consent of holders of a majority in principal amount of the outstanding debt securities of each series issued under the indenture that is affected by the modification or amendment; *provided*, *however*, that we anticipate that no such modification or amendment will, without the consent of the holder of each outstanding debt security affected thereby:

change the stated maturity of the principal of, or any installment of principal of or interest on, any debt securities of any series;

reduce the principal amount of, or the rate of interest on, or any premium payable upon the redemption of, any debt securities of any series;

change our obligation to pay any additional amounts required to be paid in respect of certain taxes, assessments or governmental charges imposed on holders of the debt securities, as the case may be, except as otherwise contemplated by the applicable indenture;

reduce the amount of principal of an original issue discount debt security or any other debt security that would be payable upon declaration of acceleration of the maturity thereof;

change the place of payment where, or the currency in which, any debt security or any premium or interest thereon is payable;

impair the right to institute suit for the enforcement of any payment on or with respect to any debt security on or after the stated maturity thereof (or in the case of a redemption, on or after the redemption date);

reduce the percentage in principal amount of outstanding debt securities of any series, the consent of whose holders is required for modification or amendment of the indenture or for waiver of compliance with certain provisions of the indenture or for waiver of certain defaults thereunder and their consequences;

make any change that adversely affects the right to convert or exchange any debt security or decreases the conversion or exchange rate or increases the conversion price of any convertible or exchangeable debt security; or

modify any of the above provisions or any of the provisions relating to the waiver of certain past defaults or certain covenants, except to increase the required percentage to effect such action or to provide that certain other provisions cannot be modified or waived without the consent of the holder of each outstanding debt security affected thereby.

We expect that any indenture we issue will permit the holders of at least a majority in aggregate principal amount of the outstanding debt securities of any series issued under such indenture which are affected by the modification or amendment to waive our compliance with certain covenants contained in the indenture. Also, we expect that any subordinated indenture will forbid us or the trustee from

18

amending the subordination of any outstanding subordinated debt securities without the consent of each holder of then outstanding senior indebtedness that would be adversely affected by such amendment.

Redemption of Securities

Debt securities may be subject to optional or mandatory redemption on terms and conditions described in the applicable prospectus supplement.

After notice has been given as provided in the applicable indenture, we expect that if funds for the redemption of any debt securities called for redemption shall have been made available on such redemption date, such debt securities will cease to bear interest on the date fixed for such redemption specified in such notice, and the only right of the holders of the debt securities will be to receive payment of the redemption price.

Conversion of Securities

The terms and conditions, if any, upon which any debt securities are convertible into shares of our common stock or preferred stock will be set forth in the applicable prospectus supplement relating thereto. We anticipate that such terms will include:

whether such debt securities are convertible into shares of our common stock or preferred stock;

the conversion price (or manner of calculation thereof);

the conversion period;

provisions as to whether conversion will be at our option or the option of the holders;

the events requiring an adjustment of the conversion price and provisions affecting conversion in the event of the redemption of such debt securities; and

any restrictions on conversion.

Merger, Consolidation, or Sale of Assets

Any indenture we issue under a prospectus supplement will likely prohibit us from consolidating with or merging with or into any other corporation or transferring all or substantially all of our property and assets as an entirety to any person, unless:

either we will be the continuing person, or the person (if other than us) formed by the consolidation or into which we are merged or to which all or substantially all of our properties and assets are transferred is a corporation organized and existing under the laws of the United States or any State thereof or the District of Columbia which expressly assumes all of our obligations under each series of debt securities and the indenture with respect to each such series;

immediately before and immediately after giving effect to that transaction, no event of default and no event which, after notice or passage of time or both, would become an event of default has occurred and is continuing; and

we deliver to the trustee an officers' certificate and an opinion of counsel each stating that the consolidation, merger, conveyance or transfer and the supplemental indenture complies with the indenture.

Limitation on Liens

In the event we issue senior debt securities under an indenture, we expect such indenture to provide that with respect to each series of senior debt securities, unless otherwise set forth in the related prospectus supplement, we will not, directly or indirectly, create, incur, assume or suffer to exist any lien, encumbrance or security interest upon any of our property, assets or revenues, whether now owned or hereafter acquired, except for:

liens for taxes not yet due or which are being contested in good faith by appropriate proceedings;

carriers', warehousemen's, mechanics', materialmen's, repairmen's or other like liens arising in the ordinary course of business that are not overdue for a period of more than 60 days or which are being contested in good faith by appropriate proceedings;

pledges or deposits in connection with workers' compensation, unemployment insurance and other social security legislation and deposits securing liability to insurance carriers under insurance or self-insurance arrangements;

deposits to secure the performance of bids, trade contracts (other than for borrowed money), leases, statutory obligations, surety and appeal bonds, performance bonds and other obligations of a like nature incurred in the ordinary course of business;

easements, rights-of-way, restrictions and other similar encumbrances incurred in the ordinary course of business which, in the aggregate, are not substantial in amount and which do not in any case materially detract from the value of the property subject thereto;

Liens, encumbrances or security interests in existence on the date of the first issuance by us of senior debt securities issued pursuant to the indenture;

liens, encumbrances or security interests securing our debt incurred to finance the acquisition of fixed or capital assets; and

liens, encumbrances or security interests on the property or assets of a corporation that becomes a subsidiary after the date of the indenture.

Defeasance

If so specified in the prospectus supplement with respect to debt securities of any series, we will likely have the option of (1) being discharged from any and all obligations in respect of the debt securities of that series (except for certain obligations to register the transfer or exchange of debt securities of that series, replace stolen, lost or mutilated debt securities of that series, maintain paying agencies, and hold money for payment in trust), or (2) not being subject to certain specified covenants with respect to the debt securities of that series as set forth in the related prospectus supplement, in each case if we deposit with the trustee, in trust, money or government obligations, which through the payment of interest thereon and principal thereof in accordance with their terms, will provide money in an amount sufficient to pay all the principal (including any mandatory sinking fund payments) of, and interest on, the outstanding debt securities of that series on the dates such payments are due in accordance with the terms of such debt securities.

To exercise any such option, we anticipate that the applicable indenture will require us to deliver to the trustee an opinion of counsel to the effect that the deposit and related defeasance would not cause the holders of the debt securities of that series to recognize income, gain or loss for federal income tax purposes and, in the case of a discharge pursuant to clause (1) in the immediately preceding paragraph, either a ruling to such effect received from or published by the United States Internal Revenue Service or an opinion that there has been a change in applicable federal income tax law to such effect.

Subordination

The prospectus supplement relating to any offering of subordinated debt securities will describe the specific subordination provisions applicable to such subordinated debt securities. Particularly, such prospectus supplement will specify the extent to which a particular series of subordinated debt securities is subordinated to other of our indebtedness. However, unless otherwise noted in the applicable prospectus supplement, subordinated debt securities will likely be subordinate and junior in right of payment to any of our existing senior debt.

Under a subordinated indenture, senior debt will likely mean all amounts due on obligations in connection with any of the following, whether outstanding at the date of execution of the subordinated indenture or thereafter incurred or created:

- the principal of (and premium, if any) and interest due on our indebtedness for borrowed money and indebtedness evidenced by securities, debentures, bonds or other similar instruments issued by
- any of our obligations as lessee under leases required to be capitalized on the balance sheet of the lessee under generally accepted accounting principles;
- all of our obligations for reimbursement on any letter of credit, banker's acceptance, security purchase facility or similar credit transaction;
- all of our obligations in respect of interest rate swap, cap or other agreements, interest rate future or options contracts, currency swap agreements, currency future or option contracts and other similar agreements;
- all obligations of the types referred to above of other persons for the payment of which we are responsible or liable as obligor, guarantor or otherwise; and
- all obligations of the types referred to above of other persons secured by any lien on any property or asset of ours (whether or not such obligation is assumed by us).

However, we do not anticipate that senior debt will include:

- any indebtedness which, by its terms or the terms of the instrument creating or evidencing it, expressly provides that it has a subordinate or equal right of payment with the subordinated debt securities;
- indebtedness incurred in the form of trade accounts payable or accrued liabilities arising in the ordinary course of business;
- any liability for federal, state, local or other taxes owed or owing by us; or
- the portion of indebtedness we may incur in violation of the subordinated indenture.

Unless otherwise noted in the prospectus supplement, if we default in the payment of any principal of (or premium, if any) or interest on any senior debt when it becomes due and payable, whether at maturity or at a date fixed for prepayment or by declaration or otherwise, then, unless and until such default is cured or waived or ceases to exist, we will likely be unable to make any direct or indirect payment (in cash, property, securities, by set-off or otherwise) in respect of the principal of or interest on the subordinated debt securities or in respect of any redemption, retirement, purchase or other requisition of any of the subordinated debt securities. Furthermore, in the event of the acceleration of the maturity of any subordinated debt securities, the holders of all senior debt securities outstanding at the time of such acceleration will likely first be entitled to receive payment in full of all amounts due on the senior debt, including amounts due on acceleration, before the holders of the subordinated debt securities will be entitled to receive any payment of principal (and premium, if any) or interest on the

subordinated debt securities. We also do not anticipate any indenture under a prospectus supplement limiting our ability to issue additional senior debt.

Upon any distribution to our creditors in a liquidation, dissolution, or reorganization (whether voluntary or involuntary or in bankruptcy, insolvency or receivership), general assignment by us for the benefit of creditors or any other marshaling of our assets or liabilities, payment of the principal of, premium, if any, on and interest, if any, on the subordinated debt securities will be subordinated to the extent provided in the indenture in right of payment to the prior payment in full of all senior indebtedness. In such event, any payment or distribution under the subordinated debt securities, whether in cash, securities or other property, which would otherwise (but for the subordination provisions) be payable or deliverable in respect of the subordinated debt securities, will be paid or delivered directly to the holders of senior debt in accordance with the priorities then existing among such holders until all senior debt has been paid in full.

Global Securities

If so specified in any prospectus supplement, debt securities of any series may be issued under a book-entry system in the form of one or more global securities. This means that one "global" debt security would be issued to represent a number of registered debt securities. The denomination of the global debt security would equal the aggregate principal amount of all registered debt securities represented by that global debt security.

We expect to deposit any registered debt securities issued in global form with a depositary, or with a nominee of the depositary, that we will name in the applicable prospectus supplement for each offering of such debt securities. Any person holding an interest in the global debt security through the depositary will be considered the "beneficial" owner of that interest. However, as is customary we will register the debt securities in the name of the depositary or the nominee of the depositary, as appropriate.

We anticipate that the indenture pursuant to which we may issue global debt securities will only allow the depositary or its nominee to transfer a global debt security in its entirety and only in the following circumstances:

by the depositary for the registered global security to a nominee of the depositary;

by a nominee of the depositary to the depositary or to another nominee of the depositary; or

by the depositary or the nominee of the depositary to a successor of the depositary or to a nominee of the successor.

However, such restrictions will likely not apply to a global debt security if the depositary or its nominee, as applicable, exchanges the global debt security for registered debt securities issued in definitive form.

We will describe the specific terms of the depositary arrangement with respect to any series of debt securities represented by a registered global security in the prospectus supplement for the offering of that series. However, we anticipate that the provisions below will apply to all depositary arrangements for debt securities represented by a registered global security.

Ownership of beneficial interests in a registered global security would be limited to (1) participants that have accounts with the depositary for the registered global security and (2) persons that may hold interests through those participants. Upon the issuance of a registered global security, the depositary will credit each participant's account on the depositary's book-entry registration and transfer system with the principal amount of debt securities represented by the registered global security beneficially owned by that participant. Ownership of beneficial interests in the registered global security would be shown on, and the transfer of ownership interests would be effected only through, records maintained

by the depositary for the registered global security, with respect to interests of participants, and on the records of participants, with respect to interests of persons holding through participants. The laws of some states may require that purchasers of securities regulated by the laws of those states take physical delivery of the securities in definitive form. Those laws may impair the ability to own, transfer or pledge beneficial interests in registered global securities.

As long as the depositary for a registered global security, or its nominee, is the registered owner of the registered global security, that depositary or its nominee will be considered the sole owner or holder of the debt securities represented by the registered global security for all purposes under the applicable indenture. Owners of beneficial interests in a registered global security generally will not be entitled to have the debt securities registered in their own names, receive or be entitled to receive physical delivery of debt securities of that series in definitive form or be considered the owners or holders of the debt securities under the applicable indenture. Accordingly, each person owning a beneficial interest in a registered global security must rely on the procedures of the depositary for the registered global security and, if that person owns through a participant, on the procedures of the participant through which that person owns its interest, to exercise any rights of a holder under the applicable indenture.

We would make payments of principal, any premium and any interest on a registered global security to the depositary or its nominee. We expect that the depositary for any registered global security, upon receipt of such payment of principal (or premium, if any) or interest in respect of the registered global security, will immediately credit participants' accounts with payments in amounts proportionate to their respective beneficial interests in the registered global security as shown on the records of the depositary. However, none of Merit Medical, the trustee or any other agent of Merit Medical or of the trustee would have any responsibility or liability for any aspect of the records relating to, or payments made on account of, beneficial ownership interests in the registered global security or for maintaining, supervising or reviewing any records relating to the beneficial ownership interests.

We would issue our debt securities in definitive form in exchange for a registered global security if the depositary for such registered global security is at any time unwilling or unable to continue as depositary or ceases to be a clearing agency registered under the Exchange Act, if a successor depositary registered as a clearing agency under the Exchange Act is not appointed within 90 days and under such other circumstances, if any, as may be described in an applicable prospectus supplement. In addition, we may at any time and in our sole discretion determine not to have any of the debt securities of a series represented by a registered global security and, in such event, would issue debt securities of the series in definitive form in exchange for the registered global security.

We would register any debt securities issued in definitive form in exchange for a registered global security in such name or names as the depositary shall instruct the trustee. We expect that the depositary will base these instructions upon directions received by the depositary from participants with beneficial interests in the registered global security.

The Trustee

Any indenture issued under a prospectus supplement will likely provide that, except during the continuance of an event of default, the trustee would perform only such duties as are specifically set forth in the indenture. During the existence of an event of default, we anticipate that the applicable indenture will require the trustee to exercise those rights and powers vested in it under the indenture and use the same degree of care and skill in its exercise of those rights and powers as a prudent person would exercise under similar circumstances in the conduct of such person's own affairs.

The Trust Indenture Act, which will be incorporated by reference in any indenture we issue, contains limitations on the rights of the trustee, should it become one of our creditors, to obtain payment of claims in certain cases or to realize on certain property received by it in respect of any such

claim as security or otherwise. Under the Trust Indenture Act; however, the trustee is permitted to engage in other transactions with us or any affiliate, provided that if the trustee acquires any conflicting interest it must eliminate that conflict or resign.

Description of Warrants

We may issue, and selling security holders may offer for resale, warrants to purchase shares of common stock. These warrants may be sold or offered independently or together with the common stock offered, and the warrants may be attached to or separate from these securities. Warrants may be issued in such amounts or in as many distinct series as we wish. The warrants would be issued under warrant agreements to be entered into between us and a warrant agent as detailed in the prospectus supplement relating to the warrants being offered.

Specific Terms of the Warrants

The applicable prospectus supplement will describe the following terms, where applicable, of the warrants in respect of which this prospectus is being delivered:

- the title of the warrants;
- the aggregate number of the warrants;
- the price or prices at which the warrants will be issued;
- the designation, amount, and terms of the shares of common stock purchasable upon exercise of the warrants;
- if applicable, the date on and after which the warrants and the shares of common stock purchasable upon exercise of the warrants will be separately transferable;
- the price or prices at which the common stock purchasable upon exercise of the warrants may be purchased;
- the date on which the right to exercise the warrants shall commence and the date on which the right shall expire;
- the minimum or maximum amount of the warrants which may be exercised at any one time;
- information with respect to book-entry procedures, if any;
- any provisions for adjustment of the number or amount of shares of our common stock receivable upon exercise of the warrants or the exercise price of the warrants;
- a discussion of any federal income tax considerations; and
- any other material terms of the warrants, including terms, procedures, and limitations relating to the exchange and exercise of the warrants.

Exercise of Warrants

Each warrant will entitle the holder of the warrant to purchase shares of our common stock at the exercise price as shall be set forth in or be determinable as set forth in, the prospectus supplement relating to the warrants. Warrants may be exercised at any time up to the close of

business on the expiration date set forth in the applicable prospectus supplement. After the close of business on the expiration date, unexercised warrants will become void.

Upon receipt of payment and the warrant certificate properly completed and duly executed at the office indicated in the prospectus supplement, we would, as soon as practicable, forward the securities purchased upon such exercise. If less than all of the warrants represented by a warrant certificate are

exercised, a new warrant certificate will be issued for the remaining warrants. Prior to the exercise of any warrants, holders of the warrants will not have any of the rights of holders of the securities purchasable upon exercise, including the right to vote or to receive any payments of dividends on the shares of common stock purchasable upon exercise. Certificates for warrants to purchase securities would be exchangeable for new warrant certificates of different denominations.

Transfer Agent and Registrar

The transfer agent and registrar for any warrants will be set forth in the applicable prospectus supplement.

Description of Units

The following description, together with the additional information we may include in any applicable prospectus supplement, summarizes the material terms and provisions of the units that we may offer, or that selling security holders may offer for resale, under this prospectus. While the terms we have summarized below will apply generally to any units offered under this prospectus, we will describe the particular terms of any series of units in more detail in the applicable prospectus supplement. The terms of any units offered under a prospectus supplement may differ from the terms described below.

We will file as exhibits to the registration statement of which this prospectus is a part, or will incorporate by reference from a Current Report on Form 8-K that we file with the SEC, the form of unit agreement that describes the terms of the series of units being offered, and any supplemental agreements, before the issuance of the related series of units. The following summaries of material terms and provisions of the units are subject to, and qualified in their entirety by reference to, all the provisions of the unit agreement and any supplemental agreements applicable to a particular series of units. We urge you to read the applicable prospectus supplements related to the particular series of units that we sell, or which are offered for resale by selling security holders, under this prospectus, as well as the complete unit agreement and any supplemental agreements that contain the terms of the units.

General

We may issue, and selling security holders may offer for resale, units comprised of one or more shares of common stock and warrants in any combination. Each unit would 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 would have the rights and obligations of a holder of each included security. The unit agreement under which a unit is issued may provide that the securities included in the unit may not be held or transferred separately, at any time or at any time before a specified date.

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

- the designation and terms of the units and of the securities comprising the units, including whether and under what circumstances those securities may be held or transferred separately;
- any provisions of the governing unit agreement that differ from those described below; and
- any provisions for the issuance, payment, settlement, transfer or exchange of the units or of the securities comprising the units.

The provisions described in this section, as well as those described under "Description of Common Stock" and "Description of Warrants" will apply to each unit and to any common shares or warrants included in each unit, respectively.

Unit Agent

The name and address of the unit agent for any units we offer will be set forth in the applicable prospectus supplement.

Issuance in Series

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

Enforceability of Rights by Holders of Units

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

Title

We, the unit agents and any of their agents may treat the registered holder of any unit certificate as an absolute owner of the units evidenced by that certificate for any purpose and as the person entitled to exercise the rights attaching to the units so requested, despite any notice to the contrary.

LEGAL MATTERS

The validity of the securities offered hereby is being passed upon for us by Parr Brown Gee & Loveless, a professional corporation, Salt Lake City, Utah. Additional legal matters may be passed on for us, or any underwriters, dealers or agents, by counsel that we will name in the applicable prospectus supplement.

EXPERTS

Our consolidated financial statements and the related financial statement schedule, incorporated in this prospectus by reference from our Annual Report on Form 10-K for the year ended December 31, 2013, and the effectiveness of our internal control over financial reporting, have been audited by Deloitte & Touche LLP, an independent registered public accounting firm, as stated in their reports, which are incorporated herein by reference. Such financial statements and financial statement schedule have been so incorporated in reliance upon the reports of such firm given upon their authority as experts in accounting and auditing.

INCORPORATION OF CERTAIN INFORMATION BY REFERENCE

The SEC allows us to "incorporate by reference" the information we file with it, which means we can disclose important information to you by referring you to those documents instead of having to repeat the information in this prospectus. The information incorporated by reference is considered to be part of this prospectus, and later information that we file with the SEC will automatically update and supersede this information. We incorporate by reference the documents listed below (Commission File No. 000-18592) and any future filings we make with the SEC under Sections 13(a), 13(c), 14 or 15(d) of the Exchange Act between the date of this prospectus and the termination of the offering, including all such documents we may file with the SEC after the date of the initial registration statement and prior to the effectiveness of the registration statement (other than current reports furnished under Item 2.02 or 7.01 of Form 8-K and exhibits filed on such form that are related to such items). These documents contain important information about us and our financial condition.

Our Annual Report on Form 10-K for the fiscal year ended December 31, 2013, filed with the SEC on March 12, 2014.

Our Current Report on Form 8-K filed with the SEC on January 7, 2014.

The description of our shares of common stock contained in our Registration Statement on Form 8-A, filed with the SEC on May 11, 1990 pursuant to the Exchange Act, including any amendment or report filed under the Exchange Act for the purpose of updating such description.

Any statement contained in a document incorporated by reference herein shall be deemed to be modified or superseded for purposes of this registration statement to the extent that a statement contained herein or in any other subsequently filed document which also is or is deemed to be incorporated by reference herein modifies or supersedes such statement. Any statement so modified or superseded shall not be deemed, except as so modified or superseded, to constitute a part of this prospectus.

Upon written or oral request, we will provide without charge to each person to whom a copy of this prospectus is delivered, including any beneficial owner, a copy of any or all of the information that has been or may be incorporated by reference in this prospectus. Direct any request for copies to Kent W. Stanger, Chief Financial Officer, at our corporate headquarters, located at 1600 West Merit Parkway, South Jordan, Utah 84095; telephone number (801) 253-1600.

WHERE YOU CAN FIND MORE INFORMATION

This prospectus is a part of a registration statement on Form S-3 that we filed with the SEC, but the registration statement includes additional information and also attaches exhibits that are referenced in this prospectus. This prospectus does not contain all of the information set forth in the registration statement and the exhibits and schedules thereto. Some items are omitted in accordance with the rules and regulations of the SEC. For further information with respect to us and the securities offered hereby, we refer you to the registration statement and the exhibits and schedules filed therewith. Statements contained in this prospectus as to the contents of any contract, agreement or any other document referred to are summaries of the material terms of the respective contract, agreement or other document. With respect to each of these contracts, agreements or other documents filed as an exhibit to the registration statement, reference is made to the exhibits for a more complete description of the matter involved. A copy of the registration statement, and the exhibits and schedules thereto, may be inspected without charge at the public reference facilities maintained by the SEC at 100 F Street, N.E., Washington, D.C. 20549. Copies of these materials may be obtained by writing to the Public Reference Section of the SEC at 100 F Street, N.E., Washington, D.C. 20549. Please call the SEC at 1-800-SEC-0330 for further information on the operation of the public reference facilities. The SEC maintains a website that contains reports, proxy and information statements and other information regarding registrants that file electronically with the SEC. The address of the SEC's website is http://www.sec.gov.

We are subject to the information and periodic reporting requirements of the Exchange Act and, in accordance therewith, file periodic reports, proxy statements and other information with the SEC. Such periodic reports, proxy statements and other information are available for inspection and copying at the public reference room and website of the SEC referenced above. We maintain a website at www.merit.com. You may access our Annual Report on Form 10-K, Quarterly Reports on Form 10-Q, Current Reports on Form 8-K, proxy statements and amendments to those reports filed or furnished pursuant to Sections 13(a) or 15(d) of the Exchange Act with the SEC free of charge at our website as soon as reasonably practicable after such material is electronically filed with, or furnished to, the SEC. The reference to our website address does not constitute incorporation by reference of the information contained on our website.

Table of Contents

4,500,000 Shares

Common Stock

PROSPECTUS SUPPLEMENT

BofA Merrill Lynch

Piper Jaffray

Wells Fargo Securities

Canaccord Genuity

Raymond James

SunTrust Robinson Humphrey

March 23, 2017