UNITED STATES
SECURITIES AND EXCHANGE COMMISSION
WASHINGTON, D.C. 20549
FORM 10-K

☒ **ANNUAL REPORT PURSUANT TO SECTION 13 OR 15(d) OF THE SECURITIES EXCHANGE ACT OF 1934**
For the fiscal year ended December 31, 2022
or
☐ **TRANSITION REPORT PURSUANT TO SECTION 13 OR 15(d) OF THE SECURITIES EXCHANGE ACT OF 1934**
For the transition period from _____ to _____

Commission File No. 001-35621

GLOBUS MEDICAL, INC.
(Exact name of registrant as specified in its charter)

DELAWARE	**04-3744954**
(State or other jurisdiction of incorporation or organization)	(I.R.S. Employer Identification No.)
2560 General Armistead Avenue, Audubon, PA 19403	**(610) 930-1800**
(Address of principal executive offices) (Zip Code)	(Registrant's telephone number, including Area Code)

Securities registered pursuant to Section 12(b) of the Act:

Title of each class	**Trading Symbol(s)**	**Name of exchange on which registered**
Class A Common Stock, par value $.001 per share	GMED	New York Stock Exchange

Securities registered pursuant to Section 12(g) of the Act: **None**

Indicate by check mark if the registrant is a well-known seasoned issuer, as defined in Rule 405 of the Securities Act: Yes ☒ No ☐

Indicate by check mark if the registrant is not required to file reports pursuant to Section 13 or Section 15(d) of the Act: Yes ☐ No ☒

Indicate by check mark whether the registrant (1) has filed all reports required to be filed by Section 13 or 15(d) of the Securities Exchange Act of 1934 during the preceding 12 months (or for such shorter period that the registrant was required to file such reports), and (2) has been subject to such filing requirements for the past 90 days: Yes ☒ No ☐

Indicate by check mark whether the registrant has submitted electronically, every Interactive Data File required to be submitted pursuant to Rule 405 of Regulation S-T (§232.405 of this chapter) during the preceding 12 months (or for such shorter period that the registrant was required to submit such files): Yes ☒ No ☐

Indicate by check mark whether the registrant is a large accelerated filer, an accelerated filer, a non-accelerated filer, a smaller reporting company or an emerging growth company. See the definitions of "large accelerated filer," "accelerated filer," "smaller reporting company," and "emerging growth company" in Rule 12b-2 of the Exchange Act:

Large Accelerated Filer ☒ Accelerated Filer ☐ Non-accelerated Filer ☐ Smaller Reporting Company ☐ Emerging Growth Company ☐

If an emerging growth company, indicate by check mark if the registrant has elected not to use the extended transition period for complying with any new or revised financial accounting standards provided pursuant to Section 13(a) of the Exchange Act.

Indicate by check mark whether the registrant has filed a report on and attestation to its management's assessment of the effectiveness of its internal control over financial reporting under Section 404(b) of the Sarbanes-Oxley Act (15 U.S.C. 7262(b)) by the registered public accounting firm that prepared or issued its audit report. ☒

Indicate by check mark whether the registrant is a shell company (as defined in Rule 12b-2 of the Exchange Act): Yes ☐ No ☒

The aggregate market value of the voting and non-voting common equity held by non-affiliates of the registrant, computed by reference to the closing sales price for the registrant's common stock on the last business day of the registrant's most recently completed second quarter, June 30, 2022, as reported on the New York Stock Exchange, was approximately $4.3 billion.

The number of shares outstanding of the issuer's common stock (par value $0.001 per share) as of February 17, 2023 was 100,302,483 shares.

DOCUMENTS INCORPORATED BY REFERENCE

Portions of our Proxy Statement for our 2023 Annual Meeting of Stockholders, to be filed within 120 days of December 31, 2022, are incorporated by reference in Part III, Items 10, 11, 12, 13 and 14 herein of this Annual Report. Such Proxy Statement, except for the parts therein which have been specifically incorporated by reference, shall not be deemed "filed" for the purposes of this Annual Report on Form 10-K.

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PART I

CAUTIONARY NOTE CONCERNING FORWARD-LOOKING STATEMENTS

This Annual Report on Form 10-K contains forward-looking statements within the meaning of the Private Securities Litigation Reform Act of 1995, 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. We have tried to identify forward-looking statements by using words such as "believe," "may," "might," "could," "will," "aim," "estimate," "continue," "anticipate," "intend," "expect," "plan" and similar words. These forward-looking statements are based on our current assumptions, expectations and estimates of future events and trends. Forward-looking statements are only predictions and are subject to many risks, uncertainties and other factors that may affect our businesses and operations and could cause actual results to differ materially from those predicted. These risks and uncertainties include, but are not limited to, health epidemics, pandemics and similar outbreaks, including the COVID-19 pandemic, factors affecting our quarterly results, our ability to manage our growth, our ability to sustain our profitability, demand for our products, our ability to compete successfully (including without limitation our ability to convince surgeons to use our products and our ability to attract and retain sales and other personnel), our ability to rapidly develop and introduce new products, our ability to develop and execute on successful business strategies, our ability to comply with changes and applicable laws and regulations that are applicable to our businesses, our ability to safeguard our intellectual property, our success in defending legal proceedings brought against us, trends in the medical device industry, general economic conditions, and other risks set forth throughout this Annual Report, including under **"Item 1. Business," "Item 1A. Risk Factors," "Item 7. Management's Discussion and Analysis of Financial Condition and Results of Operations," and "Item 7A. Quantitative and Qualitative Disclosure About Market Risk"** and those discussed in other documents we file with the Securities and Exchange Commission (the "SEC"). Moreover, we operate in an evolving environment. New risk factors and uncertainties emerge from time to time and it is not possible for us to predict all risk factors and uncertainties, nor can we assess the impact of all factors on our business or the extent to which any factor, or combination of factors, may cause actual results to differ materially from those contained in any forward-looking statements.

Given these risks and uncertainties, readers are cautioned not to place undue reliance on any forward-looking statements. Forward-looking statements contained in this Annual Report speak only as of the date of this Annual Report. We undertake no obligation to update any forward-looking statements as a result of new information, events or circumstances or other factors arising or coming to our attention after the date hereof.

Item 1. Business

Overview

Globus Medical, Inc. (together, as applicable, with its consolidated subsidiaries, "Globus," "we," "us" or "our"), headquartered in Audubon, Pennsylvania, is a medical device company that develops and commercializes healthcare solutions whose mission is to improve the quality of life of patients with musculoskeletal disorders. Founded in 2003, Globus is committed to medical device innovation and delivering exceptional service to hospitals, ambulatory surgery centers and physicians to advance patient care and improve efficiency. Since inception, Globus has listened to the voice of the surgeon to develop practical solutions and products to help surgeons effectively treat patients and improve lives.

Globus is an engineering-driven company with a history of rapidly developing and commercializing advanced products and procedures to address treatment challenges. With over 230 product launches across 54 countries worldwide, we offer a comprehensive portfolio of innovative and differentiated technologies that are used to treat a variety of musculoskeletal conditions. Although we manage our business globally within one operating segment, we separate our products into two major categories: Musculoskeletal Solutions and Enabling Technologies.

Overall Business

Market

The primary market for our products is the United States ("U.S."), where we sell our products through a combination of direct sales representatives employed by us and sales representatives employed by our exclusive independent distributors, who distribute our products on our behalf for a commission that is generally based on a percentage of sales. We believe there is significant opportunity to strengthen our position in the U.S. market by increasing the size of our sales force and continuing to add direct and distributor sales representatives in the future.

During the year ended December 31, 2022, international sales accounted for approximately 14.8% of our total sales. Internationally, we sell our products through a combination of direct sales representatives employed by us and exclusive international distributors. We believe there are significant opportunities for us to increase our presence in both existing and new international markets through the continued expansion of our direct and distributor sales forces as well as through the commercialization of additional products.

Strategy

Our goal is to become the market leader in providing innovative solutions to promote healing in patients with musculoskeletal disorders. To achieve this goal, we employ the following business strategies:

Leverage our integrated product development engine. We plan to continue developing new products, using the capabilities of our product development engine. We believe our team-oriented and highly integrated development approach, active surgeon input, and demonstrated performance position us to maintain a rapid rate of new product launches. We launched 8 new products in 2022, have a range of new products in various stages of development, and expect to continue to regularly launch new products.

Increase the size, scope and productivity of our exclusive U.S. sales force. We believe there is significant opportunity for us to further penetrate existing markets, and to enter new markets, by increasing the size and geographic scope of our exclusive U.S. sales force for musculoskeletal solutions. We expect to increase the number of our direct and distributor sales representatives in the U.S., to expand into new geographic territories and to deepen our penetration in existing territories. We will also continue to provide our sales representatives with specialized development programs designed to improve their productivity.

Continue to expand into international markets. As of December 31, 2022, we had an existing direct or distributor sales presence in 53 countries outside the United States. We expect to continue to increase our international presence through the commercialization of additional musculoskeletal solutions products in current markets and through the expansion of our international sales force in current and new markets.

Pursue strategic acquisitions. In 2017, we acquired KB Medical SA, developer of a computer-assisted robotic guidance system, and in 2018 we acquired Nemaris Inc., a privately held company that markets and develops Surgimap®, a leading surgical planning software platform, to further bolster our efforts to advance surgical procedures through Enabling Technologies. In 2019, we acquired substantially all of the assets of StelKast, Inc., a privately held company that designs, manufactures and distributes orthopedic implants for knee and hip replacement surgeries. During the second quarter of 2020, the Company acquired Synoste Oy ("Synoste"), a Finnish engineering company that specializes in the research and development of a limb lengthening system. During the fourth quarter of 2021, the Company acquired Capstone Surgical

Technologies, LLC. (“Capstone”), a privately held company that engages in the business of creating advanced drill and robotic surgery platforms. During the fourth quarter of 2022, the Company acquired the membership interests of Harvest Biologics LLC (“Harvest”), which engages in the business of selling systems that produce autologous biologics. We intend to selectively pursue acquisitions and alliances that complement our strategic plan and provide innovative technologies, personnel with significant relevant experience, or increased market penetration. We regularly evaluate possible acquisitions and strategic relationships and believe that our resources and experience make us an attractive acquirer or partner.

The Globus Solution

We believe that our focus on actively listening and responding to the needs of our customers with high quality solutions separates us from our industry peers. Since 2003 we have introduced over 230 products designed for the treatment of musculoskeletal disorders. Given our robust product portfolio of unique and differentiated products, as well as the numerous disruptive products in various stages of development, we believe we are well positioned for growth in the musculoskeletal markets we operate in.

We believe that our innovative musculoskeletal solutions products, combined with our ability to provide world-class service through a highly trained and exclusive sales force and corporate account management, create significant value for our customers.

Product Categories

While we group our products into two categories, Musculoskeletal Solutions and Enabling Technologies, they are not limited to a particular technology, platform or surgical approach. Instead, our goal is to offer a comprehensive product suite that can be used to safely and effectively treat patients based on their specific anatomy and condition, and is customized to the surgeon’s training and surgical preference.

Musculoskeletal Solutions

Our Musculoskeletal Solutions consist primarily of implantable devices, biologics, accessories, and unique surgical instruments used in an expansive range of spinal, orthopedic and neurosurgical procedures. Musculoskeletal disorders are a leading driver of healthcare costs worldwide. Disorders range in severity from mild pain and loss of feeling to extreme pain and paralysis. These disorders are primarily caused by degenerative and congenital conditions, deformity, tumors and traumatic injuries. Treatment alternatives for musculoskeletal disorders range from non-operative conservative therapies to surgical interventions depending on the pathology. Conservative therapies include bed rest, medication, casting, bracing, and physical therapy. When conservative therapies are not indicated, or fail to provide adequate quality of life improvements, surgical interventions may be used. Surgical treatments for musculoskeletal disorders can be instrumented, which include the use of implants, or non-instrumented, which forego the use of hardware but may include biologics.

Our broad spectrum of spine products addresses the vast majority of conditions affecting the spine including degenerative conditions, deformity, tumors, and trauma. With almost 20 years in this competitive market, we provide comprehensive solutions that facilitate both open and minimally invasive surgery (“MIS”) techniques. This includes traditional fusion implants such as pedicle screw and rod systems, plating systems, intervertebral spacers and corpectomy devices. We believe we pioneered innovative expandable solutions for interbody fusion, corpectomy and interspinous fixation that allow intraoperative customization of our devices to the patient’s anatomy, eliminating sequential trialing and potentially saving surgical time. We have also developed treatment options for motion preservation technologies, such as dynamic stabilization, total disc replacement and interspinous distraction devices; as well as interventional solutions to treat vertebral compression fractures. Our biologic solutions include regenerative biologic products such as allografts and synthetic alternatives that are adjunctive treatments typically used in combination with stabilizing implant hardware.

Our orthopedic trauma solutions are designed to treat a wide variety of orthopedic fracture patterns and patient anatomies in the upper and lower extremities as well as the hip. Our orthopedic trauma and extremity products, covering four major segments of the orthopedic trauma market: fracture plates, compression screws, intramedullary nails, and external fixation. We began marketing these products in 2018 and intend to grow our presence in this field. Fracture plating includes proximal humerus, distal radius, proximal tibia, distal tibia, distal fibula, distal femur, small fragment, mini-fragment and clavicle plates. Intramedullary nailing includes tibial, trochanteric, and femoral nail systems. Regenerative biologic products such as bone void fillers and allograft struts are used in orthopedic procedures where applicable.

Our hip and knee joint solutions for the treatment of degenerative conditions or failed previous reconstruction have a long history of clinical use. Over 13 different implants have been marketed to date, including modular hip stems and acetabular cups for total hip arthroplasty as well as posterior stabilizing and cruciate retaining knee arthroplasty implants.

Enabling Technologies

Our Enabling Technologies are comprised of imaging, navigation and robotics ("INR") solutions for assisted surgery which are advanced computer-assisted intelligent systems designed to enhance a surgeon's capabilities, and ultimately improve patient care and reduce radiation exposure for all involved, by streamlining surgical procedures to be safer, less invasive, and more accurate. The market for our Enabling Technologies in spine, cranial and orthopedic surgery is still in the infancy stage and consists primarily of imaging, navigation and robotic systems. In spine, a majority of these technologies are limited to surgical planning and assistance in implant placement for increased accuracy and time savings with less intraoperative radiation exposure to the patient and surgical staff. As our Enabling Technologies become more fully integrated with our Musculoskeletal Solutions, a continued rise in adoption is expected. Furthermore, we believe as new technologies such as augmented reality and artificial intelligence are introduced, Enabling Technologies have the potential to transform the way surgery is performed and most importantly, continue to improve patient outcomes.

Our INR solutions include the ExcelsiusGPS® platform which is a robotic guidance and navigation system that supports minimally invasive and open procedures with screw and interbody spacer placement applications. The ExcelsiusGPS® platform has a modular design that we expect will serve as a foundation for future clinical applications using artificial intelligence and augmented reality. Also, in 2018, we acquired Nemaris Inc., a privately held company that developed and marketed Surgimap®, a leading surgical planning software platform. Surgimap®'s intuitive, patient-specific surgical planning and cloud-based infrastructure includes predictive algorithms and visual guides that enable healthcare professionals to plan and simulate surgical treatment of complex deformities. The software also enables medical professionals to share medical imaging technology globally to improve procedural workflow and patient care. In 2022, we launched Excelsius3D™, which when combined with the ExcelsiusGPS® robotic navigation system, provides a superior intraoperative, image-guided robotic navigation solution that is designed to improve implant placement accuracy, lower radiation exposure, and shorten operative times. This highly maneuverable and intuitive imaging platform offers 3 imaging modalities, position memory, and a large field of view.

Our innovative Enabling Technologies products offer surgeons more information about patient anatomy and surgical options to help them to make well-informed preoperative and intraoperative surgical decisions. We believe the advantages of pre-planning implant position and viewing implants or instruments relative to patient anatomy during surgery are self-evident, and also create significant secondary gains such as eliminating radiation exposure altogether.

Product Development and Research

We believe in bringing products to market quickly by reducing the time from product conception to launch. We believe our approach to product development is unique and highly efficient. We employ an integrated team approach to product development involving collaboration among surgeons, our engineers, our dedicated researchers, our highly-skilled machinists, and our regulatory personnel. We believe that this team approach, as well as our extensive in-house facilities, allows us to design, test and obtain regulatory clearance and approvals for our products more effectively. We also believe that our product development engine provides us with a competitive advantage in developing solutions to challenging clinical problems for surgeons and improving outcome for patients.

Our product development efforts are supported by our in-house research capabilities. We believe that centralizing and consolidating the critical elements of the product development and commercialization process in one facility allows us to bring products from the concept stage to the market more rapidly. Research resources available in-house include a mechanical testing laboratory, spinal kinematics laboratory, tribology laboratory, cadaveric laboratory, materials characterization laboratory, computational laboratory, and clinical and biomechanical research experts.

The markets in which we operate are subject to rapid technological advancements. We must constantly improve existing products and introduce new products in order to continue to succeed. Accordingly, we have made significant investments in our product development and research capabilities.

Sales and Marketing

We market and sell our products primarily through our exclusive global sales force. As of December 31, 2022, we had a direct or distributor sales presence in the United States and in 53 other countries. We have dedicated spinal implant, orthopedic trauma and enabling technologies sales teams in place. We sell our hip and knee products primarily through independent sales agents. We expect to continue to increase the number of our direct and distributor sales representatives in each of these areas, both in the U.S. and internationally, to expand into new geographic territories and to deepen our penetration in existing territories. We believe the expansion of our U.S. and international sales forces provides us with significant opportunities for future growth as we continue to penetrate existing geographic markets and enter new ones.

Our implant sales representatives are present in the operating room during most surgeries in the United States and in many, but not all, of the other countries in which our products are sold. These representatives have the responsibility to confirm that all of the items

needed in the surgery are available and are provided sterile or are capable of being sterilized at the hospital. An assortment of sizes and quantities of implants are made available to be able to satisfy varying surgical requirements and patient anatomy, along with numerous surgical instruments and cases needed to safely perform the surgery and implantation. As products are used in surgeries, replacement items are shipped to our sales representatives and hospitals to replenish their supply.

All of our U.S. independent distributors are compensated solely on commission. Most of our new direct sales representatives start with a compensation arrangement that is largely based on salary. Our goal is for members of our direct sales force to move toward a compensation model based solely on commission as they become familiar with our products and drive higher sales.

Competition

We believe that our significant competitors are Medtronic, DePuy Synthes, Stryker, Zimmer Biomet, Smith and Nephew, and NuVasive. Orthofix, Integra LifeSciences, and other smaller public and private companies are also competitors of ours. At any time, these or other market participants may develop alternative treatments, products or procedures for the treatment of musculoskeletal disorders that compete directly or indirectly with our products. They may also develop and patent processes or products earlier than we can, or obtain regulatory clearance or approvals for competing products more rapidly than we can.

We compete in the marketplace to recruit and retain qualified scientific, management, and sales personnel, as well as in acquiring technologies and technology licenses complementary to our products or advantageous to our business.

Manufacturing and Supply

We have greatly expanded our dedicated in-house manufacturing capabilities. A significant portion of our implant products are manufactured in our facilities in Eagleville, Pennsylvania and Limerick, Pennsylvania. Most of our regenerative biologics products are processed in our facilities in San Antonio, Texas, and in Audubon, Pennsylvania. The ExcelsiusGPS® robotic guidance and navigation system and Excelsius3D™ imaging system are assembled in our facility in Methuen, Massachusetts.

Of our implant and instrument products that are not manufactured in-house, a majority are generally manufactured through a network of third-party suppliers. Our suppliers use high precision, computer-aided manufacturing equipment to manufacture our products. We have focused on developing a strong supplier base as part of our manufacturing strategy. Our relationship with our suppliers enables significant interaction between our design engineers and project managers and the suppliers' engineers and schedulers to work through issues arising during the entire product development cycle. The majority of our suppliers are domestic, which affords our engineers and other members of our product development team the opportunity to work closely with them to commercialize our products.

We select our suppliers carefully and generally use a small number of suppliers for each of our key products for added reliability. Our internal quality assurance group evaluates the potential vendor through a formal vendor approval process before we enter into a relationship with the vendor. Suppliers that meet our internal quality assurance standards are added to our approved supplier list. All of our suppliers that provide us with implants are ISO-13485 certified, meaning they meet the International Organization for Standardization ("ISO") requirements for the manufacture of medical devices. Our quality assurance group conducts periodic audits to ensure continued compliance with our standards. With every shipment of inventory that we receive, our suppliers provide a certificate of compliance with our quality control standards. Our receiving group also performs inspections, packaging and labeling on site at our headquarters facility.

We work closely with our suppliers to ensure that our inventory needs are met while maintaining high quality and reliability. To date, we have experienced slight delays in locating and obtaining the materials necessary to fulfill our production requirements, but it has not caused a meaningful backlog of sales orders. Despite such delays, we believe our supplier relationships and facilities will support our capacity needs for the foreseeable future. However, it is possible that a prolonged COVID-19 disruption could cause a backlog of sales orders. A majority of our product inventory is held primarily with our sales representatives and at hospitals throughout the United States. We stock inventory in our warehouse facilities and retain title to consigned inventory which is maintained with our field representatives and hospitals in sufficient quantities so that products are available when needed for surgical procedures. Safety stock levels are determined based on a number of factors, including demand, manufacturing lead times, and quantities required to maintain service levels.

Intellectual Property

We protect our proprietary rights through a variety of methods. In particular, we rely on patent, trademark, copyright, trade secret and other intellectual property laws and also utilize nondisclosure agreements and other measures to protect our rights.

As of December 31, 2022, we owned 1,527 issued U.S. patents (1,493 utility patents; 34 design patents) and had applications pending for 518 U.S. patents (516 utility patents; 2 design patents), and we owned 967 issued foreign patents and had applications pending for 517 foreign patents. Our issued patents expired or will expire between March 2015 and December 2042.

Our trademark portfolio contains 304 registered trademarks and 122 pending trademarks. Our portfolio includes domestic and foreign trademarks with associated logos and tag lines.

Third-Party Coverage and Reimbursement

We expect that sales volumes and prices of our Musculoskeletal Solutions products including spinal implant, orthopedic trauma, hip and knee arthroplasty, regenerative biologics, and advanced technology products may grow to be more dependent on the availability of coverage and reimbursement from third-party payors, such as state and federal programs including Medicare, Medicaid and Worker's Compensation as well as private insurance plans including Blue Cross Blue Shield plans and commercial insurers. Reimbursement is dynamic and is contingent on coding for given services or procedures, coverage by third-party payors, and adequate payment for the services or procedures.

Physicians, hospital outpatient departments, and Ambulatory Surgery Centers ("ASC") use Current Procedural Terminology ("CPT®") codes to bill for services and procedures, which are established by the American Medical Association ("AMA"). Specialty societies such as the North American Spine Society, the American Association of Neurological Surgeons, and the American Academy of Orthopedic Surgeons provide advice to the AMA CPT® Editorial Panel for developing codes. The availability of existing codes to bill for services and procedures may impact the adoption of technology. The CPT codes, depending on the situation and payor rules, are sometimes billed with billing modifiers that can affect coverage and reimbursement.

The Centers for Medicare and Medicaid Services ("CMS") and the National Center for Health Statistics are jointly responsible for overseeing changes and modifications to International Classification of Diseases, Clinical Modification/Procedure Coding System ("ICD-10-CM/PCS") procedure codes used by all providers including physicians and facilities for reporting patient diagnosis(es) (ICD-10-CM codes) and hospitals for reporting inpatient procedures (ICD-10-PCS codes). The granularity and specificity of the ICD-10-CM/PCS coding system may impact reimbursement in the future, particularly hospital inpatient reimbursement. Physician and hospital coding is subject to change, which could impact coverage and reimbursement and thus potentially impact physician practice behavior.

Independent of coding status, third-party payors may deny coverage based on their own criteria. Payor medical policies vary from payor to payor and contract to contract. There are thousands of payor medical policies which are continually reviewed and revised at the discretion of payors. Payor medical policies may become more restrictive. Payors may deem the clinical efficacy of a device or procedure to be experimental or investigational, not the most cost-effective treatment available, or used for an unapproved indication. Additionally, many private payors use coverage decisions and payment amounts established by CMS for the Medicare program as guidelines in setting their coverage and reimbursement policies. Medicare may establish National Coverage Determinations (NCDs) or Medicare Administrative Contractors (MACs) may establish Local Coverage Determinations (LCDs) that provide coverage information and determine whether services are reasonable and necessary. As the portion of the U.S. population over the age of 65 and eligible for Medicare continues to grow, we may be more vulnerable to coverage and reimbursement limitations imposed by CMS. National and local coverage policy decisions are subject to unforeseeable change and have the potential to impact physician behavior. We will continue to provide the appropriate and compliant resources to patients, physicians, hospitals, and insurers in order to promote the best patient care, provide clarity regarding coverage and reimbursement policies, and work to reverse any non-coverage policies.

For federal/state programs, such as Medicaid, coverage and reimbursement differ from state to state. Some state Medicaid programs may not reimburse an adequate amount for the procedures performed with our products, if any payment is made at all. In addition, state-level worker's compensation coverage and reimbursement vary from state to state. Payment by Medicare and other third-party payors may not be adequate to cover the cost of medical devices used in musculoskeletal procedures. Additionally, more musculoskeletal procedures are being performed in the hospital outpatient and ASC settings, in part due to innovation. Reimbursement levels in the hospital outpatient and ASC settings are typically lower than for the hospital inpatient setting and may not be adequate to cover the cost of innovative and novel medical devices.

In international markets, reimbursement and healthcare payment systems vary significantly by country and some countries have instituted price ceilings on specific product lines. There can be no assurance that our products will be accepted by third-party payors, that coverage and reimbursement will be available or, if available, that the third-party payors' coverage and reimbursement policies will not adversely affect our ability to sell our products profitably.

We believe that the overall escalating cost of medical products and services has led to, and will continue to lead to, increased pressures on the healthcare industry to reduce the costs of products and services. There can be no assurance that third-party coverage and reimbursement will be available or adequate, or that future legislation, regulation, coding or coverage and reimbursement policies of third-party payors will not adversely affect the demand for our products or our ability to sell these products on a profitable basis.

Government Regulation

Our business is subject to extensive federal, state, local and foreign regulations. Some of the pertinent laws have not been definitively interpreted by the regulatory authorities or the courts, and their provisions are open to a variety of subjective interpretations. In addition, these laws and their interpretations are subject to change.

Both federal and state governmental agencies continue to subject the healthcare industry to intense regulatory scrutiny, including heightened civil and criminal enforcement efforts. We believe that we have structured our business operations and relationships with our customers to comply with all applicable legal requirements. However, it is possible that governmental entities or other third parties, including Relators (whistleblowers) who can file complaints on behalf of the government and on their own behalf under the federal civil False Claims Act ("FCA"), could interpret these laws differently and assert otherwise. We discuss below the statutes and regulations that are most relevant to our business.

U.S. Food and Drug Administration Regulation

Our products are medical devices and human tissue products subject to extensive regulation by the FDA and other federal, state, local and foreign regulatory bodies. FDA regulations govern, among other things, the following activities that we or our partners perform and will continue to perform:

product design and development;

product testing, manufacturing and safety;

post-market surveillance and reporting;

product labeling;

complaint handling;

post-market approval studies;

controls for electronic and other radiation emitting products; and

product advertising, marketing and promotion.

FDA's Pre-Market Clearance and Approval Requirements for Medical Devices

Unless an exemption applies, each medical device we wish to commercially distribute in the United States requires either 510(k) clearance, pre-market approval ("PMA"), or grant of a *de novo* classification request from the FDA. The FDA classifies medical devices into one of three classes. Devices deemed to pose low or moderate risk are placed in either Class I or II. Unless classified as exempt from pre-market notification, Class I and II devices generally require the manufacturer to submit to the FDA a pre-market notification requesting permission for commercial distribution. This process is known as 510(k) clearance. Some low risk devices are exempt from this requirement. Devices deemed by the FDA to pose the greatest risk, such as life-sustaining, life-supporting or implantable devices, and devices deemed not substantially equivalent to a previously cleared 510(k) devices are placed in Class III, which typically requires approval of a PMA application. For novel Class III devices that were not previously formally classified by the FDA and that present low to moderate risk, a risk-based classification determination can be requested in accordance with the *de novo* request process, under which the FDA may determine that the product can be appropriately regulated as a Class I or II device. 510(k) pre-market notifications, *de novo* requests, and PMAs are subject to the payment of user fees, paid at the time of submission for FDA review. The FDA can also impose restrictions on the sale, distribution or use of devices at the time of their clearance or approval, or subsequent to marketing.

Human Cell, Tissue and Cellular and Tissue Based Products

We currently distribute a number of products processed from human tissue, some of which are manufactured by third-party suppliers. The FDA regulates human tissue products as Human Cells and Cellular and Tissue Based Products ("HCT/Ps"). Certain HCT/Ps are regulated solely under Section 361 of the Public Health Service Act and are referred to as "Section 361 HCT/Ps," while other HCT/Ps are subject to the FDA's regulatory requirements for medical devices or biologics. Section 361 HCT/Ps do not require 510(k) clearance, PMA approval, or other premarket approvals from the FDA before marketing. Tissue banks that handle HCT/Ps must register their establishments with the FDA, list their HCT/P products with the FDA, and comply with FDA donor eligibility and screening requirements, current Good Tissue Practice ("CGTP"), product labeling, and post-market reporting requirements for HCT/Ps.

The FDA periodically inspects tissue processors to determine compliance with these requirements. Entities that provide us with allograft bone tissue are responsible for performing donor recovery, donor screening and donor testing and our compliance with those aspects of the CGTP regulations that regulate those functions are dependent upon the actions of these independent entities.

The procurement and transplantation of allograft bone tissue is subject to U.S. federal law pursuant to the National Organ Transplant Act ("NOTA"), a criminal statute which prohibits the purchase and sale of human organs used in human transplantation,

including bone and related tissue, for "valuable consideration." NOTA permits reasonable payments associated with the removal, transportation, processing, preservation, quality control, implantation and storage of human bone tissue. With the exception of removal and implantation, we provide services in all of these areas.

The procurement of human tissue is also subject to state anatomical gift acts and some states have statutes similar to NOTA. In addition, some states require that tissue processors be licensed by that state.

FDA Enforcement

The FDA enforces these requirements by inspection and market surveillance. Failure to comply with applicable regulatory requirements can result in enforcement action by the FDA, which may include any of the following sanctions:

untitled letters or warning letters;

fines, injunctions and civil penalties;

recall or seizure of our products;

operating restrictions, partial suspension or total shutdown of production;

refusing our request for 510(k) or de novo clearance or PMA of new products;

withdrawing 510(k) clearance or PMAs that are already granted;

refusal to grant export approval of our products; and

criminal prosecution.

We are subject to unannounced device inspections by the FDA's Office of Regulatory Affairs, Office of Compliance, Center for Devices and Radiological Health, and Center for Biologics Evaluation and Research, as well as other regulatory agencies overseeing the implementation and adherence of applicable state and federal tissue licensing regulations. These inspections may include our suppliers' facilities.

On October 31, 2018, we received a warning letter from the FDA resulting from an inspection of the facilities of our subsidiary Human Biologics of Texas, located in San Antonio, Texas, in April 2018. The letter described observed non-conformities to regulations for human cells, tissues, and cellular and tissue-based products relating to one allograft tissue product processed by Human Biologics of Texas and sold to end users. We take the matters identified in the warning letter seriously and are working diligently to address the FDA's observations. We responded to the FDA's warning letter on November 20, 2018, provided periodic updates to FDA on our progress, and notified FDA of actions completed to resolve the observations. As of December 31, 2022, this warning letter remains open.

We believe that the FDA's concerns set forth in the warning letter can be resolved without a material impact to our financial results. We cannot, however, give any assurances that the FDA will be satisfied with our response or as to the expected date of the resolution of the matters included in the warning letter. Until the issues cited in the warning letter are resolved to the FDA's satisfaction, additional legal or regulatory action may be taken without further notice. Any adverse action by the FDA, depending on its magnitude, may restrict us from effectively producing, marketing and selling the product that is the subject matter of the warning letter and could have a material adverse effect on our business, financial condition and results of operations.

International

International sales of medical devices are subject to foreign government regulations, which vary substantially from country to country. In order to market our products in other countries, we must obtain regulatory approvals and comply with extensive safety and quality regulations in other countries. The time required to obtain approval by a foreign country may be longer or shorter than that required for FDA clearance or approval, and the requirements may differ. The European Union/European Economic Area ("EEA") requires a CE mark in order to market medical devices. Many other countries, such as Australia, India, New Zealand, Pakistan and Sri Lanka, accept CE or FDA clearance or approval. Other countries, such as Brazil, Canada and Japan, require separate regulatory filings.

In the EEA, our devices are required to comply with the essential requirements of the EU Medical Device Directive (Council Directive 93/42/EEC) ("MDD"). Compliance with these requirements entitles us to affix the CE conformity mark to our medical devices, without which they cannot be commercialized in the EEA. To demonstrate compliance with the essential requirements and obtain the right to affix the CE conformity mark we must undergo a conformity assessment procedure, which varies according to the type of medical device and its classification. Following the expiration of the transitional provisions of the MDD relating to the CE mark (extended to May 2027), all medical device companies manufacturing and/or marketing products in the EEA, including Globus, will be required to comply with requirements of the Medical Devices Regulation EU 2017/745 ("MDR"), which are generally stricter and include increasing technical documentation requirements and altering the classification of some products. Most devices that are CE marked under the MDD may continue to be marketed in the EU under certain conditions until May 2027, at which point these products

must comply with the new regulation. Products placed on the market under the MDD prior to May 2027 may continue to be sold for one year after May 2027.

Additionally, in the EEA the procurement, testing, processing, preservation, storage and distribution of human tissues and cells is subject to the requirements of the laws of individual EEA Member States implementing Directive 2004/23/EC, Directive 2006/17/EC and Directive 2006/86/EC.

Further, the advertising and promotion of our products in the EEA is subject to limited provisions under Regulation 2017/745 and the laws of individual EEA Member States implementing Directive 2006/114/EC concerning misleading and comparative advertising, and Directive 2005/29/EC on unfair commercial practices, as well as other EEA Member State laws and industry codes governing the advertising and promotion of medical devices. These laws and codes may limit or restrict the advertising and promotion of our products to the general public and may impose limitations on our promotional activities with healthcare professionals. With the departure of the UK from the EU in January 2021, while CE marking will continue to be accepted by the UK until June 30, 2024 (extended from July 2023), a separate UKCA mark will be thereafter required to market a device in the UK.

We are subject to unannounced device inspections by the Notified Body (an organization accredited by a Member State of the EEA to conduct conformity assessments), as well as other regulatory agencies overseeing the implementation and adherence of applicable regulations. These inspections may include our suppliers' facilities.

Sales and Marketing Commercial Compliance

Federal anti-kickback laws and regulations prohibit, among other things, persons from knowingly and willfully soliciting, receiving, offering or paying remuneration, directly or indirectly, in exchange for, or to induce either the referral of an individual, or the purchase, order or recommendation of, any good or service paid for under federal healthcare programs such as the Medicare and Medicaid programs. State anti-kickback laws have similar prohibitions.

In addition, federal false claims laws prohibit any person from knowingly presenting, or causing to be presented, a false or fraudulent claim for payment to the federal government, or knowingly making, or causing to be made, a false statement to get a false claim paid. Violations of the federal Anti-Kickback Statute and off-label promotion have been pursued by the Department of Justice ("DOJ") and the Department of Health and Human Services ("HHS") as violations of the civil False Claims Act ("FCA"). Lawsuits under the FCA often are initiated by Relators on behalf of the government. Relators are incentivized to pursue claims against manufacturers and providers by the potential to share in any monetary recoveries by the government in litigation or as part of a settlement, which can be significant. Pursuant to FDA regulations, we can only market our products for cleared or approved uses. Although surgeons are permitted to use medical devices for indications other than those cleared or approved by the FDA based on their medical judgment, we are prohibited from promoting products for such off-label uses. Legislation periodically is introduced in the United States Congress that would broaden the applicability of the FCA and implement other changes that would not be favorable to defendants in FCA cases. If enacted, such legislation could apply to any case filed under the FCA on or after the date of enactment. Additionally, the majority of states in which we market our products have similar anti-kickback, false claims, anti-fee splitting and physician self-referral laws, which may apply to items or services reimbursed by any third-party payor, including commercial insurers, and violations may result in substantial civil and criminal penalties.

The U.S. Foreign Corrupt Practices Act ("FCPA") and similar anti-bribery laws in non-U.S. jurisdictions, such as the United Kingdom's Bribery Act, generally prohibit companies and their intermediaries from making improper payments to non-U.S. government officials and (in the case of the Bribery Act) private sector decision makers for the purpose of obtaining or retaining business. Because of the predominance of government-administered healthcare systems in many jurisdictions around the world, many of our customer relationships outside of the U.S. are with governmental entities and are therefore potentially subject to such laws. Global enforcement of anti-corruption laws has increased considerably in recent years, with more frequent voluntary self-disclosures by companies, aggressive investigations and enforcement proceedings by U.S. and non-U.S. governmental agencies, and assessment of significant fines and penalties against companies and individuals. It is our policy to implement safeguards to educate our employees and agents on these legal requirements and prohibit improper practices. The government may seek to hold us liable for FCPA violations committed by companies that we acquire. Violations of these laws may be punishable by criminal or civil sanctions, including substantial fines, imprisonment of current or former employees and exclusion from participation in governmental healthcare programs.

Additionally, we must comply with a variety of other laws that protect the privacy of individually identifiable healthcare information and impose extensive tracking and reporting related to transfers of value provided to certain healthcare professionals. The Patient Protection and Affordable Care Act, as amended by the Health Care and Education Affordability Reconciliation Act, imposes reporting and disclosure requirements on device manufacturers with respect to ownership and investment interests by physicians and members of their immediate family as well as certain payments or other "transfers of value" made to physicians and other healthcare providers licensed in the U.S. and to teaching hospitals. Several states in which we market our products also have imposed healthcare provider payment reporting, gift ban and compliance program requirements on device manufacturers. The shifting compliance environment and the need to build and maintain robust and expandable systems to comply in multiple jurisdictions with different

compliance and/or reporting requirements increases the possibility that a healthcare company may run afoul of one or more of the requirements.

Environmental Matters

The manufacture of certain of our products, including our allograft implants and products, and the handling of materials used in the product testing process, including in our cadaveric laboratory, involve the controlled use of biological, hazardous and/or radioactive materials and wastes. Our business and facilities and those of our suppliers are subject to foreign, federal, state and local laws and regulations relating to the protection of human health and the environment, including those governing the use, manufacture, storage, handling and disposal of, and exposure to, such materials and wastes. In addition, under some environmental laws and regulations, we could be held responsible for costs relating to any contamination at our past or present facilities and at third-party waste disposal sites even if such contamination was not caused by us.

We are not currently aware of any material costs or liabilities relating to environmental matters, including any claims or actions under environmental laws or obligations to perform any cleanups at any of our facilities or any third-party waste disposal sites that we expect to have a material adverse effect on our business, financial condition or operating results. However, it is possible that material environmental costs or liabilities may arise in the future.

Human Capital

We believe our employees are our most valuable asset and are critical to our success as an organization. Our talent related initiatives, including employee recruitment and development, diversity and inclusion and compensation and benefit programs, are focused on building and retaining the world-class and talented staff that is needed to meet our goals.

As of December 31, 2022, we had over 2,600 employees, including sales and marketing, product development, general administrative and accounting, both domestically and internationally. Our employees are not subject to a collective bargaining agreement except in a single market outside the U.S., and we consider our relationship with our employees to be good.

Information

We were incorporated in Delaware in March 2003. Our principal executive offices are located at 2560 General Armistead Avenue, Audubon, Pennsylvania 19403, and our telephone number at that location is (610) 930-1800. Our corporate website address is *http://www.globusmedical.com*. The information contained in or accessible through our website or contained on other websites is not deemed to be part of this Annual Report on Form 10-K.

We are subject to the filing requirements of the Exchange Act. Therefore, we file annual reports, periodic reports, proxy statements and other information with the SEC. The SEC maintains a website (www.sec.gov) that contains reports, proxy and information statements, and other information regarding issuers that file electronically.

We make our annual reports on Form 10-K, quarterly reports on Form 10-Q, current reports on Form 8-K and all amendments to such reports filed or furnished pursuant to Section 13(a) or 15(d) of the Exchange Act available free of charge through a link on the Investors section of our website located at *http://www.globusmedical.com* (under “SEC Filings”) as soon as reasonably practicable after they are filed with or furnished to the SEC.

Item 1A. Risk Factors

Risk factors that could cause our actual results to differ from our expectations and that could negatively impact our business, results of operations and financial condition are discussed below and elsewhere in this Annual Report on Form 10-K. If any of these risks actually occurs, our business, results of operations, financial condition and future growth prospects could be materially and adversely affected. You should carefully read and consider each of these risks, together with all of the other information set forth in this Annual Report on Form 10-K. The risks and uncertainties described below are not the only ones we face. Additional risks and uncertainties not presently known to us or that we currently believe are immaterial may also materially adversely affect our business, results of operations, financial condition and future growth prospects, and our stock price.

We are providing the following summary of the risk factors contained in our Form 10-K to enhance the readability and accessibility of our risk factor disclosures. We encourage our stockholders to carefully review the full risk factors contained in this Form 10-K in their entirety for additional information regarding the risks and uncertainties that could cause our actual results to vary materially from recent results or from our anticipated future results.

Risks Related to Our Business and Our Industry

To be commercially successful, we must convince surgeons and hospitals that our products are an attractive alternative to our competitors' products and to existing surgical treatments of musculoskeletal disorders.
Pricing pressure from our competitors and our customers may impact our ability to sell our products profitably.
If our customers are unable to obtain adequate coverage and reimbursement for their purchases of our products, we may not be able to sell them profitably.
If we are unable to maintain and expand our network of direct sales representatives and independent distributors, we may not be able to generate anticipated sales.
Our sales and operating results may be negatively affected and we may not grow if we are unable to compete successfully.
We are dependent on a limited number of third-party suppliers, and the loss of any of these suppliers, or their inability to provide us with an adequate supply of products or materials in a timely manner could harm our business.
The proliferation of physician-owned distributorships ("PODs") could result in increased pricing pressure on our products or harm our ability to sell our products to physicians.
Our business could suffer if we lose the services of key members of our senior management, advisors or personnel.
The safety and efficacy of our products is not yet supported by long-term clinical data.
If we do not enhance our product offerings and introduce new products, we may be unable to effectively compete.
We are subject to risks arising from our acquisitions of or investments in new or complementary businesses, products or technologies.
We are required to maintain high levels of inventory, which may be costly.
We rely on information technology systems and network infrastructure to operate and manage our business, which may be subject to a breach, cyber-attack or other disruption.
We are subject to data privacy laws and our failure to comply with them could subject us to substantial liabilities.
If we experience significant disruptions in our information technology systems, our business, results of operations and financial condition could be adversely affected.
Consolidation in the healthcare industry could lead to demands for price concessions or to the exclusion of some suppliers from certain of our markets, which could have an adverse effect on our business.
If our Enabling Technologies products require significant amounts of service after sale or we receive a significant number of warranty claims, our costs may increase.
We experience long and variable capital sales cycles for our Enabling Technologies products.

Risks Related to our Legal and Regulatory Environment

Our medical device products and operations are subject to extensive governmental regulation both in the United States and abroad.
Modifications to our products may require new 510(k) or de novo clearances, PMAs or PMA supplements.
Our HCT/P products are subject to extensive government regulation.
We and our suppliers are subject to the FDA's good manufacturing practice regulations and similar international regulations.
We may be subject to a recall of our products or the discovery of serious safety issues with our products.
We may be subject to enforcement action if we engage in the off-label promotion of our products.
Governmental regulation and limited sources and suppliers could restrict our procurement and use of tissue.
Negative publicity concerning methods of tissue recovery and screening of donor tissue could reduce demand for our regenerative biologics products and impact the supply of available donor tissue.
We are subject to environmental laws and regulations that can impose significant costs and expose us to potential financial liabilities.
We or our suppliers may be the subject of claims for non-compliance with FDA regulations in connection with the processing, manufacturing or distribution of regenerative biologics implants and products.
We and our distributor sales representatives might be subject to claims for failing to comply with U.S. federal, state, local and foreign fraud and abuse laws.

Risks Related to our International Operations

We may fail to obtain or maintain foreign regulatory approvals to market our products in other countries.
We are subject to risks associated with our non-U.S. operations.
Our results of operations could suffer if we are unable to manage our planned international expansion effectively.
We are subject to risks arising from currency exchange rate fluctuations on our international transactions and translation of local currency results into United States dollars, which could adversely affect our profitability.

Risks Related to our Financial Results and Need for Financing

We will need to generate significant sales to remain profitable
We may be unable to grow our revenue or earnings as anticipated, which may have a material adverse effect on our results of operations.
Our quarterly and annual operating results may fluctuate significantly.

Risks Related to our Intellectual Property and Potential Litigation

We could become subject to litigation that could be costly and result in the diversion of management's time and efforts.

Risks Related to the Ownership of our Class A Common Stock

Because of their significant stock ownership, our executive officers, and our directors and principal stockholders will be able to exert control over us and our significant corporate decisions.
We are a "controlled company" within the meaning of the New York Stock Exchange Rules.
Our Board is authorized to issue and designate shares of our preferred stock in additional series without stockholder approval.
Anti-takeover provisions in our organizational documents and Delaware law may discourage or prevent a change of control.

General Risk Factors

If we do not successfully implement our business strategy, our business and results of operations will be adversely affected
If we fail to properly manage our anticipated growth, our business could suffer.
Fluctuations in insurance cost and availability could adversely affect our profitability or our risk management profile.
We are exposed to the credit risk of some of our customers, which could result in material losses.
The widespread outbreak of a communicable disease, or any other public health crisis, could adversely affect our financial condition and results of operations.

Risks Related to Our Business and Our Industry

To be commercially successful, we must convince surgeons and hospitals that our products are an attractive alternative to our competitors' products and that our Enabling Technologies and Musculoskeletal Solutions products are an attractive alternative to existing surgical treatments of musculoskeletal disorders.

Surgeons play a significant role in determining the course of treatment and, ultimately, the type of product that will be used to treat a patient, so we rely on effectively marketing to them. Hospitals, however, are increasingly involved in the evaluation of products and product purchasing decisions. In order for us to sell our products, we must convince surgeons and hospitals that our products are attractive alternatives to competing products for use in procedures. Acceptance of our products depends on educating surgeons and hospitals as to the distinctive characteristics, perceived benefits, safety and cost-effectiveness of our products as compared to our competitors' products and on training surgeons in the proper application of our products. If we are not successful in convincing surgeons and hospitals of the merit of our products or educating them on the use of our products, they may not use our products and we will be unable to increase our sales and sustain growth or profitability.

Furthermore, we believe surgeons will not widely adopt certain of our most novel Musculoskeletal Solutions or Enabling Technologies products unless they determine, based on experience, clinical data and published peer-reviewed journal articles, that MIS techniques, our motion preservation, regenerative biologics, and INR technologies provide benefits or are an attractive alternative to conventional treatments of musculoskeletal disorders and incorporate improved technologies that permit novel surgical procedures.

Surgeons, and in certain instances, hospitals, may be hesitant to change their medical treatment practices or the products available for use to treat patients for the following reasons, among others:

lack of experience with MIS, motion preservation, regenerative biologics or INR technologies;
lack or perceived lack of evidence supporting additional patient benefits;
perceived liability risks generally associated with the use of new products and procedures;
limited or lack of availability of coverage and reimbursement within healthcare payment systems;
costs associated with the purchase of new products and equipment; and
the time commitment that may be required for training.

If we are unable to convince surgeons and hospitals to use our products, or long-term data does not show the benefits of using our products, we will not achieve expected sales or sustain our growth, and our financial condition and results of operation may be adversely affected.

Pricing pressure from our competitors and our customers may impact our ability to sell our products at prices necessary to support our current business strategies.

The musculoskeletal devices industry is characterized by intense competition and continues to attract numerous new companies and technologies, which has encouraged more established companies to intensify competitive pricing pressure. As a result of this increased competition, as well as the challenges of third-party coverage and reimbursement practices, we believe there will be continued pricing pressure in the future. If competitive forces drive down the prices we are able to charge for our products, our profit margins will shrink, which will adversely affect our ability to maintain our profitability and to invest in and grow our business.

If our hospital and other healthcare provider customers are unable to obtain adequate coverage and reimbursement for their purchases of our Musculoskeletal Solutions products, we may not be able to sell our Musculoskeletal Solutions products at prices necessary to maintain our profitability or at all.

Maintaining and growing sales of our products depends on the availability of adequate coverage and reimbursement from third-party payors, including government programs such as Medicare and Medicaid, private insurance plans and managed care programs. Hospitals and other healthcare providers that purchase our Musculoskeletal Solutions products generally rely on third-party payors to cover all or part of the costs associated with the procedures performed with these products, including the cost to purchase the product. Our customers' access to adequate coverage and reimbursement for the procedures performed with our Musculoskeletal Solutions

products by government and private insurance plans is central to the acceptance of our current and future products. We may be unable to sell our Musculoskeletal Solutions products on a profitable basis, or at all, if third-party payors deny coverage or reduce their current levels of payment. If our cost of production increases faster than increases in reimbursement levels for the Musculoskeletal Solutions products, our profitability may be negatively impacted.

Future action by CMS (which administers the Medicare program and provides oversight and funding to state Medicaid programs), other government agencies or private payors, may diminish payments to physicians, outpatient surgery centers and/or hospitals, which could harm our ability to market and sell our products. Private payors may adopt coverage decisions and payment amounts determined by CMS as guidelines in setting their coverage and reimbursement policies. Private payors that do not follow the Medicare guidelines may adopt different coverage and reimbursement policies for procedures performed with our products. In addition, for governmental programs, such as Medicaid, coverage and reimbursement differs from state to state. Medicaid payments to physicians and facilities are often lower than payments by other third-party payors and some state Medicaid programs may not pay an adequate amount for the procedures performed with our products, if any payment is made at all. Furthermore, the healthcare industry in the United States has experienced a trend toward cost containment as government and private insurers seek to control rising healthcare costs by imposing lower payment rates and negotiating reduced contract rates with service providers.

Third-party payors, including public and private payors, may develop negative coverage policies impacting our Musculoskeletal Solutions products. In addition, some payors have changed their coverage policies to be more restrictive as to the criteria under which they will cover and reimburse for vertebral fusions in the lumbar spine to treat multilevel degenerative disc disease, initial primary laminectomy/discectomy for nerve root decompression, or spinal stenosis. Although these coverage policy changes have not had a material impact on our business, other insurers may adopt similar coverage decisions in the future. Patients covered by these insurers may be unwilling or unable to afford lumbar fusion surgeries to treat these conditions, which could materially harm or limit our ability to sell our Musculoskeletal Solutions products designed for lumbar fusion procedures. Our business would be negatively impacted if the trend by governmental agencies or third-party payors continues to reduce coverage of and/or reimbursement for procedures using our Musculoskeletal Solutions products.

We cannot be certain that under current and future payment systems, such as those utilized by Medicare and in many private managed care systems, the cost of our Musculoskeletal Solutions products will be adequately incorporated into the overall cost of the procedure. Therefore, we cannot be certain that the procedures performed with our Musculoskeletal Solutions products will be reimbursed at a sufficiently profitable level, or at all.

To the extent we sell our Musculoskeletal Solutions products internationally, market acceptance may depend, in part, upon the availability of coverage and reimbursement within prevailing healthcare payment systems. Reimbursement and healthcare payment systems in international markets vary significantly by country, and include both government-sponsored healthcare and private insurance. Our Musculoskeletal Solutions products may not obtain international coverage and reimbursement approvals in a timely manner, if at all. Our failure to receive such approvals would negatively impact market acceptance of our products in the international markets in which those approvals are sought.

If we are unable to maintain and expand our network of direct sales representatives and independent distributors, we may not be able to generate anticipated sales.

Our operating results are directly dependent upon the sales and marketing efforts of not only our employees, but also our independent distributors. We expect our direct sales representatives and independent distributors to develop long-lasting relationships with the surgeons they serve. If our direct sales representatives or independent distributors fail to adequately promote, market and sell our products, our sales could significantly decrease.

We face significant challenges and risks in managing our geographically dispersed distribution network and retaining the individuals who make up that network. If certain of our direct sales representatives were to leave us, or if certain of our independent distributors were to cease to do business with us, our sales could be adversely affected. Some of our independent distributors account for a significant portion of our sales volume, and if any such independent distributor were to cease to distribute our products, our sales could be adversely affected. In such a situation, we may need to seek alternative independent distributors or increase our reliance on our direct sales representatives, which may not prevent our sales from being adversely affected. If a direct sales representative or independent distributor were to depart and be retained by one of our competitors, we may be unable to prevent them from helping competitors solicit business from our existing customers, which could further adversely affect our sales. Because of the intense competition for their services, we may be unable to recruit or retain additional qualified independent distributors or to hire additional direct sales representatives to work with us. We may not be able to enter into agreements with them on favorable or commercially reasonable terms, if at all. Failure to hire or retain qualified direct sales representatives or independent distributors would prevent us from maintaining or expanding our business and generating sales.

As we launch new products and increase our marketing efforts with respect to existing products, we will need to expand the reach of our marketing and sales networks. Our future success will depend largely on our ability to continue to hire, train, retain and

motivate skilled direct sales representatives and independent distributors with significant technical knowledge in various areas. New hires require training and take time to achieve full productivity. If we fail to train new hires adequately, or if we experience high turnover in our sales force in the future, we cannot be certain that new hires will become as productive as may be necessary to maintain or increase our sales.

If we are unable to expand our sales and marketing capabilities domestically and internationally, we may not be able to effectively commercialize our products, which would adversely affect our business, results of operations and financial condition.

We operate in a very competitive business environment and if we are unable to compete successfully against our existing or potential competitors, our sales and operating results may be negatively affected and we may not grow.

Our industry is intensely competitive, subject to rapid change and highly sensitive to the introduction of new products or other market activities of industry participants. We believe that our significant competitors are Medtronic, DePuy Synthes, Stryker, Zimmer Biomet, Smith and Nephew, and NuVasive. Orthofix, Integra LifeSciences and other smaller public and private companies are also competitors of ours. At any time, these or other industry participants may develop alternative treatments, products or procedures for the treatment of musculoskeletal disorders that compete directly or indirectly with our products. They may also develop and patent processes or products earlier than we can or obtain regulatory clearance or approvals for competing products more rapidly than we can, which could impair our ability to develop and commercialize similar processes or products. If alternative treatments are, or are perceived to be, superior to our musculoskeletal surgery products, sales of our products could be negatively affected and our results of operations could suffer.

Many of our current and potential competitors are major medical device companies that have substantially greater financial, technical and marketing resources than we do, and they may succeed in developing products that would render our products obsolete or noncompetitive.

Many of our larger competitors enjoy several competitive advantages over us, including:

greater financial, human and other resources for product research and development, sales and marketing and litigation;
significantly greater name recognition;
established relationships with surgeons, hospitals and other healthcare providers;
large and established sales and marketing and distribution networks;
products supported by long-term clinical data;
greater experience in obtaining and maintaining regulatory clearances or approvals for products and product enhancements;
more expansive portfolios of intellectual property rights; and
greater ability to cross-sell their products or to incentivize hospitals or surgeons to use their products.

The frequent introduction by competitors of products that compete with our existing or planned products may also make it difficult to market or sell our products. In addition, the entry of multiple new products and competitors, including PODs, may lead some of our competitors to employ pricing strategies that could adversely affect the pricing of our products and pricing in the musculoskeletal implant and device market generally.

As a result, our ability to compete successfully will depend on our ability to develop proprietary products that reach the market in a timely manner, receive adequate coverage and reimbursement from third-party payors, and are safer, less invasive and more effective than alternatives available for similar purposes. If we are unable to do so, our sales or margins could decrease, thereby harming our business.

We are dependent on a limited number of third-party suppliers, and the loss of any of these suppliers, or their inability to provide us with an adequate supply of products or materials in a timely manner, could harm our business.

We rely on third-party suppliers to supply many of our finished products and also various components and materials used to manufacture other products. For us to be successful, our suppliers must be able to provide us with products, components, and materials in substantial quantities, in compliance with regulatory requirements, in accordance with agreed upon specifications, at acceptable costs and on a timely basis. Our anticipated growth could strain the ability of our suppliers to deliver an increasingly large supply of products, materials and components. Other issues, including shortages of raw materials or components, problems with production yields and quality control and assurance, especially with products such as allograft, which is processed human tissue, could impair a supplier's ability to supply us with product quantities necessary to support our sales. Furthermore, under our supplier agreements, our suppliers generally have no obligation to manufacture for us or sell to us any specific quantity of products. If we are unable to obtain sufficient quantities of high-quality components to meet demand on a timely basis, we could lose customers, our reputation may be harmed, and our business could suffer.

We generally use a small number of suppliers for our products, materials and components. Our dependence on such a limited number of suppliers exposes us to risks, including limited control over pricing, availability, quality and delivery schedules. Our suppliers may be impacted by equipment failure or economic, environmental, or geopolitical factors that disrupt manufacturing capacities. If any one or more of our suppliers cease to provide us with sufficient quantities of products or materials in a timely manner or on terms acceptable to us, or cease to manufacture components of acceptable quality, we would have to seek alternative sources of supply. Because of the nature of our internal quality control requirements, regulatory requirements and the custom and proprietary nature of components, we cannot quickly engage additional or replacement suppliers for many of our critical components. Failure of any of our third-party suppliers to deliver products or materials at the level our business requires would limit our ability to meet our sales commitments to our customers and could have a material adverse effect on our business. We may also have difficulty obtaining similar components from other suppliers that are acceptable to the FDA or other foreign regulatory authorities. We could incur delays while we locate and engage qualified alternative suppliers, and we may be unable to engage alternative suppliers on favorable terms or at all. We cannot guarantee that disruptions will not occur, and any such disruption may result in decreased inventory, increased overhead costs, product shortages and decreased sales, any of which could have a material adverse effect on our business, results of operations and financial condition, and could harm our commercialization efforts and adversely affect our ability to generate future sales.

The proliferation of PODs could result in increased pricing pressure on our products or harm our ability to sell our products to physicians who own or are affiliated with those distributorships.

PODs are medical device distributors that are owned, directly or indirectly, by physicians. These physicians derive a proportion of their revenue from selling or arranging for the sale of medical devices for use in procedures at hospitals that agree to purchase from or through the POD.

We do not sell or distribute any of our products through PODs. The number of PODs may continue to grow as economic pressures increase throughout the industry, as hospitals, insurers and physicians search for ways to reduce costs, and, in the case of the physicians, search for ways to increase their incomes. These companies and the physicians who own, or partially own, them have significant market knowledge and access to the surgeons who use our products and the hospitals that purchase our products, and growth in this area may reduce our ability to compete effectively for business from surgeons who own such distributorships.

Our business could suffer if we lose the services of key members of our senior management, key advisors or personnel.

We are dependent upon the continued services of key members of our senior management and a limited number of key advisors and personnel. In particular, we are highly dependent on the skills and leadership of our Executive Chairman, David C. Paul, and our Chief Executive Officer, Daniel T. Scavilla. The loss of any one of these individuals could disrupt our operations or our strategic plans. Additionally, our future success will depend on, among other things, our ability to continue to hire and retain the necessary qualified scientific, technical and managerial personnel, for whom we compete with numerous other companies, academic institutions and organizations. The loss of members of our management team, key advisors or personnel, or our inability to attract or retain other qualified personnel or advisors, could have a material adverse effect on our business, results of operations and financial condition. Though members of our sales force generally enter into noncompetition agreements that restrict their ability to compete with us, most of the members of our executive management team are not subject to such agreements. Accordingly, the adverse effect resulting from the loss of certain executives could be compounded by our inability to prevent them from competing with us.

The safety and efficacy of our products is not yet supported by long-term clinical data, which could limit sales, and our products might therefore prove to be less safe and effective than initially thought.

All of the products we currently market in the United States, other than our SECURE®-C cervical disc, have either received pre-market clearance under Section 510(k) of the Federal Food, Drug, and Cosmetic Act (“FDCA”) or are exempt from pre-market review. The FDA's 510(k) clearance process requires us to show that our proposed product is “substantially equivalent” to another 510(k)-cleared product. This process is shorter and typically requires the submission of less supporting documentation than other FDA approval processes and does not always require long-term clinical studies. Additionally, to date, we have not been required to complete long-term clinical studies in connection with the sale of our products outside the United States, except our SECURE®-C device, which was prospectively studied through seven-year postoperative clinical study as part of the Post-Market Approval (PMA) process. As a result, we currently lack the breadth of published long-term clinical data supporting the safety and efficacy of virtually all of our products and the benefits they offer that might have been generated in connection with other approval processes. For these reasons, surgeons may be slow to adopt our products, we may not have comparative data that our competitors have or are generating, and we may be subject to greater regulatory and product liability risks. Further, future patient studies or clinical experience may indicate that treatment with our products does not improve patient outcomes. Such results would slow the adoption of our products by surgeons, significantly reduce our ability to achieve expected sales, and could prevent us from sustaining our profitability.

Moreover, if future results and experience indicate that our products cause unexpected or serious complications or other unforeseen negative effects, we could be subject to mandatory product recalls, product seizures, suspension or withdrawal of FDA clearance or approval, and significant legal liability or harm to our business reputation.

If we do not enhance our existing product offerings and introduce new products through our research and development and product development efforts, we may be unable to effectively compete.

In order to increase our market share, we must enhance and broaden our product offerings in response to changing customer demands and competitive pressures and technologies. The success of any new product offering or enhancement to an existing product will depend on numerous factors, including our ability to:

properly identify and anticipate surgeon and patient needs;
develop and introduce new products or product enhancements in a timely manner;
adequately protect our intellectual property and avoid infringing upon the intellectual property rights of third parties;
demonstrate the safety and efficacy of new products; and
obtain the necessary regulatory clearances or approvals for new products or product enhancements.

If we do not develop and obtain regulatory clearance or approval for new products or product enhancements in time to meet market demand, or if there is insufficient demand for these products or enhancements, our results of operations will suffer. Our research and development and product development efforts may require a substantial investment of time and resources before we are adequately able to determine the commercial viability of a new product, technology, material or other innovation. In addition, even if we are able to successfully develop enhancements or new generations of our products, these enhancements or new generations of products may not produce sales in excess of the costs of development and they may be quickly rendered obsolete by changing customer preferences or the introduction by our competitors of products embodying new technologies or features.

We continue to introduce new products and services related to our the ExcelsiusGPS® platform and orthopedic trauma products. We recently launched the Excelsius3D™ imaging system. Prior to launching these platforms, we had no prior experience marketing these new products and we may launch new products in the future that we have no prior experience marketing. We will need to convince a new audience of surgeons and hospital personnel that our new products are attractive alternatives to competing products for use in applicable procedures. If we are not successful in convincing surgeons and hospitals of the merit of new products or educating them on their use, our sales and operating results may be negatively affected and we may not grow as quickly as we anticipate.

We may seek to grow our business through acquisitions of or investments in new or complementary businesses, products or technologies, and the failure to manage acquisitions or investments, or the failure to integrate them with our existing business, could have a material adverse effect on us.

From time to time we expect to consider opportunities to acquire or make investments in other technologies, products and businesses that may enhance our capabilities, complement our current products or expand the breadth of our markets or customer base. Potential and completed acquisitions and strategic investments involve numerous risks, including:

problems assimilating the purchased technologies, products or business operations;
issues maintaining uniform standards, procedures, controls and policies;
unanticipated costs associated with acquisitions;
diversion of management's attention from our core business;
adverse effects on existing business relationships with suppliers and customers;
risks associated with entering new markets in which we have limited or no experience;
potential loss of key employees of acquired businesses; and
increased legal and accounting compliance costs.

We do not know if we will be able to identify acquisitions we deem suitable, whether we will be able to successfully complete any such acquisitions on favorable terms or at all, or whether we will be able to successfully integrate any acquired business, product or technology into our business or retain any key personnel, suppliers or distributors. Our ability to successfully grow through acquisitions depends upon our ability to identify, negotiate, complete and integrate suitable target businesses and to obtain any necessary financing. These efforts could be expensive and time-consuming, and may disrupt our ongoing business and prevent management from focusing on our operations. If we are unable to integrate any acquired businesses, products or technologies effectively, our business, results of operations and financial condition will be materially adversely affected.

We are required to maintain high levels of inventory, which could consume a significant amount of our resources and reduce our cash flows.

As a result of the need to maintain substantial levels of inventory, we are subject to the risk of inventory obsolescence. Many of our Musculoskeletal Solutions products come in sets, which feature components in a variety of sizes to satisfy the particular patient's anatomical needs. In order to market our Musculoskeletal Solutions products effectively, we often must maintain implant sets consisting

of the full range of product sizes. For each surgery, fewer than all of the components of the set are used, and therefore certain portions of the set, like uncommon sizes, may become obsolete before they can be used. In the event that a substantial portion of our inventory becomes obsolete, it could have a material adverse effect on our earnings and cash flows due to the resulting costs associated with the inventory impairment charges and costs required to replace such inventory.

We rely on information technology systems and network infrastructure to operate and manage our business, if we experience a breach, cyber-attack or other disruption to these systems or data, our business, results of operations and financial condition could be adversely affected.

We are increasingly dependent on sophisticated information technology systems to operate our business, including to process, transmit and store sensitive data, and many of our products and services include or use integrated software and information technology that may collect data regarding customers, patients, suppliers and third parties, or connects to our systems. Given the nature of our business, we also may maintain personally identifiable information ("PII") or access to protected health information ("PHI"). Specifically, we rely on our information technology systems to effectively manage sales and marketing, accounting and financial functions, inventory management, engineering and product development tasks, and our research and development data. Our business therefore depends on the continuous, effective, reliable, and secure operation of our computer hardware, software, networks, Internet servers, and related infrastructure.

Although our computer and communications hardware is protected by reasonable physical, technical, and administrative safeguards, it is still vulnerable to system malfunction, computer viruses, and cybersecurity breaches – including ransomware, phishing DDoS, malware, brute force, insider threats, and other cyber attacks and security incidents. These events could lead to the unauthorized access to information systems maintained by us or our service providers or customers and result in the misappropriation or unauthorized disclosure of confidential information belonging to us, our employees, patients, partners, customers, or our suppliers. The techniques used by criminal elements to attack computer systems are sophisticated, change frequently and may originate from less regulated and remote areas of the world, including countries that engage in state-sponsored cyber attacks. As a result, we may not be able to address these techniques proactively or implement adequate preventative measures. Additionally, the regulatory environment governing information, security and privacy laws is increasingly demanding and continues to evolve. If our information technology systems are compromised, we could be subject to fines, damages, litigation and enforcement actions and we could lose trade secrets or other confidential information, the occurrence of which could harm our reputation, business, results of operations and financial condition.

Our information systems, and those of third-parties with whom we contract, also require an ongoing commitment of significant resources to maintain, protect and enhance existing systems and develop new systems to keep pace with continuing changes in information technology. The failure of our information technology systems to perform as we anticipate or our failure to effectively implement new systems could disrupt our operations and could result in decreased sales, increased overhead costs, excess inventory and product shortages, all of which could have a material adverse effect on our reputation, business, results of operations and financial condition.

We are subject to data privacy laws and our failure to comply with them could subject us to substantial liabilities.

Our business relies on the secure electronic transmission, storage and hosting of sensitive information, including personal information, PHI, financial information, intellectual property and other sensitive information related to our customers and workforce. The collection, maintenance, protection, use, transmission, disclosure and disposal of certain personal information and the security of medical devices are regulated at the U.S. federal and state, international and industry levels. U.S. federal and state laws, such as the Health Insurance Portability and Accountability Act of 1996, protect the confidentiality of certain patient health information, including patient medical records, and restrict the use and disclosure of patient health information. In addition to the regulation of personal health information, a number of states have also adopted laws and regulations that may affect our privacy and data security practices for other kinds of PII, such as state laws that govern the use, disclosure and protection of sensitive personal information, such as social security numbers, or that are designed to protect credit card account data. State consumer protection laws may also establish privacy and security standards for use and management of PII, including information related to customers, suppliers, and care providers.

Outside the U.S., we are impacted by the privacy and data security requirements at the international, national and regional level, and on an industry specific basis. Legal requirements in the countries we serve relating to the collection, storage, handling and transfer of personal data and potentially intellectual property continue to evolve with increasingly strict enforcement regimes. More privacy and security laws and regulations are being adopted, and more are being enforced, with potential for significant financial penalties. In the European Union ("E.U."), stringent data protection and privacy rules impact the use of patient data across the healthcare industry. The E.U. General Data Protection Regulation ("GDPR") applies across the E.U., with similar requirements applying to the United Kingdom and European Economic Area countries, and includes, among other things, a requirement for prompt notice of data breaches to data subjects and supervisory authorities in certain circumstances and imposes significant fines for non-compliance. Data protection authorities from different EU member states may interpret and apply the GDPR somewhat differently, and the GDPR also permits EU member states to create supplemental national laws, which increases the complexity for compliance. Failure to comply with GDPR requirements could result in penalties of up to €20 million or 4% of worldwide revenue, whichever is greater, for serious

violations. Within the U.S., a number of states have enacted more onerous privacy laws, such as the California Consumer Privacy Act (the "CCPA"), which also impose stricter privacy requirements and are enforced by state attorneys general and other state agencies. Any investigations or any other government actions related to the GDPR, CCPA, and other privacy laws may be costly to respond to, result in negative publicity, increase our operating costs, require significant management time and attention, and subject us to remedies that may harm our business, including fines, demands or orders that we modify or cease existing business practices. Private litigation, including class actions, related to privacy and cybersecurity issues is also on the rise in the U.S. and other countries.

If we experience significant disruptions in our information technology systems, our business, results of operations and financial condition could be adversely affected.

The efficient operation of our business depends on our information technology systems. We rely on our information technology systems to effectively manage:

sales and marketing, accounting and financial functions;
inventory management;
engineering and product development tasks; and
our research and development data.

Our information technology systems are vulnerable to damage or interruption from:

earthquakes, fires, floods and other natural disasters;
terrorist attacks and attacks by computer viruses or hackers or other cybersecurity attacks or breaches;
power losses; and
computer systems, or Internet, telecommunications or data network failures.

The failure of our information technology systems to perform as we anticipate or our failure to effectively implement new systems could disrupt our entire operation and could result in decreased sales, increased overhead costs, excess inventory and product shortages, all of which could have a material adverse effect on our reputation, business, results of operations and financial condition.

Consolidation in the healthcare industry could lead to demands for price concessions or to the exclusion of some suppliers from certain of our markets, which could have an adverse effect on our business, results of operations or financial condition.

Because healthcare costs have risen significantly over the past decade, numerous initiatives and reforms initiated by legislators, regulators and third-party payors to curb these costs have resulted in a consolidation trend in the healthcare industry to aggregate purchasing power. As the healthcare industry consolidates, competition to provide products and services to industry participants has become and will continue to become more intense. This in turn has resulted and will likely continue to result in greater pricing pressures and the exclusion of certain suppliers from important market segments as group purchasing organizations, independent delivery networks and large single accounts continue to use their market power to consolidate purchasing decisions for hospitals. We expect that market demand, government regulation, third-party coverage and reimbursement policies and societal pressures will continue to change the worldwide healthcare industry, resulting in further business consolidations and alliances among our customers, which may reduce competition, exert further downward pressure on the prices of our products and may adversely impact our business, results of operations or financial condition.

If our Enabling Technologies products require significant amounts of service after sale or we receive a significant number of warranty claims, our costs may increase and our financial results may be adversely affected.

Sales of certain of our Enabling Technologies products that are capital equipment typically include a warranty and maintenance obligation on our part for services for a period of twelve months from the date the equipment is installed at a customer's facility. Customers may also purchase a supplemental service plan for technical and other services for any required service beyond the initial warranty and service period. If product warranty claims or required service under the service plans exceed our expectations, we may incur additional expenditures for parts and service. In addition, our reputation could be damaged and our products may not achieve market acceptance and could result in reductions in sales.

We experience long and variable capital sales cycles for our Enabling Technologies products, which may cause fluctuations in our financial results.

The sales and purchase order cycle of our Enabling Technologies capital equipment products is lengthy because they are major capital items and their purchase generally requires the approval of senior management of hospitals, their parent organizations, purchasing groups, and government bodies, as applicable. In addition, sales to some of our customers are subject to competitive bidding or public tender processes. These approval and bidding processes can be lengthy. Further, the introduction of new products could adversely impact

our sales cycle as customers take additional time to assess the benefits and costs of such products. As a result, it is difficult for us to predict the length of capital sales cycles and, therefore, the exact timing of capital sales.

The above factors may contribute to fluctuations in our quarterly operating results. Because of these fluctuations, it is possible that in future periods our operating results will fall below the expectations of securities analysts or investors. If that happens, the market price of our stock would likely decrease.

Risks Related to our Legal and Regulatory Environment

Our medical device products and operations are subject to extensive governmental regulation both in the United States and abroad, and our failure to comply with applicable requirements could cause our business to suffer.

The medical device industry is regulated extensively by governmental authorities, principally the FDA and corresponding state and foreign regulatory agencies. The FDA and other U.S. and foreign governmental agencies regulate, among other things, with respect to medical devices:

design, development and manufacturing;
testing, labeling, content and language of instructions for use and storage;
clinical trials;
product safety;
marketing, sales and distribution;
pre-market clearance and approval;
record keeping procedures;
advertising and promotion;
recalls and field safety corrective actions;
post-market surveillance, including reporting of deaths or serious injuries and malfunctions that, if they were to recur, could lead to death or serious injury;
post-market approval studies; and
product import and export.

The regulations to which we are subject are complex and have tended to become more stringent over time; see **"Item 1. Business; Government Regulation"** above for a summary of certain regulations to which we are subject. Regulatory changes could result in restrictions on our ability to carry on or expand our operations, higher than anticipated costs or lower than anticipated sales.

The processes by which 510(k) clearance, grant of a *de novo* classification request, or PMA approval is obtained can be expensive and lengthy and require the payment of significant fees. The FDA's 510(k) clearance process usually takes from three to 12 months, but may last longer. The FDA's goal is to review *de novo* classification requests within 150 FDA review days, but presently, the current average review period is about eight months. The process of obtaining a PMA is much costlier and more uncertain than the 510(k) clearance process and generally takes one to three years, or even longer, from the time the application is submitted to the FDA until an approval is obtained. The process of obtaining regulatory clearances through the 510(k) process, *de novo* classification, or approvals through the PMA process to market a medical device in the United States or internationally can be costly and time-consuming, and we may not be able to obtain these clearances, grants of *de novo* classification, or approvals on a timely basis, if at all.

In the United States, all of our currently commercialized medical device products, other than SECURE®-C have either received pre-market clearance under Section 510(k) of the FDCA or are exempt from pre-market review. If the FDA requires us to go through a lengthier, more rigorous examination for future products or modifications to existing products than we had expected, our product introductions or modifications could be delayed or canceled, which could cause our sales to decline and potentially harm our ability to compete. In addition, if the FDA disagrees with our determination that a product we currently market is subject to an exemption from pre-market review, the FDA may require us to submit a 510(k), *de novo*, or PMA and may require us to cease distribution of the product and/or recall the product unless and until we obtain 510(k) or *de novo* clearance or PMA. Further, even with respect to those future products where a PMA is not required, we cannot assure you that we will be able to obtain the 510(k) or *de novo* clearances with respect to those products. The FDA may also reclassify devices currently on the market from Class II to Class III, which could result in additional regulatory burden requiring submission and approval of a PMA prior to marketing, or could result in the FDA rescinding a 510(k) for a previously cleared device.

The FDA can delay, limit or deny clearance or approval of a device for many reasons, including:

we may not be able to demonstrate to the FDA's satisfaction that our products are safe and effective for their intended uses;

the data from our pre-clinical studies and clinical trials may be insufficient to support clearance or approval, where required; and
the manufacturing process or facilities we use may not meet applicable requirements.

In addition, the FDA may change its clearance and 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 approved or cleared products on a timely basis. Most recently, the FDA has been required to dedicate a significant amount of its resources to the review and oversight of medical products intended for COVID-19 or other pandemic-related purposes. This strain on the FDA's resources could lead to delays in the FDA's review of new 510(k) or other marketing applications that are unrelated to COVID-19. It is also possible that, if we obtain new FDA regulatory clearances or approvals, the clearances or approvals may contain limitations on the indicated uses or may prohibit certain uses which may impact the marketability of the product.

Any delay in, or failure to receive or maintain, clearance or approval for our medical device products under development could prevent us from generating revenue from these products or achieving profitability. Additionally, the FDA and other regulatory authorities have broad enforcement powers. Regulatory enforcement or inquiries, or other increased scrutiny on us, could dissuade some surgeons from using our products and adversely affect our reputation and the perceived safety and efficacy of our products.

In addition, even after we have obtained the proper regulatory approval to market a product, the FDA has the power to require us to conduct post marketing studies, such as a Section 522 Order. These studies can be very expensive and time-consuming to conduct. Failure to comply with those studies in a timely manner could result in the revocation of the 510(k) clearance for the product that is subject to such a Section 522 Order and the recall or withdrawal of the product, which could prevent us from generating sales from that product in the United States.

Similarly, we must comply with numerous international laws and regulations in order to market our products outside of the United States; see **"Item 1. Business; Government Regulation; International"** above for a summary of certain international laws and regulations to which we are subject. As is the case in the United States, the applicable regulatory body may change its clearance and 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 approved or cleared products on a timely basis. Any delay in, or failure to receive or maintain, clearance or approval for our products under development could prevent us from generating revenue from these products or achieving profitability. Conducting clinical studies to obtain clinical data that might be required as part of the clinical evaluation process can be expensive and time-consuming. Additionally, the regulatory authorities have broad enforcement powers. Regulatory enforcement or inquiries, or other increased scrutiny on us, could dissuade some surgeons from using our products and adversely affect the perceived safety and efficacy of our products and our reputation.

Failure to comply with applicable regulations could jeopardize our ability to sell our products and result in enforcement actions such as:

untitled letters or warning letters;
fines;
injunctions;
civil penalties;
termination of distribution;
recalls or seizures of products;
delays in the introduction of products into the market;
total or partial suspension of production;
refusal of the FDA or other regulator to grant future clearances or approvals;
withdrawals or suspensions of current clearances or approvals, resulting in prohibitions on sales of our products;
refusal to grant export approvals; and/or
in the most serious cases, criminal penalties.

Any of these sanctions could result in higher than anticipated costs or lower than anticipated sales and have a material adverse effect on our reputation, business, results of operations and financial condition.

Modifications to our products may require new 510(k) or de novo clearances, PMAs or PMA supplements, or may require us to cease marketing or recall the modified products until clearances or approvals are obtained.

Any modification to a 510(k)-cleared device that could significantly affect its safety or effectiveness or that would constitute a major change in its intended use, requires a new 510(k) clearance or, possibly, a *de novo* request or approval of a PMA. The FDA requires every manufacturer to make this determination in the first instance, but the FDA may review any manufacturer's decision. The

FDA may not agree with our decisions regarding whether new clearances or approvals are necessary. We have modified some of our 510(k)-cleared products, and have determined based on our review of the applicable FDA guidance that in certain instances new 510(k) clearances or PMAs are not required. If the FDA disagrees with our determination and requires us to submit new 510(k) notifications, *de novo* petitions, PMAs or PMA supplements for modifications to our previously cleared products for which we have concluded that new clearances or approvals are unnecessary, we may be required to cease marketing or to recall the modified product until we obtain clearance or approval, and we may be subject to significant regulatory fines or penalties.

Our HCT/P products are subject to extensive government regulation and our failure to comply with these requirements could cause our business to suffer.

In the United States, we are marketing our human tissue products as Section 361 HCT/Ps, which are not subject to FDA premarket clearance or approval requirements. The FDA could disagree with our determination that our human tissue products are Section 361 HCT/Ps and could determine that these products are biologics requiring a biological license application approval or medical devices requiring 510(k) or *de novo* clearance or PMA approval, or New Drug Application ("NDA") approval. The FDA may then require that we cease marketing our human tissue products and/or recall the products unless and until we receive the appropriate clearance or approval from the FDA.

HCT/Ps also are subject to donor eligibility and screening, CGTP, product labeling, and post market reporting requirements. If we or our suppliers fail to comply with these requirements, we could be subject to FDA enforcement action, including, for example, warning letters, fines, injunctions, product recalls or seizures, and, in the most serious cases, criminal penalties.

We received an FDA warning letter on October 31, 2018 related to observed non-conformities to the FDA's HCT/P regulations. See **"Item 1. Business; Government Regulation."**

If we or our suppliers fail to comply with the FDA's good manufacturing practice regulations and similar international regulations, this could impair our ability to market our products in a cost-effective and timely manner.

We and our third-party suppliers are required to comply with the FDA's Quality System Regulation ("QSR"), which covers the methods and documentation of the design, testing, production, control, quality assurance, labeling, packaging, sterilization, storage and shipping of our products. In addition, suppliers and processors of allograft must comply with the CGTP, which govern the methods used in and the facilities and controls used for the manufacture of human cell tissue and cellular and tissue-based products, record-keeping and the establishment of a quality program.

The FDA audits compliance with the QSR and CGTP requirements through periodic announced and unannounced inspections of manufacturing and other facilities. The FDA may conduct inspections or audits at any time. If we or our suppliers have significant non-compliance issues or if any corrective action plan that we or our suppliers propose in response to observed deficiencies is not sufficient, the FDA could take enforcement action, including any of the following sanctions:

untitled letters, warning letters, fines, injunctions, consent decrees and civil penalties;
customer notifications or repair, replacement, refunds, recall, detention or seizure of our products;
operating restrictions or partial suspension or total shutdown of production;
refusing or delaying our requests for 510(k) or de novo clearance or PMA of new products or modified products;
withdrawing 510(k) or de novo clearances or PMAs that have already been granted;
refusal to grant export approval for our products; or
criminal prosecution.

Any of these sanctions could have a material adverse effect on our reputation, business, results of operations and financial condition.

Outside the United States, our products and operations are also often required to comply with standards set by industrial standards bodies, such as the ISO. Foreign regulatory bodies may evaluate our products or the testing that our products undergo against these standards. The specific standards, types of evaluation and scope of review differ among foreign regulatory bodies. We intend to comply with the standards enforced by such foreign regulatory bodies as needed to commercialize our products. If we fail to adequately comply with any of these standards, a foreign regulatory body may take adverse actions similar to those within the power of the FDA. Any such action may harm our reputation and business, and could have an adverse effect on our business, results of operations and financial condition.

A recall of our products, either voluntarily or at the direction of the FDA or another governmental authority, or the discovery of serious safety issues with our products, could have a significant adverse impact on us.

The FDA and similar foreign governmental authorities have the authority to require the recall of commercialized products in the event of material deficiencies or defects in design or manufacture or in the event that a product poses an unacceptable risk to health. Manufacturers may, under their own initiative, recall a product if any material deficiency in a device is found. Even if voluntary, the FDA requires that a medical device manufacturer report to the FDA any corrective action or removal of a device initiated to reduce a risk to health posed by the device. A government-mandated or voluntary recall by us or one of our distributors could occur as a result of risk to health, component failures, manufacturing errors, design or labeling defects or other deficiencies and issues. Recalls of any of our products would divert managerial and financial resources and have an adverse effect on our reputation, results of operations and financial condition, which could impair our ability to produce our products in a cost-effective and timely manner in order to meet our customers' demands. We may also be required to bear other costs or take other actions that may have a negative impact on our future sales and our ability to generate profits.

In the EEA, we must comply with the EU Medical Device Vigilance System. Under this system, manufacturers are required to take Field Safety Corrective Actions ("FSCAs") to reduce a risk of death or serious deterioration in the state of health associated with the use of a medical device that is already placed on the market. A FSCA may include the recall, modification, exchange, destruction or retrofitting of the device.

Any adverse event involving our products, whether in the United States or abroad, could result in future voluntary corrective actions, such as recalls or customer notifications, or agency action, such as inspection, mandatory recall or other enforcement action. Any corrective action, whether voluntary or involuntary, as well as defending ourselves in a lawsuit, will require the dedication of our time and capital, distract management from operating our business and may harm our reputation and financial results.

We may be subject to enforcement action if we engage in the off-label promotion of our products.

Our promotional materials and training methods must comply with FDA and other applicable laws and regulations, including the prohibition of the promotion of off-label use. Physicians may use our products off-label, as the FDA does not restrict or regulate a physician's choice of treatment within the practice of medicine. However, if the FDA determines that our promotional efforts constitutes promotion of an off-label use, it could request that we modify our training or promotional efforts or subject us to regulatory or enforcement actions, including the issuance of an untitled letter, a warning letter, injunction, seizure, civil penalties and criminal fines. It is also possible that other federal, state or foreign enforcement authorities, such as DOJ or HHS, might take action if they consider our promotional or training materials to constitute promotion of an unapproved/off-label use, which could result in significant criminal and/or civil sanctions under other statutory authorities, such as laws prohibiting false claims for reimbursement (e.g., the FCA). In that event, our reputation could be damaged and adoption of the products would be impaired. Although our policy is to refrain from statements that could be considered off-label promotion of our products, the FDA, or another regulatory agency or a Relator under the FCA could disagree and conclude that we have engaged in off-label promotion. In addition, the off-label use of our products may increase the risk of injury to patients, and, in turn, the risk of product liability claims. Claims under the FCA initiated either by a government regulatory or enforcement authority or by a Relator and product liability claims are expensive to defend and could divert our management's attention, result in substantial damage awards against us and harm our reputation.

Governmental regulation and limited sources and suppliers could restrict our procurement and use of tissue.

In the United States, the procurement and transplantation of allograft bone tissue is subject to federal law pursuant to the NOTA, a criminal statute which prohibits the purchase and sale of human organs used in human transplantation, including bone and related tissue, for "valuable consideration." NOTA permits reasonable payments associated with the removal, transportation, processing, preservation, quality control, implantation and storage of human bone tissue. We provide services in all of these areas in the United States, with the exception of removal and implantation, and receive payments for all such services. We make payments to tissue banks for their services related to recovering allograft bone tissue on our behalf. If NOTA is interpreted or enforced in a manner that prevents us from receiving payment for services we render or that prevents us from paying tissue banks or certain of our clients for the services they render for us, our business could be materially adversely affected. In addition, there is similar legislation in Europe and the UK which we must abide by, including Directive 2004/23/EC in relation to human tissues and cells requiring that donation be unpaid (except for expenses and inconvenience) and voluntary.

We depend on a limited number of sources of human tissue for use in some of our regenerative biologics products and a limited number of entities to process the human tissue for use in those regenerative biologics products, and any failure to obtain tissue from these sources or to have the tissue processed by these entities for us in a timely manner will interfere with our ability to effectively meet demand for our regenerative biologics products incorporating human tissue. Less than five third-party suppliers currently supply all of our needs for allograft implants and products, other than those implants and products that we process ourselves. The processing of human tissue into our regenerative biologics products is very labor-intensive and it is therefore difficult to maintain a steady supply stream. In addition, due to seasonal changes in mortality rates, some scarce tissues used in our regenerative biologics products are at

times in particularly short supply. We cannot be certain that our current supply of human tissue and allograft implants, plus any additional source that we identify in the future, will be sufficient to meet our needs. Our dependence on a small number of third-party suppliers and the challenges we may face in obtaining adequate supplies of human tissue involve several risks, including limited control over pricing, availability, quality and delivery schedules. In addition, any interruption in the supply of any human tissue component could materially harm our and our third-party suppliers' ability to manufacture our regenerative biologics products until a new source of supply, if any, could be found. We may be unable to find a sufficient alternative supply channel in a reasonable time period or on commercially reasonable terms, if at all, which would have a material adverse effect on our business, results of operations and financial condition.

Negative publicity concerning methods of tissue recovery and screening of donor tissue in our industry could reduce demand for our regenerative biologics products and impact the supply of available donor tissue.

Media reports or other negative publicity concerning both alleged improper methods of tissue recovery from donors and disease transmission from donated tissue could limit widespread acceptance of some of our regenerative biologics products. Unfavorable reports of improper or illegal tissue recovery practices, both in the United States and internationally, as well as incidents of improperly processed tissue leading to the transmission of disease, may broadly affect the rate of future tissue donation and market acceptance of technologies incorporating human tissue. In addition, such negative publicity could cause the families of potential donors to become reluctant to agree to donate tissue to for-profit tissue processors. For example, the media has reported examples of alleged illegal harvesting of body parts from cadavers and resulting recalls conducted by certain companies selling human tissue-based products affected by the alleged illegal harvesting. These reports and others could have a negative effect on our tissue regeneration business.

We are subject to environmental laws and regulations that can impose significant costs and expose us to potential financial liabilities.

The manufacture of certain of our products, including our allograft implants and products, and the handling of materials used in the product testing process, including in our cadaveric laboratory, involve the controlled use of biological, hazardous and/or radioactive materials and wastes. Our business and facilities and those of our suppliers are subject to foreign, federal, state and local laws and regulations relating to the protection of human health and the environment, including those governing the use, manufacture, storage, handling and disposal of, and exposure to, such materials and wastes. In addition, under some environmental laws and regulations, we could be held responsible for costs relating to any contamination at our past or present facilities and at third-party waste disposal sites even if such contamination was not caused by us. A failure to comply with current or future environmental laws and regulations could result in severe fines or penalties. Any such expenses or liability could have a significant negative impact on our business, results of operations and financial condition.

We or our suppliers may be the subject of claims for non-compliance with FDA regulations in connection with the processing, manufacturing or distribution of our proposed allograft or other regenerative biologics implants and products.

Allegations may be made against us or against donor recovery groups or tissue banks, including those with which we have a contractual supplier relationship, claiming that the acquisition or processing of tissue for allograft implants and products or other regenerative biologics products does not comply with applicable FDA regulations or other relevant statutes and regulations. Allegations like these could cause regulators or other authorities to take investigative or other action against us or our suppliers, or could cause negative publicity for us or our industry generally. These actions or any negative publicity could cause us to incur substantial costs, divert the attention of our management from our business and harm our reputation.

We and our distributor sales representatives might be subject to claims for failing to comply with U.S. federal, state, local and foreign fraud and abuse laws, including anti-kickback laws and other anti-referral laws.

There are numerous U.S. federal and state laws pertaining to healthcare fraud and abuse, including anti-kickback laws and physician self-referral laws. Our relationships with surgeons, hospitals and our independent distributors are subject to scrutiny under these laws. Violations of these laws are punishable by criminal and civil sanctions, including, in some instances, imprisonment and exclusion from participation in federal and state healthcare programs, including the Medicare, Medicaid and Veterans Administration health programs. Because of the broad and far-reaching nature of these laws, we may be required to alter or discontinue one or more of our business practices.

Healthcare fraud and abuse regulations are complex, and even minor irregularities can potentially give rise to claims that a statute or prohibition has been violated. Examples of laws that may affect our ability to operate include:

- the Federal Anti-Kickback Statute, which prohibits, among other things, persons from knowingly and willfully soliciting, receiving, offering or paying remuneration, directly or indirectly, in exchange for or to induce either the referral of an individual for, or the purchase, order or recommendation of, any good or service for which payment may be made under federal healthcare programs such as the Medicare and Medicaid programs;

federal false claims laws which prohibit, among other things, individuals or entities from knowingly presenting, or causing to be presented, claims for payment to Medicare, Medicaid, or other government payors that are false or fraudulent;
the federal Health Insurance Portability and Accountability Act of 1996, which created federal criminal laws that prohibit executing a scheme to defraud any healthcare benefit program or making false statements relating to healthcare matters;
the Federal Trade Commission Act and similar laws regulating advertisement and consumer protections;
the FCPA, which prohibits corrupt payments, gifts or transfers of value to foreign officials;
the Physician Payment Sunshine Act, which requires medical device companies to report ownership and investment interests by physicians and members of their immediate family as well as certain payments and other transfers of value, including gifts and other benefits, provided to physicians and certain other healthcare professionals licensed in the U.S. and to teaching hospitals; and
foreign and U.S. state law and code equivalents of each of the above federal laws, such as anti-kickback and false claims laws and disclosure of transfers of value and gift bans with respect to healthcare professionals, some of which may apply to items or services reimbursed by any third-party payor, including commercial insurers.

Possible sanctions for violation of these laws include monetary penalties and other civil and criminal sanctions, exclusion from Medicare and Medicaid programs and forfeiture of amounts collected in violation of such prohibitions. Any violations of these laws, or any action against us for violation of these laws, even if we successfully defend against it, could result in a material adverse effect on our reputation, business, results of operations and financial condition.

We have entered into consulting, royalty and other agreements with surgeons, including some who make referrals to us. In addition, some of our referring surgeons own our stock, which they either purchased in an arm's length transaction on terms identical to those offered to non-referral sources or received from us as fair market value consideration for consulting services performed. While these transactions were structured with the intention of complying with all applicable laws, including the federal ban on physician self-referrals, commonly known as the "Stark Law," state anti-referral laws and other applicable anti-kickback laws, it is possible that regulatory agencies may view these transactions as prohibited arrangements that must be restructured, or discontinued, or for which we could be subject to other significant penalties. Regulators also could prohibit us from accepting payment for products ordered or recommended by these surgeons. We would be materially and adversely affected if regulatory agencies interpret our financial relationships with surgeons who order our products to be in violation of applicable laws and we were unable to comply with applicable laws. This could subject us to monetary penalties for non-compliance, the cost of which could be substantial.

To enforce compliance with the federal laws, the DOJ has increased its scrutiny of interactions between healthcare companies and healthcare providers, which has led to a number of investigations, prosecutions, convictions and settlements in the healthcare industry. Dealing with investigations can be time- and resource-consuming and can divert management's attention from the business. Additionally, if an investigation were initiated involving us and we decided to settle that investigation with the DOJ or other law enforcement agencies, we may be forced to agree to additional onerous and expensive compliance and reporting requirements for a period of years as part of a consent decree or corporate integrity agreement. Any such investigation or settlement could increase our costs or otherwise have an adverse effect on our business, financial condition and results of operations.

In addition, there has been a recent trend of increased federal and state regulation on payments and other transfers of value made to healthcare professionals related to marketing and other activities. Some states mandate implementation of healthcare compliance programs, impose gift bans, and/or require the tracking and reporting of gifts, compensation and other remuneration to physicians and certain other US-licensed healthcare professionals and US teaching hospitals. The shifting commercial compliance environment and the need to build and maintain robust and expandable systems to comply with different compliance and/or reporting requirements in multiple jurisdictions increase the possibility that a healthcare company may run afoul of one or more of the requirements.

The scope and enforcement of these laws is uncertain and subject to rapid change in the current environment of healthcare reform, especially in light of the lack of applicable precedent and regulations. Federal or state regulatory and enforcement authorities might challenge our current or future activities under these laws. Plaintiffs' attorneys acting on behalf of FCA Relators, who are incentivized to pursue claims against manufacturers by the potential to share in any monetary damages and penalties recovered by the government, also might initiate lawsuits that challenge our current or future activities under these laws. Any such challenges by regulatory authorities directly or by Relators suing on behalf of the government could have a material adverse effect on our reputation, business, results of operations and financial condition. In addition to the sanctions described above, any state or federal regulatory review or FCA lawsuit, regardless of the outcome, would be costly and time-consuming and could have a material adverse effect on our business, financial condition and results of operations.

Risks Related to our International Operations

We may fail to obtain or maintain foreign regulatory approvals to market our products in other countries.

We currently market our products internationally and intend to expand our international marketing. International jurisdictions require separate regulatory approvals and compliance with numerous and varying regulatory requirements. For example, we intend to continue to seek regulatory clearance to market our primary products in the EEA, Japan, Brazil, Canada and other key markets. The approval procedures vary among countries and may involve requirements for additional testing, and the time required to obtain approval may differ from country to country and from that required to obtain FDA clearance or approval.

Clearance or approval by the FDA does not ensure approval or certification by regulatory authorities in other countries or jurisdictions, and approval or certification by one foreign regulatory authority does not ensure approval or certification by regulatory authorities in other foreign countries or by the FDA. The foreign regulatory approval or certification process may include all of the risks associated with obtaining FDA clearance or approval. We may not obtain foreign regulatory approvals on a timely basis, if at all. We may not be able to file for regulatory approvals or certifications and may not receive necessary approvals to commercialize our products in any market. If we fail to receive necessary approvals or certifications to commercialize our products in foreign jurisdictions on a timely basis, or at all, our business, results of operations and financial condition could be adversely affected.

Additionally, in the EEA, we must inform the Notified Body that carried out the conformity assessment of the medical devices we market or sell in the EEA of any planned substantial changes to our quality system or changes to our devices which could affect compliance with the essential requirements or the devices' intended use. The Notified Body will then assess the changes and verify whether they affect the products' conformity. If the assessment is not favorable, it could prevent us from selling that product in the EEA, which could adversely impact our business and results of operations. In addition, on January 1, 2021 the UK left the European Union. EU CE markings for medical devices will continue to be recognized in Great Britain until June 30, 2024, and certificates issued for medical devices by EU-recognized Notified Bodies will continue to be valid for the Great Britain market until June 30, 2024 and the EU no longer recognizes UK Notified Bodies. The UK has given no commitment to follow the new EU medical devices legislation (Regulation EU 2017/745) and has recently consulted on the form and content of new UK legislation which may result in divergence from the EU regime.

We are subject to risks associated with our non-U.S. operations.

The FCPA and similar worldwide anti-bribery laws in non-U.S. jurisdictions generally prohibit companies and their intermediaries from making improper payments for the purpose of obtaining or retaining business. The FCPA also imposes accounting standards and requirements on publicly traded U.S. corporations and their foreign affiliates, which are intended to prevent the diversion of corporate funds to the payment of bribes and other improper payments, and to prevent the establishment of "off books" slush funds from which such improper payments can be made. Because of the predominance of government-sponsored healthcare systems around the world, many of our customer relationships outside of the United States are with governmental entities and are therefore subject to such anti-bribery laws. Our internal control policies and procedures may not always protect us from reckless or criminal acts committed by our employees or agents. Violations of these laws, or allegations of such violations, could disrupt our operations, involve significant management distraction and result in a material adverse effect on our business, results of operations and financial condition. We also could suffer severe penalties, including criminal and civil penalties, disgorgement and other remedial measures, including further changes or enhancements to our procedures, policies and controls, as well as potential personnel changes and disciplinary actions.

Furthermore, we are subject to the export controls and economic embargo rules and regulations of the United States, including, but not limited to, the Export Administration Regulations and trade sanctions against embargoed countries, which are administered by the Office of Foreign Assets Control within the Department of the Treasury, as well as the laws and regulations administered by the Department of Commerce. These regulations limit our ability to market, sell, distribute or otherwise transfer our products or technology to prohibited countries or persons. A determination that we have failed to comply, whether knowingly or inadvertently, may result in substantial penalties, including fines and enforcement actions and civil and/or criminal sanctions, the disgorgement of profits and the imposition of a court-appointed monitor, as well as the denial of export privileges, and may have an adverse effect on our reputation.

These and other factors may have a material adverse effect on our international operations or on our business, results of operations and financial condition generally.

Our results of operations could suffer if we are unable to manage our planned international expansion effectively.

Expansion into international markets is an element of our business strategy and involves risk. The sale and shipment of our products across international borders, as well as the purchase of components and products from international sources, subject us to

extensive U.S. and foreign governmental trade, import and export and customs regulations and laws. Compliance with these regulations and laws is costly and exposes us to penalties for non-compliance. Other laws and regulations that can significantly affect us include various anti-bribery laws, including the FCPA and anti-boycott laws. Any failure to comply with applicable legal and regulatory obligations in the United States or abroad could adversely affect us in a variety of ways that include, but are not limited to, significant criminal, civil and administrative penalties, including imprisonment of individuals, fines and penalties, denial of export privileges, seizure of shipments and restrictions on certain business activities. Also, the failure to comply with applicable legal and regulatory obligations could result in the disruption of our distribution and sales activities.

Our international operations expose us and our independent distributors to risks inherent in operating in foreign jurisdictions, including:

exposure to different legal and regulatory standards;
lack of stringent protection of intellectual property;
obstacles to obtaining domestic and foreign export, import and other governmental approvals, permits and licenses and compliance with foreign laws;
potentially adverse tax consequences and the complexities of foreign value-added tax systems;
adverse changes in tariffs and trade restrictions;
foreign exchange rate risk;
limitations on the repatriation of earnings;
difficulties in staffing and managing foreign operations;
transportation delays and difficulties of managing international distribution channels;
longer collection periods and difficulties in collecting receivables from foreign entities;
increased financing costs; and
political, social and economic instability and increased security concerns.

These risks may limit or disrupt our expansion, restrict the movement of funds or result in the deprivation of contractual rights or the taking of property by nationalization or expropriation without fair compensation.

Our goal of succeeding as an international company depends, in part, on our ability to develop and implement policies and strategies that are effective in anticipating and managing these and other risks in the countries in which we do business. Failure to manage these and other risks may have a material adverse effect on our operations in any particular country and on our business as a whole.

We are subject to risks arising from currency exchange rate fluctuations on our international transactions and translation of local currency results into United States dollars, which could adversely affect our profitability.

International operations account for approximately 14.8% of our total net sales, and we intend to continue to expand our international presence. A significant portion of our foreign revenues and expenses are generated in Japan, the Euro zone, United Kingdom and Australia. As our reporting currency is the U.S. dollar, significant changes in currency exchange rates can result in increased exposure to foreign exchange effects on our consolidated results of operations. We cannot predict changes in currency exchange rates, the impact of exchange rate changes, nor the degree to which we will be able to manage the impact of currency exchange rate changes.

Risks Related to our Financial Results and Need for Financing

We will need to generate significant sales to remain profitable.

We intend to increase our operating expenses substantially as we add sales representatives and distributors to increase our geographic sales coverage, submit additional investigational device exemption applications to the FDA, increase our marketing capabilities, conduct clinical trials and increase our general and administrative functions to support our growing operations. We will need to generate significant sales to maintain profitability and we might not be able to do so. Even if we do generate significant sales, we might not be able to sustain or increase profitability on a quarterly or annual basis in the future. If our sales grow more slowly than we anticipate or if our operating expenses exceed our expectations, our business, financial condition and results of operations will likely be adversely affected.

We may be unable to grow our revenue or earnings as anticipated, which may have a material adverse effect on our results of operations.

We have experienced rapid growth since our inception and have increased our net sales to $1,022.8 million in 2022. Our ability to achieve future growth will depend upon, among other things, the success of our growth strategies, which we cannot assure

will be successful. In addition, we may have more difficulty maintaining our historical or prior rate of growth of revenues, profitability or cash flows. Our future success will depend upon numerous factors, including the strength of our brand, the market success of our current and future products, competitive conditions, our ability to attract and retain our employees and our ability to manage our business and implement our growth strategy. If we are unable to achieve future growth, our business, financial condition and results of operations could be adversely affected. In addition, we anticipate significantly expanding our infrastructure and adding personnel in connection with our anticipated growth, which we expect will cause our selling, general and administrative expenses to increase, which could adversely impact our results of operations.

Our quarterly and annual operating results may fluctuate significantly.

Our operating results are difficult to predict and may be subject to periodic fluctuations. Our sales and results of operations will be affected by numerous factors, including:

our ability to drive increased sales of our products;
our ability to establish and maintain an effective and dedicated sales force;
pricing pressure applicable to our products, including adverse third-party coverage and reimbursement outcomes;
results of clinical research and trials on our existing products and products in development;
the mix of our products sold because profit margins differ amongst our products;
timing of new product offerings, acquisitions, licenses or other significant events by us or our competitors;
the ability of our suppliers to timely provide us with an adequate supply of materials and components;
the evolving product offerings of our competitors;
regulatory approvals and legislative changes affecting the products we may offer or those of our competitors;
interruption in the manufacturing or distribution of our products;
the effect of competing technological, industry and market developments;
changes in our ability to obtain regulatory clearance or approval for our products; and
our ability to expand the geographic reach of our sales and marketing efforts.

Many of the products we may seek to develop and introduce in the future will require FDA approval or clearance before commercialization in the United States, and commercialization of such products outside of the United States would likely require additional regulatory approvals and import licenses. As a result, it will be difficult for us to forecast demand for these products with any degree of certainty. In addition, we will be increasing our operating expenses as we expand our commercial capabilities. Accordingly, we may experience significant, unanticipated quarterly or annual losses. If our quarterly or annual operating results fall below the expectations of investors or securities analysts, the price of our Class A common stock could decline substantially. Furthermore, any quarterly or annual fluctuations in our operating results may, in turn, cause the price of our Class A common stock to fluctuate substantially. We believe that quarterly comparisons of our financial results are not necessarily meaningful and should not be relied upon as an indication of our future performance.

Negative trends in the general economy, including interest rate fluctuations, increases in inflation, and financial market volatility may adversely affect our business and financial performance. If inflation in the cost of raw materials increases beyond our ability to manage it, we may not be able to adjust prices sufficiently to offset the effect of the various cost increases without negatively impacting our consumer demand. Furthermore, the continuing impacts of the COVID-19 pandemic could lead to greater increases in inflation, which could adversely affect our operations and financial performance.

The availability of funding under existing credit arrangements might be limited, and our cash and cash equivalents are subject to volatility.

Any lender that is obligated to provide funding to us under any now existing or future credit agreement with us may not be able to provide funding in a timely manner, or at all, when we require it. The cost of, or lack of, available credit or equity financing could impact our ability to develop sufficient liquidity to maintain or grow our company, which in turn may adversely affect our business, results of operations or financial condition. We also manage cash and cash equivalents and short-term investments through various institutions. There may be a risk of loss on investments based on the volatility of the underlying instruments that will prevent us from recovering the full principal of our investments. Negative changes in domestic and global economic conditions or disruptions of either or both of the financial and credit markets may also affect third-party payors and may have a material adverse effect on our stock price, business, results of operations, financial condition and liquidity.

Our future capital needs are uncertain and we may need to raise funds in the future, and such funds may not be available on acceptable terms or at all.

Continued expansion of our business will be expensive and we may seek funds from public and private stock offerings, borrowings under our existing or future credit facilities or other sources. Our capital requirements will depend on many factors, including:

the revenues generated by sales of our products;
the costs associated with expanding our sales and marketing efforts;
the expenses we incur in manufacturing and selling our products;
the costs of developing and commercializing new products or technologies;
the cost of obtaining and maintaining regulatory approval or clearance of our products and products in development;
the number and timing of acquisitions and other strategic transactions;
the costs associated with our planned international expansion;
the costs associated with increased capital expenditures, including fixed asset purchases of instrument sets which we loan to hospitals to support surgeries; and
unanticipated general and administrative expenses.

As a result of these factors, we may seek to raise capital, and such capital may not be available on favorable terms, or at all. Furthermore, if we issue equity or debt securities to raise capital, our existing stockholders may experience dilution, and the new equity or debt securities may have rights, preferences and privileges senior to those of our existing stockholders. In addition, if we raise capital through collaboration, licensing or other similar arrangements, it may be necessary to relinquish valuable rights to our products, potential products or proprietary technologies, or grant licenses on terms that are not favorable to us. If we cannot raise capital on acceptable terms, we may not be able to develop or enhance our products, execute our business plan, take advantage of future opportunities, or respond to competitive pressures, changes in our supplier relationships, or unanticipated customer requirements. Any of these events could adversely affect our ability to achieve our development and commercialization goals, which could have a material adverse effect on our business, results of operations and financial condition.

Our existing revolving credit facility contains restrictive covenants that may limit our operating flexibility.

Our existing revolving credit facility contains certain restrictive covenants that could limit our ability to transfer or dispose of assets, merge with other companies or consummate certain changes of control, acquire other companies, pay dividends, incur additional indebtedness and liens, experience changes in management and enter into new businesses. We therefore may not be able to engage in any of the foregoing transactions unless we obtain the consent of the lender or terminate the revolving credit facility. There is no guarantee that we will be able to generate sufficient cash flow or sales to meet the financial covenants or pay the principal and interest on any such debt. Furthermore, there is no guarantee that future working capital, borrowings or equity financing will be available to repay or refinance any such debt.

Risks Related to our Intellectual Property and Potential Litigation

Our ability to protect our intellectual property and proprietary technology is uncertain.

We rely primarily on patent, copyright, trademark and trade secret laws, as well as confidentiality and non-disclosure agreements and other methods, to protect our proprietary technologies and know-how. We have applied for patent protection relating to certain existing and proposed products and processes. While we generally apply for patents in those countries where we intend to make, have made, use or sell patented products, we may not accurately predict all of the countries where patent protection will ultimately be desirable. If we fail to timely file a patent application in any such country, we may be precluded from doing so at a later date. Furthermore, we cannot assure you that any of our patent applications will be approved. The rights granted to us under our patents, including prospective rights sought in our pending patent applications, may not be meaningful or provide us with any commercial advantage and they could be opposed, contested or circumvented by our competitors or be declared invalid or unenforceable in judicial or administrative proceedings. The failure of our patents to adequately protect our technology might make it easier for our competitors to offer the same or similar products or technologies. Competitors may be able to design around our patents or develop products that provide outcomes which are comparable to ours without infringing on our intellectual property rights. We have entered into confidentiality agreements and intellectual property assignment agreements with our officers, employees, consultants and advisors regarding our intellectual property and proprietary technology. In the event of unauthorized use or disclosure or other breaches of such agreements, we may not be provided with meaningful protection for our trade secrets or other proprietary information. Due to differences between foreign and U.S. patent laws, our patented intellectual property rights may not receive the same degree of protection in foreign countries as they would in the United States. Even if patents are granted outside the United States, effective enforcement in those countries may not be available. Since most of our issued patents and pending patent applications are for the United States only, we lack

a corresponding scope of patent protection in other countries. In countries where we do not have significant patent protection, we may not be able to stop a competitor from marketing products in such countries that are the same as or similar to our products.

We rely on our trademarks, trade names and brand names to distinguish our products from the products of our competitors, and have registered or applied to register many of these trademarks. We cannot assure you that our trademark applications will be approved. Third parties may also oppose our trademark applications, or otherwise challenge our use of the trademarks. In the event that our trademarks are successfully challenged, we could be forced to rebrand our products, which could result in loss of brand recognition, and could require us to devote resources to advertising and marketing new brands. Further, we cannot assure you that competitors will not infringe upon our trademarks, or that we will have adequate resources to enforce our trademarks.

If a competitor infringes upon one of our patents, trademarks or other intellectual property rights, enforcing those patents, trademarks and other rights may be difficult and time consuming. Even if successful, litigation to defend our patents and trademarks against challenges or to enforce our intellectual property rights could be expensive and time consuming and could divert management's attention from managing our business. Moreover, we may not have sufficient resources or desire to defend our patents or trademarks against challenges or to enforce our intellectual property rights.

The medical device industry is characterized by patent litigation and we could become subject to litigation that could be costly, result in the diversion of management's time and efforts, require us to pay damages, and/or prevent us from marketing our existing or future products.

Our commercial success will depend in part on not infringing the patents or violating the other proprietary rights of third parties. Significant litigation regarding patent rights exists in our industry. Our competitors in both the United States and abroad, many of which have substantially greater resources and have made substantial investments in competing technologies, may have applied for or obtained or may in the future apply for and obtain, patents that will prevent, limit or otherwise interfere with our ability to make and sell our products. We have not conducted an independent review of patents issued to third parties. The large number of patents, the rapid rate of new patent issuances, the complexities of the technology involved and uncertainty of litigation increase the risk of business assets and management's attention being diverted to patent litigation. We have received in the past, and expect to receive in the future, communications from various industry participants alleging our infringement of their patents, trade secrets or other intellectual property rights and/or offering licenses to such intellectual property. We are currently subject to lawsuits, and have received other written allegations, claiming that we have infringed certain patents of others in the spine industry. A summary of these cases is provided under **"Item 3. Legal Proceedings"** below. Any lawsuits resulting from such allegations could subject us to significant liability for damages, and invalidate our proprietary rights. Any potential intellectual property litigation also could force us to do one or more of the following:

stop selling products or using technology that contains the allegedly infringing intellectual property;
lose the opportunity to license our technology to others or to collect royalty payments based upon successful protection and assertion of our intellectual property rights against others;
incur significant legal expenses;
pay substantial damages to the party whose intellectual property rights we may be found to be infringing;
redesign those products that contain the allegedly infringing intellectual property, which could be costly and disruptive; or
attempt to obtain a license to the relevant intellectual property from third parties, which may not be available on reasonable terms or at all.

Any litigation or claim against us, even those without merit, may cause us to incur substantial costs, and could place a significant strain on our financial resources, divert the attention of management from our core business, and harm our reputation. Further, as the number of participants in the musculoskeletal industry grows, the possibility of intellectual property infringement claims against us increases. If we are found to infringe the intellectual property rights of third parties, we could be required to pay substantial damages (including treble, or triple, damages if an infringement is found to be willful) and/or royalties and could be prevented from selling our products unless we obtain a license or are able to redesign our products to avoid infringement. Any such license may not be available on reasonable terms, if at all, and there can be no assurance that we would be able to redesign our products in a way that would not infringe the intellectual property rights of others. If we fail to obtain any required licenses or make any necessary changes to our products or technologies, we may have to withdraw existing products from the market or may be unable to commercialize one or more of our products, all of which could have a material adverse effect on our business, results of operations and financial condition.

Further, in the course of our regular review of pending legal matters, we determine whether it is probable that a potential loss relating to a legal proceeding may have a material impact on our business, financial performance or cash position. However, estimates of probable losses are inherently uncertain, and even if we determine that a loss is probable, in accordance with authoritative accounting guidance, if we are unable to estimate the possible loss or range of loss, we do not record an accrual related to such litigation. As a result of this accounting policy, we may experience variability in our results of operations if damages for which we are found liable exceed the amounts we have accrued.

In addition, we generally indemnify our customers and distributors with respect to infringement by our products of the proprietary rights of third parties. Third parties may assert infringement claims against our customers or distributors. These claims may require us to initiate or defend protracted and costly litigation on behalf of our customers or distributors, regardless of the merits of these claims. If any of these claims succeed, we may be forced to pay damages on behalf of our customers or distributors or may be required to obtain licenses for the products they use. If we cannot obtain all necessary licenses on commercially reasonable terms, our customers may be forced to stop using our products.

We may be subject to damages resulting from claims that we, our employees or our independent distributors have wrongfully used or disclosed alleged trade secrets, proprietary or confidential information of our competitors or are in breach of non-competition or non-solicitation agreements with our competitors.

Many of our employees were previously employed at other medical device companies, including our competitors or potential competitors, in some cases until recently. Many of our independent distributors sell, or in the past have sold, products of our competitors. We may be subject to claims that we, our employees, or our independent distributors have inadvertently or otherwise used or disclosed trade secrets or other proprietary information of these former employers or competitors. In addition, we have been and may in the future be subject to claims that we caused an employee to breach the terms of his or her non-competition or non-solicitation agreement. Litigation may be necessary to defend against these claims. Even if we are successful in defending against these claims, litigation could result in substantial costs and could be a distraction to management. If our defense to those claims fails, in addition to paying monetary damages, we may lose valuable personnel. There can be no assurance that this type of litigation will not continue, and any future litigation or the threat thereof may adversely affect our ability to hire additional direct sales representatives. A loss of key personnel or their work product could hamper or prevent our ability to commercialize product candidates, which could have an adverse effect on our business, results of operations and financial condition.

We may incur product liability losses and insurance coverage may be inadequate or unavailable to cover these losses.

Our business exposes us to potential product liability claims that are inherent in the testing, design, manufacture and sale of medical devices for surgical procedures. The development of allograft implants and technologies for human tissue repair and treatment may entail particular risk of transmitting diseases to human recipients, which could result in the assertion of substantial product liability claims against us. Surgery involves significant risk of serious complications, including bleeding, nerve injury, paralysis and even death. In addition, if longer-term patient results and experience indicates that our products or any component of a product cause tissue damage, motor impairment or other adverse effects, we could be subject to significant liability. Furthermore, if surgeons are not sufficiently trained in the use of our products, they may misuse or ineffectively use our products, which may result in unsatisfactory patient outcomes or patient injury. We could become the subject of product liability lawsuits alleging that component failures, manufacturing flaws, design defects or inadequate disclosure of product-related risks or product-related information resulted in an unsafe condition or injury to patients. The medical devices industry has been particularly prone to potential product liability claims that are inherent in the testing, manufacture and sale of medical devices and products for surgery procedures.

A product liability or other damages claim, product recall or product misuse, regardless of the outcome, could require us to spend significant time and money in litigation or to pay significant damages or costs, and could seriously harm our business. If our product liability insurance is inadequate to pay a damages award, we may have to pay the excess out of our cash reserves, which may harm our financial condition. Any product liability claim brought against us, with or without merit, could result in the increase of the costs we incur to obtain product liability insurance or our inability to secure product liability coverage in the future. If any of our products are found to cause tissue damage, motor impairment or other adverse effects, we could be subject to significant liability. Even a meritless or unsuccessful product liability claim could harm our reputation in the industry, impair our ability to sell one or more of our products in the future, result in significant legal fees and cause significant diversion of management’s attention from managing our business. A product liability or other claim, product recall, or product misuse involving any of our products, whether or not meritorious, could also materially and adversely harm our reputation and our ability to attract and retain customers.

In addition, any product liability claim brought against us, with or without merit, could result in an increase of our product liability insurance rates. Insurance coverage varies in cost and can be difficult to obtain, and we cannot guarantee that we will be able to obtain insurance coverage in the future on terms acceptable to us or at all.

Risks Related to the Ownership of our Class A Common Stock

Because of their significant stock ownership, our Executive Chairman, our chief executive officer, our other executive officers, and our directors and principal stockholders will be able to exert control over us and our significant corporate decisions.

Because of their significant stock ownership, our Executive Chairman, our chief executive officer, our other executive officers, and our directors will be able to exert substantial control over us and our significant corporate decisions. Based on an aggregate of 100,192,379 shares of our Class A and Class B common stock outstanding as of December 31, 2022, our executive officers and directors and their affiliates beneficially owned, in the aggregate, approximately 74.5% of the voting power of our outstanding capital stock. In

particular, as of December 31, 2022, David C. Paul, our Executive Chairman and his family members, controlled approximately 22.4% of our Class A and Class B common stock, representing approximately 74.3% of the voting power of our outstanding capital stock as of that date.

As a result, David C. Paul has, and these persons acting together have, the ability to significantly influence or determine the outcome of all matters submitted to our stockholders for approval, including the election and removal of directors and any merger, consolidation, or sale of all or substantially all of our assets. Furthermore, as of December 31, 2022, we had 192,602,552 shares of Class B common stock available for issuance. This amount exceeds 5% of our outstanding common stock, meaning our Board of Directors ("Board") could issue Class B common stock without necessarily triggering the automatic conversion of that Class B common stock to Class A common stock that, pursuant to our charter, will occur when any holder's shares of Class B common stock represents less than 5% of the aggregate number of all outstanding shares of our common stock, thereby further concentrating the voting power of our capital stock in a limited number of stockholders.

The interests of our executive officers, directors and principal stockholders might not coincide with the interests of the other holders of our capital stock. This concentration of ownership may harm the value of our Class A common stock by, among other things:

delaying, deferring or preventing a change in control of our company;
impeding a merger, consolidation, takeover or other business combination involving our company; or
causing us to enter into transactions or agreements that are not in the best interests of all stockholders.

We are a "controlled company" within the meaning of the New York Stock Exchange Rules, and we take, and intend to continue to take, advantage of exemptions from certain corporate governance requirements.

David C. Paul, alone, and our management, directors and significant stockholders, collectively, beneficially own a majority of the voting power of our outstanding common stock. Under the New York Stock Exchange Rules, a company of which more than 50% of the voting power is held by an individual, group or another company is a "controlled company" and may elect not to comply with certain corporate governance requirements, including the requirement that a majority of our directors be independent, as defined in the New York Stock Exchange Rules, and the requirement that our compensation and nominating and corporate governance committees consist entirely of independent directors. We rely, and intend to continue to rely, on the "controlled company" exemption under the New York Stock Exchange Rules. As a result, a majority of the members of our Board may not be independent directors and our nominating and corporate governance and compensation committees will not consist entirely of independent directors. Accordingly, while we remain a controlled company and during any transition period following a time when we are no longer a controlled company, you will not have the same protections afforded to stockholders of companies that are subject to all of the New York Stock Exchange's corporate governance requirements.

Our Board is authorized to issue and designate shares of our preferred stock in additional series without stockholder approval.

Our amended and restated certificate of incorporation authorizes our Board, without the approval of our stockholders, to issue 35 million shares of our preferred stock, subject to limitations prescribed by applicable law, rules and regulations and the provisions of our amended and restated certificate of incorporation, as shares of preferred stock in series, and to establish from time to time the number of shares to be included in each such series, and to fix the designation, powers, preferences and rights of the shares of each such series and the qualifications, limitations or restrictions thereof. The powers, preferences and rights of these additional series of preferred stock may be senior to or on parity with our Class A common stock, which may reduce its value.

Anti-takeover provisions in our organizational documents and Delaware law may discourage or prevent a change of control, even if an acquisition would be beneficial to our stockholders, which could depress the price of our Class A common stock and prevent attempts by our stockholders to replace or remove our current management.

Our amended and restated certificate of incorporation and amended and restated bylaws contain other provisions that could delay or prevent a change of control of our company or changes in our Board that our stockholders might consider favorable.

In addition, we are subject to the provisions of Section 203 of the Delaware General Corporation Law regulating corporate takeovers, which may restrict or prohibit certain business combination transactions with stockholders owning 15% or more of our outstanding voting stock, including discouraging takeover attempts that might result in a premium over the market price for shares of our Class A common stock.

Section 203 and other provisions in our amended and restated certificate of incorporation, amended and restated bylaws and Delaware law could make it more difficult for stockholders or potential acquirers to obtain control of our Board or initiate actions that are opposed by our then-current Board, including delay or impede a merger, tender offer, or proxy contest involving our company. The existence of these provisions could negatively affect the price of our Class A common stock and limit opportunities for you to realize value in a corporate transaction.

General Risk Factors

If we do not successfully implement our business strategy, our business and results of operations will be adversely affected.

Our business strategy was formed based on assumptions that might prove wrong. We believe that various demographics and industry-specific trends will help drive growth in our markets and our business, but these demographics and trends are uncertain. Actual demand for our products could differ materially from projected demand if our assumptions regarding these factors prove to be incorrect or do not materialize, or if alternative treatments to those offered by our products gain widespread acceptance.

We may not be able to successfully implement our business strategy. To implement our business strategy, we need to, among other things, strengthen our brand, develop and introduce new musculoskeletal surgery products, find new applications for and improve our existing products, obtain regulatory clearance or approval for new products and applications and educate surgeons about the clinical and cost benefits of our products, all of which we believe could increase acceptance of our products by surgeons. Our strategy of focusing exclusively on the medical devices market may limit our ability to grow. In addition, we are seeking to increase our sales and, in order to do so, will need to commercialize additional products and expand our direct and distributor sales forces in existing and new territories, all of which could result in our becoming subject to additional or different domestic and foreign regulatory requirements, with which we may not be able to comply. Moreover, even if we successfully implement our business strategy, our operating results may not improve or may decline. We may decide to alter or discontinue aspects of our business strategy and may adopt different strategies due to business or competitive factors not currently foreseen, such as new medical technologies that would make our products obsolete. Any failure to implement our business strategy may adversely affect our business, results of operations and financial condition.

If we fail to properly manage our anticipated growth, our business could suffer.

Our rapid growth has placed, and will continue to place, a significant strain on our management and on our operational and financial resources and systems. Failure to manage our growth effectively could cause us to over-invest or under-invest in infrastructure, and result in losses or weaknesses in our infrastructure, which could materially adversely affect us. Additionally, our anticipated growth will increase the demands placed on our suppliers, resulting in an increased need for us to carefully monitor for quality assurance. Any failure by us to manage our growth effectively could have an adverse effect on our ability to achieve our development and commercialization goals.

Fluctuations in insurance cost and availability could adversely affect our profitability or our risk management profile.

We hold a number of insurance policies, including product liability insurance, directors' and officers' liability insurance, property insurance, health insurance and workers' compensation insurance. If the costs of maintaining adequate insurance coverage increase significantly in the future, our operating results could be materially adversely affected. Likewise, if any of our current insurance coverage should become unavailable to us or become economically impractical, we would be required to operate our business without indemnity from commercial insurance providers. If we operate our business without insurance, we could be responsible for paying claims or judgments against us that would have otherwise been covered by insurance, which could adversely affect our results of operations or financial condition.

We are exposed to the credit risk of some of our customers, which could result in material losses.

Our business is subject to the risk of nonpayment by our customers. We sell our Enabling Technologies products through various credit and installment payment arrangements. We may experience loss from a customer's failure to make payments according to the contractual terms.

Although we have systems in place to monitor and mitigate the associated risk, there can be no assurance that such systems will be effective in reducing the credit risk relating to the sale of our Enabling Technologies products. If the level of credit losses we experience in the future exceed our expectations, such losses could have a material adverse effect on our financial condition or results of operations.

The widespread outbreak of a communicable disease, or any other public health crisis, could adversely affect our financial condition and results of operations.

We could be negatively affected by the widespread outbreak of a communicable disease, or any other public health crisis that results in disruptions to hospitals and other healthcare facilities.

A novel strain of coronavirus was first identified in Wuhan, China in December 2019, and the disease caused by it, COVID-19, was subsequently declared a pandemic by the World Health Organization in March 2020. The continuing preventative and precautionary measures that hospitals and federal, state, local, and international governments have taken to mitigate the spread of the disease has led to restrictions on, disruptions in, and other related impacts on elective procedure rates.

Further, worldwide supply chain disruption relating to the COVID-19 pandemic has resulted in delays and component shortages that have and may continue to impact our ability to manufacture our products by extending our lead times. These disruptions may, among other things, impact our ability to satisfy customer demand, which could negatively impact our results of operations.

These challenges and restrictions will likely continue for the duration of the pandemic, which is uncertain, and could continue beyond the pandemic. Many jurisdictions are relaxing restrictions and resuming business operations, but a resurgence in infections or mutations of the coronavirus that causes COVID-19 could cause governments, hospitals, public institutions, or other authorities to reinstate such restrictions or impose additional restrictions. Given the dynamic nature of this situation, the Company cannot reasonably estimate the impacts of COVID-19 on our financial condition, results of operations or cash flows in the future. However, if a resurgence occurs and governments mandate restrictions, including restrictions on elective surgeries, we expect that it could have a material adverse impact on our revenue growth, operating profit and cash flow, lead to revised payment terms with certain of our customers, and change the effective tax rate driven by changes in the mix of earnings across the Company’s jurisdictions.

Item 1B. Unresolved Staff Comments

None.

Item 2. Properties

Our corporate headquarters are located in Audubon, Pennsylvania and owned by us. We own research and manufacturing facilities in Massachusetts, Pennsylvania and Texas, lease additional research facilities in Arizona and also own distribution centers in Heerlen, Netherlands and Brunssum, Netherlands to support our international operations. We maintain a distribution warehouse, along with sales and administrative offices in thirteen additional countries, all of which are leased.

Item 3. Legal Proceedings

We are involved in a number of proceedings, legal actions and claims. Such matters are subject to many uncertainties, and the outcomes of these matters are not within our control and may not be known for prolonged periods of time. In some actions, the claimants seek damages, as well as other relief, including injunctions prohibiting us from engaging in certain activities, which, if granted, could require significant expenditures and/or result in lost revenues. For further details on the material legal proceedings to which we are currently a party, please refer to **"Part II; Item 8. Financial Statements and Supplementary Data; Notes to Consolidated Financial Statements; Note 16. Commitments and Contingencies"** below.

In addition, we are subject to legal proceedings arising in the ordinary course of business.

Item 4. Mine Safety Disclosures

Not applicable.

PART II

Item 5. Market for the Registrant's Common Equity, Related Stockholder Matters and Issuer Purchases of Equity Securities

Class A Common Stock

Our Class A common stock trades on The New York Stock Exchange, under the symbol "GMED." We had approximately 36 stockholders of record as of February 17, 2023. We believe that the number of beneficial owners is substantially greater than the number of record holders because a large portion of our Class A common stock is held of record through brokerage firms in "street name."

Recent Sales of Unregistered Securities

None.

Issuer Purchases of Equity Securities

We repurchase shares of the Company's Class A common stock pursuant to the publicly announced share repurchase program authorized by the Board of Directors in March 2020 and the expansion of the stock repurchase plan authorized by the Board of Directors in March 2022.

The following table provides the activity related to share repurchases for the fourth quarter of 2022.

(***In thousands except for per share prices***)

Period	Total number of shares purchased [(a)]	Average price paid per share [(b)]	Total number of shares purchased as part of publicly announced plans or programs [(a)]	Approximate dollar value of shares that may yet be purchased under the plans or programs [(a)]
October 1, 2022 - October 31, 2022	—	$ —	—	$ 150,801
November 1, 2022 - November 30, 2022	—	—	—	150,801
December 1, 2022 - December 31, 2022	—	$ —	—	$ 150,801
Total	—		—	

(a) On March 11, 2020, our Board of Directors authorized a share repurchase program that allows for the repurchase up to $200 million of the Company's Class A common stock. On March 4, 2022, our Board of Directors authorized the expansion of the share repurchase program of the Company's Class A common stock by an additional $200 million. The shares may be purchased through privately negotiated or open market transactions. This program has no time limit and may be suspended for periods or discontinued at any time.
(b) Inclusive of an immaterial amount of commission fees.

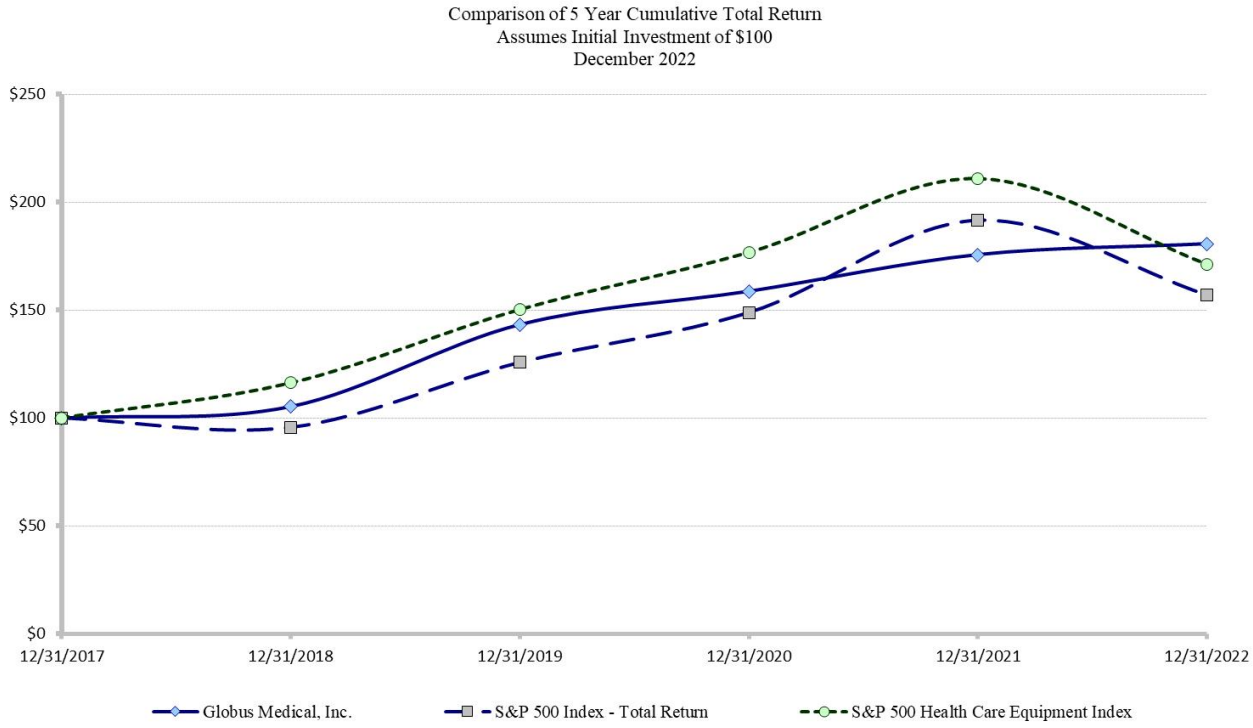
Dividend Policy

We have never declared or paid any cash dividends on our capital stock. We currently intend to retain future earnings, if any, for development of our business and do not anticipate that we will declare or pay cash dividends on our capital stock in the foreseeable future.

Comparative Stock Performance Graph

The following graph illustrates a comparison of the total cumulative stockholder return on our Class A common stock from December 31, 2017 through December 31, 2022 to two indices: the S&P 500 Index and the S&P 500 Health Care Equipment Index. The graph assumes an initial investment of $100 on December 31, 2017, in each of our Class A common stock, the stocks comprising the S&P 500 Index, and the stocks comprising the S&P 500 Health Care Equipment Index, including reinvestment of dividends, if any. Historical stockholder return is not necessarily indicative of the performance to be expected for any future periods.

The following graph and related information shall not be deemed "soliciting material" or to be "filed" with the SEC, nor shall such information be incorporated by reference into any future filing, except to the extent that we specifically incorporate it by reference into such filing.



	December 31,					
Company/Index	**2017**	**2018**	**2019**	**2020**	**2021**	**2022**
Globus Medical, Inc.	$100	$105	$143	$159	$176	$181
S&P 500 Index	$100	$96	$126	$149	$192	$157
S&P 500 Health Care Equipment	$100	$116	$150	$177	$211	$171

Item 7. Management's Discussion and Analysis of Financial Condition and Results of Operations

The following discussion and analysis of our financial condition and results of operations should be read together with our consolidated financial statements and related notes included elsewhere in this Annual Report. This discussion and analysis contains forward-looking statements that involve risks, uncertainties and assumptions. You should review the "Risk Factors" and "Cautionary Note Concerning Forward-Looking Statements" sections of this Annual Report for a discussion of certain of the important factors that could cause actual results to differ materially from the results described in or implied by the forward-looking statements described in the following discussion and analysis. Certain amounts and percentages in this discussion and analysis have been rounded for convenience of presentation.

Overview

We are an engineering-driven company with a history of rapidly developing and commercializing advanced products and procedures to address treatment challenges. With over 230 products on the market, we offer a comprehensive portfolio of innovative and differentiated technologies that treat a variety of musculoskeletal conditions. Although we manage our business globally within one operating segment, we separate our products into two major categories: Musculoskeletal Solutions and Enabling Technologies.

We continue to monitor the evolution and impact of COVID-19 and evaluate the guidance from domestic and international authorities, including federal, state and local public health authorities regarding COVID-19, and we may need to make changes to our business based on their recommendations. In these circumstances, there may be developments outside our control requiring us to adjust our operating plan. As such, the Company cannot reasonably estimate the ongoing impacts of COVID-19 on our financial condition, results of operations or cash flows in the future. However, if a resurgence occurs and governments mandate restrictions, including restrictions on elective surgeries, we do expect that it may have a material adverse impact on our sales, results of operations, and cash flows, revised payment terms with certain of our customers, and a change in effective tax rate driven by changes in the mix of earnings across the Company's jurisdictions.

We are focused on continuing to navigate the challenges presented by COVID-19 and believe we are in a strong position to continue to sustain and grow our business.

Product Categories

While we group our products into two categories, Musculoskeletal Solutions and Enabling Technologies, they are not limited to a particular technology, platform or surgical approach. Instead, our goal is to offer a comprehensive product suite that can be used to safely and effectively treat patients based on their specific anatomy and condition, and is customized to the surgeon's training and surgical preference.

Musculoskeletal Solutions

Our Musculoskeletal Solutions consist primarily of implantable devices, biologics, accessories, and unique surgical instruments used in an expansive range of spinal, orthopedic and neurosurgical procedures. Musculoskeletal disorders are a leading driver of healthcare costs worldwide. Disorders range in severity from mild pain and loss of feeling to extreme pain and paralysis. These disorders are primarily caused by degenerative and congenital conditions, deformity, tumors and traumatic injuries. Treatment alternatives for musculoskeletal disorders range from non-operative conservative therapies to surgical interventions depending on the pathology. Conservative therapies include bed rest, medication, casting, bracing, and physical therapy. When conservative therapies are not indicated, or fail to provide adequate quality of life improvements, surgical interventions may be used. Surgical treatments for musculoskeletal disorders can be instrumented, which include the use of implants, or non-instrumented, which forego the use of hardware but may include biologics.

Enabling Technologies

Our Enabling Technologies are comprised of INR solutions for assisted surgery which are advanced computer-assisted intelligent systems designed to enhance a surgeon's capabilities, and ultimately improve patient care and reduce radiation exposure for all involved, by streamlining surgical procedures to be safer, less invasive, and more accurate. The market for our Enabling Technologies in spine and orthopedic surgery is still in the infancy stage and consists primarily of imaging, navigation and robotic systems. In spine, a majority of these technologies are limited to surgical planning and assistance in implant placement for increased accuracy and time savings with less intraoperative radiation exposure to the patient and surgical staff. As our Enabling Technologies become more fully integrated with our Musculoskeletal Solutions, a continued rise in adoption is expected. Furthermore, we believe as new technologies such as augmented reality and artificial intelligence are introduced, Enabling Technologies have the potential to transform the way surgery is performed and most importantly, continue to improve patient outcomes.

Geographic Information

To date, the primary market for our products has been the United States, where we sell our products through a combination of direct sales representatives employed by us and distributor sales representatives employed by exclusive independent distributors, who distribute our products for a commission that is generally based on a percentage of sales. We believe there is significant opportunity to strengthen our position in the U.S. market by increasing the size of our U.S. sales force and we intend to add additional direct and distributor sales representatives in the future.

During the year ended December 31, 2022, international net sales accounted for approximately 14.8% of our total net sales. We have sold our products in approximately 53 countries other than the United States through a combination of sales representatives employed by us and exclusive international distributors. We believe there are significant opportunities for us to increase our presence in both existing and new international markets through the continued expansion of our direct and distributor sales forces and through the commercialization of additional products.

Seasonality

Our business is generally not seasonal in nature. However, sales of Musculoskeletal Solutions products may be influenced by summer vacation and winter holiday periods during which we have experienced fewer surgeries taking place, as well as more surgeries taking place later in the year when patients have met the deductibles under insurance plans. Sales of our Enabling Technologies products may be influenced by longer capital purchase cycles and the timing of budget approvals for major capital purchases.

Components of our Results of Operations

We manage our business globally within one operating segment, which is consistent with how our management reviews our business, makes investment and resource allocation decisions and assesses operating performance.

Net Sales

We sell implants and related disposables, primarily to hospitals, for use by surgeons to treat musculoskeletal disorders. We generally place surgical sets, which contain our implants, disposables, surgical instruments and cases, in the field with our sales representatives, and the surgical sets are maintained either with our sales representatives or at our hospital customers that purchase the surgical sets used in surgeries. We recognize revenue when the implants and related disposables have been implanted or used in a surgery, or for sets that are sold directly, when title to the goods and risk of loss are transferred to the customer and there are no remaining performance obligations which affect the customer’s final acceptance of the sale.

We generally recognize INR solutions revenue when control transfers to the customer, which occurs at the time the product is shipped or delivered. Depending on the terms of the arrangement, we may also defer the recognition of a portion of the consideration as we satisfy future performance obligations related to the provision of maintenance and support.

Cost of Goods Sold

While we have increased our in-house implant product manufacturing capacity and assemble our INR systems in-house, we also have products manufactured by third-party suppliers. Substantially all of our suppliers manufacture our products in the United States. Our cost of goods sold consists primarily of costs from our in-house manufacturing, costs of products purchased from third-party suppliers, excess and obsolete inventory charges, depreciation of surgical instruments and cases, royalties, shipping, inspection and related costs incurred in making our products available for sale or use.

Research and Development Expenses

Research and development expenses primarily consist of engineering, product development, clinical and regulatory expenses, consulting services, outside prototyping services, internal and external research activities, materials, depreciation, and other costs associated with development of our products. Research and development expenses also include personnel and consultants’ compensation, stock-based compensation expense, and acquired research in process with no alternative future use. We expense research and development costs as they are incurred.

We expect to incur additional research and development costs as we continue to develop new products. These costs will increase in absolute terms as we continue to expand our product pipeline and add personnel.

Selling, General and Administrative Expenses

Selling, general and administrative expenses primarily consist of salaries, benefits and other related costs, including stock-based compensation, for personnel employed in sales, marketing, finance, legal, compliance, administrative, information technology, medical education and training, quality and human resource departments. Our selling, general and administrative expenses also include commissions, generally based on a percentage of sales, to direct sales representatives and distributors. We expect selling, general and administrative expenses will increase in absolute terms with the continued expansion of our sales force and commercialization of our current and pipeline products. We plan to hire more personnel to support the growth of our business.

Provision for Litigation

We record a provision for litigation settlements when a loss is known or considered probable and the amount can be reasonably estimated and in the case of a favorable settlement, income when realized.

Amortization of Intangibles

We amortize finite lived intangible assets over the period of estimated benefit using the straight-line method. Indefinite lived intangible assets are tested for impairment annually or whenever events or circumstances indicate that the carrying amount of the asset (asset group) may not be recoverable. If impairment is indicated, we measure the amount of the impairment loss as the amount by which the carrying amount exceeds the fair value of the asset. Fair value is generally determined using a discounted future cash flow analysis.

Acquisition Related Costs

Acquisition related costs represent: the change in fair value of business-acquisition-related contingent consideration; costs related to integrating recently acquired businesses, including but not limited to costs to exit or convert contractual obligations, severance, and information system conversion; and specific costs related to the consummation of the acquisition process such as banker fees, legal fees, and other acquisition related professional fees.

Income Tax Provision

We are taxed at the rates applicable within each jurisdiction. The composite income tax rate, tax provisions, deferred tax assets and deferred tax liabilities will vary according to the jurisdiction in which profits arise. Tax laws are complex and subject to different interpretations by management and the respective governmental taxing authorities, and require us to exercise judgment in determining our income tax provision, our deferred tax assets and liabilities, and the valuation allowance recorded against our net deferred tax assets.

Deferred tax assets and liabilities are determined using the enacted tax rates in effect for the years in which those tax assets are expected to be realized. A valuation allowance is established when it is more likely than not that the future realization of all or some of the deferred tax assets will not be achieved.

Critical Accounting Policies and Estimates

The preparation of the consolidated financial statements requires us to make assumptions, estimates and judgments that affect the reported amounts of assets and liabilities, the disclosures of contingent assets and liabilities as of the date of the consolidated financial statements, and the reported amounts of sales and expenses during the reporting periods. Certain of our more critical accounting policies require the application of significant judgment by management in selecting the appropriate assumptions for calculating financial estimates. By their nature, these judgments are subject to an inherent degree of uncertainty. On an ongoing basis, we evaluate our judgments, including but not limited to those related to inventories, recoverability of long-lived assets and the fair value of our common stock. We use historical experience and other assumptions as the basis for our judgments and making these estimates. Because future events and their effects cannot be determined with precision, actual results could differ significantly from these estimates. Any changes in those estimates will be reflected in our consolidated financial statements as they occur. While our significant accounting policies are more fully described in **“Part II; Item 8. Financial Statements and Supplementary Data; Notes to Consolidated Financial Statements; Note 2. Summary of Significant Accounting Policies”** below in this Annual Report, we believe that the following accounting policies and estimates are most critical to a full understanding and evaluation of our reported financial results. The critical accounting policies addressed below reflect our most significant judgments and estimates used in the preparation of our consolidated financial statements. We have reviewed these critical accounting policies with the audit committee of our Board.

Revenue Recognition. Revenue is recognized upon transfer of control of promised products or services to customers in an amount that reflects the consideration we expect to receive in exchange for those products or services. Sales and other taxes we collect concurrent with revenue-producing activities are excluded from revenue. For purposes of disclosure, we disaggregate our revenue into two categories, Musculoskeletal Solutions and Enabling Technologies. Our Musculoskeletal Solutions products consist primarily of the implantable devices, disposables, and unique instruments used in an expansive range of spine, orthopedic trauma, hip, knee and extremity

procedures. The majority of our Musculoskeletal Solutions contracts have a single performance obligation and revenue is recognized at a point in time. Our Enabling Technologies products are advanced hardware and software systems, and related technologies, that are designed to enhance a surgeon's capabilities and streamline surgical procedures by making them less invasive, more accurate, and more reproducible to improve patient care. The majority of our Enabling Technologies product contracts contain multiple performance obligations, including maintenance and support, and revenue is recognized as we fulfill each performance obligation. When contracts have multiple performance obligations, we allocate the contract's transaction price to each performance obligation using our best estimate of the standalone selling price of each distinct good or service in the contract. Our policy is to classify shipping and handling costs billed to customers as sales and the related expenses as cost of goods sold.

Excess and Obsolete Inventory. Inventories are stated at the lower of cost or net realizable value. Cost is determined on a first-in, first-out basis. The majority of our inventory is finished goods and we utilize both in-house manufacturing and third-party suppliers to produce our products. We periodically evaluate the carrying value of our inventories in relation to our estimated forecast of product demand, which takes into consideration the estimated life cycle of product releases. When quantities on hand exceed estimated sales forecasts, we record a write-down for such excess inventories. Once inventory has been written down, it creates a new cost basis for inventory that is not subsequently written up.

The need to maintain substantial levels of inventory increases the risk of carrying excess inventory. Many of our Musculoskeletal Solutions products come in sets which feature components in a variety of sizes so that the implant or device may be customized to the patient's needs. In order to market our Musculoskeletal Solutions products effectively, we must often maintain and provide surgeons and hospitals with surgical sets, back-up products and products of different sizes. For each surgery, fewer than all of the components of the set are used, and therefore certain portions of the set may be considered excess inventory since they are not likely to be used. One of our primary business goals is to focus on continual product innovation. Though we believe this provides us with a competitive advantage, it also increases the risk that our products will become excess or obsolete inventory prior to sale or prior to the end of their anticipated useful lives. When we introduce new products or next-generation products, we may be required to take charges for excess and obsolete inventory that have a significant impact on the value of our inventory or on our operating results.

Fair Value Measurements. Fair value is defined as the price that would be received for an asset or paid to transfer a liability (an exit price) in the principal or most advantageous market for the asset or the liability in an orderly transaction between market participants on the measurement date. Additionally, a fair value hierarchy was established that prioritizes the inputs to valuation techniques used to measure fair value. The hierarchy gives the highest priority to unadjusted quoted prices in active markets for identical assets and liabilities and the lowest priority to unobservable inputs. The level within the fair value hierarchy is based on the lowest level of any input that is significant to the fair value measurement.

Our assets and liabilities measured at fair value on a recurring basis are classified and disclosed in one of the following three categories:

Level 1—quoted prices (unadjusted) in active markets for identical assets and liabilities;

Level 2—observable inputs other than quoted prices in active markets for identical assets and liabilities; and

Level 3—unobservable inputs in which there is little or no market data available, which require the reporting entity to use significant unobservable inputs or valuation techniques.

The purchase price of business acquisitions is primarily allocated to the tangible and identifiable intangible assets acquired and liabilities assumed based on their estimated fair values on the acquisition date, with the excess recorded as goodwill. We utilize Level 3 inputs in the determination of the initial fair value.

Contingent consideration represents contingent milestone, performance and revenue-sharing payment obligations related to acquisitions and is measured at fair value, based on significant inputs not observable in the market, which represents a Level 3 measurement within the fair value hierarchy. The valuation of contingent consideration uses assumptions we believe would be made by a market participant. We assess these assumptions on an ongoing basis as additional data impacting the assumptions is obtained. The fair value of contingent consideration is recorded in business acquisition liabilities on our consolidated balance sheets, and the changes in the fair value of contingent consideration are recognized in acquisition related costs in the consolidated statements of operations and comprehensive income. The fair value of contingent restricted stock unit ("RSU") grants are recorded as additional paid-in capital in the consolidated balance sheet on the day of the grant due to the remote likelihood of forfeiture.

Goodwill and Intangible Assets. Goodwill represents the excess purchase price over the fair values of the identifiable assets acquired less the liabilities assumed. Goodwill is tested for impairment at least annually. Goodwill is tested for impairment at the reporting unit level by comparing the reporting unit's carrying amount to the fair value of the reporting unit. The fair values are estimated using an income and discounted cash flow approach. We perform our annual impairment test for goodwill in the fourth quarter of each

year. We consider qualitative indicators of the fair value of a reporting unit when it is unlikely that a reporting unit has impaired goodwill. During the years ended December 31, 2022, 2021, and 2020, we did not record any impairment charges related to goodwill.

Intangible assets consist of purchased in-process research and development ("IPR&D"), developed technology, supplier network, patents, customer relationships, re-acquired rights, and non-compete agreements. Intangible assets with finite useful lives are amortized over the period of estimated benefit using the straight-line method and estimated useful lives ranging from one to twenty-one years. Intangible assets are tested for impairment annually or whenever events or circumstances indicate that a carrying amount of an asset (asset group) may not be recoverable. If an impairment is indicated, we measure the amount of the impairment loss as the amount by which the carrying amount exceeds the fair value of the asset. Fair value is generally determined using a discounted future cash flow analysis. There were no impairments of finite-lived intangible assets during the years ended December 31, 2022, 2021, or 2020.

IPR&D has an indefinite life and is not amortized until completion of the project at which time the IPR&D becomes an amortizable asset. If the related project is not completed in a timely manner, we may have an impairment related to the IPR&D, calculated as the excess of the asset's carrying value over its fair value. There were no impairments of IPR&D during the years ended December 31, 2022, 2021, or 2020.

Long-Lived Assets. We periodically evaluate the recoverability of the carrying amount of long-lived assets, which include property and equipment, as well as whenever events or changes in circumstances indicate that the carrying amount of an asset group may not be fully recoverable. An impairment is assessed when the undiscounted future cash flows from the use and eventual disposition of an asset group are less than its carrying value. If an impairment is indicated, we measure the amount of the impairment loss as the amount by which the carrying amount exceeds the fair value of the asset group. Our fair value methodology is based on quoted market prices, if available. If quoted market prices are not available, an estimate of fair value is made based on prices of similar assets or other valuation techniques including present value techniques. During the years ended December 31, 2022, 2021, or 2020, we did not record any impairment charges related to long-lived assets.

Stock-Based Compensation Expense. The cost of employee and non-employee director awards is measured at the grant date fair value of the award and is recognized as expense over the requisite service period, which is generally the vesting period of the equity award. Compensation expense for awards includes the impact of forfeiture in the period when they occur.

We estimate the fair value of stock options utilizing the Black-Scholes option-pricing model. Inputs to the Black-Scholes model include our stock price, expected volatility, expected term, risk-free interest rate and expected dividends. Expected volatility is based on the historical volatility of the Company's common stock over the most recent period commensurate with the estimated expected term of the Company's stock options offering period which is derived from historical experience. The risk-free interest rate assumption is based on observed interest rates of U.S. Treasury securities appropriate for the expected terms of the stock options. The dividend yield assumption is based on the history and expectation of no dividend payouts. The fair value of restricted stock units is estimated on the day of grant based on the closing price of the Company's common stock.

We expect to continue to grant stock options in the future, and to the extent that we do, our actual stock-based compensation expense recognized may increase.

Legal Proceedings. We are involved in a number of proceedings, legal actions, and claims. Such matters are subject to many uncertainties, and the outcomes of these matters are not within our control and may not be known for prolonged periods of time. In some actions, the claimants seek damages, as well as other relief, including injunctions prohibiting us from engaging in certain activities, which, if granted, could require significant expenditures and/or result in lost revenues. We record a liability in the consolidated financial statements for these actions when a loss is considered probable and the amount can be reasonably estimated. If the reasonable estimate of a probable loss is a range, and no amount within the range is a better estimate than any other, the minimum amount of the range is accrued. If a loss is reasonably possible but not known or probable, and can be reasonably estimated, the estimated loss or range of loss is disclosed. In most cases, significant judgment is required to estimate the amount and timing of a loss to be recorded. We expense legal costs related to loss contingencies as incurred. While it is not possible to predict the outcome for these matters, we believe it is possible that costs associated with them could have a material adverse impact on our consolidated earnings, financial position or cash flows.

Income Taxes. We recognize deferred tax assets and liabilities for the future tax consequences attributable to differences between the financial statement carrying amounts of existing assets and liabilities and their respective tax bases. We measure deferred tax assets and liabilities using enacted tax rates expected to apply to taxable income in the year in which such items are expected to be received or settled. We recognize the effect on deferred tax assets and liabilities of a change in tax rates in the period that includes the enactment date. We establish a valuation allowance to offset any deferred tax assets if, based upon available evidence, it is more likely than not that some or all of the deferred tax assets will not be realized.

While we believe that our tax positions are fully supportable, there is a risk that certain positions could be challenged successfully. In these instances, we look to establish reserves. If we determine that a tax position is more likely than not of being

sustained upon audit, based solely on the technical merits of the position, we recognize the benefit. We measure the benefit by determining the amount that has likelihood greater than 50% of being realized upon settlement. We presume that all tax positions will be examined by a taxing authority with full knowledge of all relevant information. We regularly monitor our tax positions, tax assets and tax liabilities. We reevaluate the technical merits of our tax positions and recognize an uncertain tax benefit or reverse a previously recorded tax benefit when (i) a tax audit is completed, (ii) applicable tax law, including a tax case or legislative guidance, changes or (iii) the statute of limitations expires. Significant judgment is required in accounting for tax reserves.

Results of Operations

Year Ended December 31, 2022 Compared to the Year Ended December 31, 2021

Net Sales

The following table sets forth, for the periods indicated, our net sales by geography expressed as dollar amounts and the changes in sales between the specified periods expressed in dollar amounts and as percentages:

	Year Ended December 31,		Change	
(In thousands, except percentages)	**2022**	**2021**	**$**	**%**
United States	$ 871,939	$ 819,571	$ 52,368	6.4%
International	150,904	138,531	12,373	8.9%
Total net sales	$ 1,022,843	$ 958,102	$ 64,741	6.8%

In the United States, the increase in net sales of $52.4 million was due primarily to increased spine product sales resulting from penetration in existing territories and an increase in sales volume of enabling technologies.

International net sales increased by $12.4 million, which was due primarily to increased spine product sales resulting from penetration in existing territories and sales volume of enabling technologies, partially offset by lower sales in Japan due to the transition of our sales force composition.

Cost of Goods Sold

	Year Ended December 31,		Change	
(In thousands, except percentages)	**2022**	**2021**	**$**	**%**
Cost of goods sold	$ 263,725	$ 239,223	$ 24,502	10.2%
Percentage of net sales	25.8%	25.0%		

The increase in cost of goods sold was primarily due to increased volume and product mix and unfavorable freight trends. These increases were partially offset by lower write-downs of excess and obsolete inventory and depreciation costs.

Research and Development Expenses

	Year Ended December 31,		Change	
(In thousands, except percentages)	**2022**	**2021**	**$**	**%**
Research and development	$ 73,015	$ 97,346	$ (24,331)	-25.0%
Percentage of net sales	7.1%	10.2%		

The decrease in research and development expenses was due primarily to $34.3 million of acquired IPR&D for the year ending December 31, 2021, which was expensed because we determined that it did not have an alternative future use. The remaining change is driven by an increase in personnel related expenses due to our continued investment in product development.

Selling, General and Administrative Expenses

	Year Ended December 31,		Change	
(In thousands, except percentages)	**2022**	**2021**	**$**	**%**
Selling, general and administrative	$ 432,117	$ 408,149	$ 23,968	5.9%
Percentage of net sales	42.2%	42.6%		

The increase in selling, general and administrative expenses was primarily due to an increase in commission expenses resulting from higher product sales and an increase in travel and meeting expenses.

Provision for Litigation

	Year Ended December 31,		Change	
(In thousands, except percentages)	**2022**	**2021**	**$**	**%**
Provision for litigation	$ 2,341	$ 5,921	$ (3,580)	-60.5%
Percentage of net sales	0.2%	0.6%		

The provision for litigation includes accruals for potential legal settlements for the year ending December 31, 2022 and 2021.

Amortization of Intangibles

	Year Ended December 31,		Change	
(In thousands, except percentages)	**2022**	**2021**	**$**	**%**
Amortization of intangibles	$ 17,735	$ 18,526	$ (791)	-4.3%
Percentage of net sales	1.7%	1.9%		

The decrease in the amortization of intangibles is primarily due to individual intangible assets reaching their full amortization.

Acquisition Related Costs

	Year Ended December 31,		Change	
(In thousands, except percentages)	**2022**	**2021**	**$**	**%**
Acquisition related costs	$ 5,959	$ 16,984	$ (11,025)	-64.9%
Percentage of net sales	0.6%	1.8%		

Acquisition related costs decreased due to lower unfavorable changes in fair value of business acquisition liabilities, driven by changes in market conditions and the achievement of certain performance conditions.

Other Income/(expense), Net

	Year Ended December 31,		Change	
(In thousands, except percentages)	**2022**	**2021**	**$**	**%**
Other income, net	$ 15,068	$ 8,454	$ 6,614	78.2%
Percentage of net sales	1.5%	0.9%		

The increase in other income, net was due primarily to higher interest income from higher yields on marketable securities from external market factors and a non-recurring recovery related to damaged product during the year ended December 31, 2022.

Income Tax Provision

	Year Ended December 31,		Change	
(In thousands, except percentages)	**2022**	**2021**	**$**	**%**
Income tax provision	$ 52,850	$ 31,216	$ 21,634	69.3%
Effective income tax rate	21.7%	17.3%		

The increase in the effective income tax rate was primarily the result of the lower effect of windfall tax benefits from stock-based compensation compared to the prior year.

A discussion of our Results of Operations for the year ended December 31, 2021 can be found in "**Part II, Item 7. Management's Discussion and Analysis of Financial Condition and Results of Operations: Results of Operations; Year Ended December 31, 2021 Compared to the Year Ended December 31, 2020.**" on our Form 10-K filed on February 17, 2022.

Liquidity and Capital Resources

Our principal source of liquidity is cash flow from operating activities as well as our cash and cash equivalents and marketable securities, which we believe will provide sufficient funding for us to meet our liquidity requirements for the foreseeable future. Our principal liquidity requirements are to fund working capital, research and development, including clinical trials, capital expenditures primarily related to investment in surgical sets required to maintain and expand our business, and potential future business or intellectual property acquisitions. We expect to continue to make investments in surgical sets as we launch new products, increase the size of our U.S. sales force, and expand into international markets. We may, however, require additional liquidity as we continue to execute our business strategy. To the extent that we require new sources of liquidity, we may consider incurring debt, including borrowing against our existing credit facility, convertible debt instruments, and/or raising additional funds through an equity offering. The sale of additional equity may result in dilution to our stockholders. There is no assurance that we will be able to secure such additional funding on terms acceptable to us, or at all.

In August 2020, we entered into a credit agreement with Citizens Bank, N.A. (the "Credit Agreement") that provides a revolving credit facility permitting borrowings up to $125.0 million (as amended, the "Revolving Credit Facility"), and has a termination date of August 2, 2023. The Revolving Credit Facility includes up to a $25.0 million sub limit for letters of credit. As of December 31, 2022, we have not borrowed under the Revolving Credit Facility.

The following table summarizes our outstanding contractual obligations as of December 31, 2022. There have been no material changes in our remaining contractual obligations since that time.

		Payments Due by Period			
(In thousands)	Total	Less than 1 Year	1-3 Years	3-5 Years	More than 5 Years
Operating leases	$ 6,316	$ 2,653	$ 3,168	$ 348	$ 147
Purchase obligations [1]	7,629	4,629	2,500	500	—
Total [2] *	$ 13,945	$ 7,282	$ 5,668	$ 848	$ 147

(1) Reflects minimum annual volume commitments to purchase inventory under certain of our supplier contracts.

(2) In connection with certain acquisitions completed in 2011 through 2022, we have certain contingent consideration obligations payable to the sellers in these transactions upon the achievement of certain regulatory and sales milestones. For further information, see **Notes 3**, and **6** to the consolidated financial statements in "**Part II; Item 8. Financial Statements and Supplementary Data.**"

* Excludes contributions to pension and other post-employment benefit plans, uncertain tax positions, non-current tax liabilities and royalty obligations for which we cannot make a reliable estimate of the period of cash settlement. For further information, see **Notes 14**, and **16** to the consolidated financial statements in "**Part II; Item 8. Financial Statements and Supplementary Data.**"

Cash Flows

The following table summarizes, for the periods indicated, cash flows from operating, investing and financing activities:

	Year Ended December 31,			2022-2021 Change	2021-2020 Change
(In thousands)	2022	2021	2020	$	$
Net cash provided by/(used in) operating activities	$ 178,468	$ 276,274	$ 198,793	$ (97,806)	$ 77,481
Net cash provided by/(used in) investing activities	(110,362)	(375,939)	(117,322)	265,577	(258,617)
Net cash provided by/(used in) financing activities	(109,962)	54,147	(38,663)	(164,109)	92,810
Effect of foreign exchange rate changes on cash	(747)	(810)	865	63	(1,675)
Increase (decrease) in cash and cash equivalents	$ (42,603)	$ (46,328)	$ 43,673	$ 3,725	$ (90,001)

Cash Provided by Operating Activities

The net cash provided by operating activities for the year ended December 31, 2022 was primarily cash flow from net income, partially offset by outflows for inventories and unfavorable changes in accounts receivable.

Cash Used in Investing Activities

The cash used in investing activities for the year ended December 31, 2022 was primarily from purchases of property and equipment and the acquisition of businesses, net of cash acquired and purchases of intangible and other assets.

Cash Provided by Financing Activities

The net cash used in financing activities for the year ended December 31, 2022 was primarily the result of the repurchase of Class A common stock, partially offset by inflows from proceeds from exercise of stock options.

A discussion of our Cash Flows for the year ended December 31, 2021 can be found in "**Part II, Item 7. Management's Discussion and Analysis of Financial Condition and Results of Operations: Results of Operations; Cash Flows.**" on our Form 10-K filed on February 17, 2022.

Recently Issued Accounting Pronouncements

For further details on recently issued accounting pronouncements, please refer to **"Part II; Item 8. Financial Statements and Supplementary Data; Notes to Consolidated Financial Statements; Note 2. Summary of Significant Accounting Policies; (v) Recently Issued Accounting Pronouncements."**

Item 7A. Quantitative and Qualitative Disclosure About Market Risk

Market risk is the potential loss arising from adverse changes in the financial markets. We are exposed to various market risks, which may result in potential losses arising from adverse changes in market rates, such as interest rates and foreign exchange rates. We do not enter into derivatives or other financial instruments for trading or speculative purposes and do not believe we are exposed to material market risk with respect to our cash, cash equivalents and marketable debt securities.

Interest Rate Risk

Our exposure to interest rate risk relates primarily to our revolving credit facility and our investments in cash equivalents and marketable debt securities. At December 31, 2022, we had no debt outstanding under our revolving credit facility and therefore were not exposed to interest rate risk with respect to interest payable under that facility.

In general, our investments in cash equivalents and marketable debt securities are governed by our investment policy, which has been approved by our Board of Directors. Our investment policy seeks to preserve the value of capital, consistent with maximizing return on our investments while maintaining adequate liquidity. To achieve our investment objectives, we maintain a portfolio of various holdings, types and maturities and invest in securities that meet or exceed our investment policy standards, focusing on high credit quality debt securities.

We continue to be exposed to interest rate risk related to our cash equivalents and marketable securities. Generally, our interest rate risk with respect to these investments is limited due to yields earned. Changes in the overall level of interest rates affect the interest income generated by our cash, cash equivalents and marketable securities. Our investment policy limits the amount of credit exposure to any one issue, issuer or type of security. Our securities all have effective maturity dates within three years of the date of purchase and are designated as available for sale. As of December 31, 2022, we believe that a hypothetical 10% change in interest rates would not materially affect the underlying valuation of our marketable securities.

Foreign Exchange Risk

We operate in countries outside of the United States and, therefore, we are exposed to foreign currency risk. Most of our direct sales outside of the United States are invoiced in local currencies. We expect the percentage of our sales and operating expenses denominated in foreign currencies will increase in the foreseeable future as we continue to expand into international markets. When our sales or expenses are not denominated in U.S. dollars, a fluctuation in exchange rates could affect our net income. We do not currently hold derivatives to hedge our exposure to foreign currency exchange rate fluctuations; however, we may choose to hedge our exposure in the future.

Item 8. Financial Statements and Supplementary Data

GLOBUS MEDICAL, INC.
INDEX TO CONSOLIDATED FINANCIAL STATEMENTS

REPORT OF INDEPENDENT REGISTERED PUBLIC ACCOUNTING FIRM

To the shareholders and the Board of Directors of Globus Medical, Inc.

Opinion on the Financial Statements

We have audited the accompanying consolidated balance sheets of Globus Medical, Inc. and subsidiaries (the "Company") as of December 31, 2022 and 2021, the related consolidated statements of operations and comprehensive income, equity, and cash flows for each of the three years in the period ended December 31, 2022, and the related notes and the schedule listed in the Index at Item 15(a)(2) (collectively referred to as the "financial statements"). In our opinion, the financial statements present fairly, in all material respects, the financial position of the Company as of December 31, 2022 and 2021, and the results of its operations and its cash flows for each of the three years in the period ended December 31, 2022, in conformity with accounting principles generally accepted in the United States of America.

We have also audited, in accordance with the standards of the Public Company Accounting Oversight Board (United States) (PCAOB), the Company's internal control over financial reporting as of December 31, 2022, based on criteria established in Internal Control — Integrated Framework (2013) issued by the Committee of Sponsoring Organizations of the Treadway Commission and our report dated February 21, 2023, expressed an unqualified opinion on the Company's internal control over financial reporting.

Basis for Opinion

These financial statements are the responsibility of the Company's management. Our responsibility is to express an opinion on the Company's financial statements based on our audits. We are a public accounting firm registered with the PCAOB and are required to be independent with respect to the Company in accordance with the U.S. federal securities laws and the applicable rules and regulations of the Securities and Exchange Commission and the PCAOB.

We conducted our audits in accordance with the standards of the PCAOB. Those standards require that we plan and perform the audit to obtain reasonable assurance about whether the financial statements are free of material misstatement, whether due to error or fraud. Our audits included performing procedures to assess the risks of material misstatement of the financial statements, whether due to error or fraud, and performing procedures that respond to those risks. Such procedures included examining, on a test basis, evidence regarding the amounts and disclosures in the financial statements. Our audits also included evaluating the accounting principles used and significant estimates made by management, as well as evaluating the overall presentation of the financial statements. We believe that our audits provide a reasonable basis for our opinion.

Critical Audit Matter

The critical audit matter communicated below is a matter arising from the current-period audit of the financial statements that was communicated or required to be communicated to the audit committee and that (1) relates to accounts or disclosures that are material to the financial statements and (2) involved our especially challenging, subjective, or complex judgments. The communication of critical audit matters does not alter in any way our opinion on the financial statements, taken as a whole, and we are not, by communicating the critical audit matter below, providing a separate opinion on the critical audit matter or on the accounts or disclosures to which it relates.

Inventories Valuation – Refer to Notes 2 and 7 to the financial statements

Critical Audit Matter Description

Inventories are recorded at the lower of cost or net realizable value. Management periodically evaluates the carrying value of inventories in relation to the forecasts of product demand, which takes into consideration the estimated life cycle of product releases. When quantities on hand exceed sales forecasts, a write-down is recorded for such excess inventories. Changes in assumptions of product demand could have a significant impact on the amount of write-down recorded.

Given the inherent uncertainty in forecasting product demand, including the impact of product releases, auditing the reasonableness of management’s estimates and assumptions required a high degree of auditor judgment and an increased extent of effort.

How the Critical Audit Matter Was Addressed in the Audit

Our procedures related to management’s forecasts of product demand used to record a write-down for excess and obsolete inventories included the following, among others:

- We tested the effectiveness of controls over management's inventory valuation model, including those over management's development and approval of product demand forecasts.
- We evaluated management's ability to accurately forecast product demand by comparing actual results to management's historical estimates.
- We selected a sample of products and verified that the product demand forecasts were supported by historical sales data and other current information.
- We performed corroborative inquiries with the personnel responsible for product development and sales forecasting to evaluate the reasonableness of the product demand forecasts.
- We tested the mathematical accuracy of management's calculations.

/s/ DELOITTE & TOUCHE LLP

Philadelphia, Pennsylvania
February 21, 2023

We have served as the Company's auditor since 2017.

REPORT OF INDEPENDENT REGISTERED PUBLIC ACCOUNTING FIRM

To the shareholders and the Board of Directors of Globus Medical, Inc.

Opinion on Internal Control over Financial Reporting

We have audited the internal control over financial reporting of Globus Medical, Inc. and subsidiaries (the "Company") as of December 31, 2022, based on criteria established in Internal Control — Integrated Framework (2013) issued by the Committee of Sponsoring Organizations of the Treadway Commission (COSO). In our opinion, the Company maintained, in all material respects, effective internal control over financial reporting as of December 31, 2022, based on criteria established in Internal Control — Integrated Framework (2013) issued by COSO.

We have also audited, in accordance with the standards of the Public Company Accounting Oversight Board (United States) (PCAOB), the consolidated financial statements as of and for the year ended December 31, 2022, of the Company and our report dated February 21, 2023, expressed an unqualified opinion on those financial statements.

Basis for Opinion

The Company's management is responsible for maintaining effective internal control over financial reporting and for its assessment of the effectiveness of internal control over financial reporting, included in the accompanying Management's Report on Internal Control over Financial Reporting. Our responsibility is to express an opinion on the Company's internal control over financial reporting based on our audit. We are a public accounting firm registered with the PCAOB and are required to be independent with respect to the Company in accordance with the U.S. federal securities laws and the applicable rules and regulations of the Securities and Exchange Commission and the PCAOB.

We conducted our audit in accordance with the standards of the PCAOB. Those standards require that we plan and perform the audit to obtain reasonable assurance about whether effective internal control over financial reporting was maintained in all material respects. Our audit included obtaining an understanding of internal control over financial reporting, assessing the risk that a material weakness exists, testing and evaluating the design and operating effectiveness of internal control based on the assessed risk, and performing such other procedures as we considered necessary in the circumstances. We believe that our audit provides a reasonable basis for our opinion.

Definition and Limitations of Internal Control over Financial Reporting

A company's internal control over financial reporting is a process designed to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external purposes in accordance with generally accepted accounting principles. A company's internal control over financial reporting includes those policies and procedures that (1) pertain to the maintenance of records that, in reasonable detail, accurately and fairly reflect the transactions and dispositions of the assets of the company; (2) provide reasonable assurance that transactions are recorded as necessary to permit preparation of financial statements in accordance with generally accepted accounting principles, and that receipts and expenditures of the company are being made only in accordance with authorizations of management and directors of the company; and (3) provide reasonable assurance regarding prevention or timely detection of unauthorized acquisition, use, or disposition of the company's assets that could have a material effect on the financial statements.

Because of its inherent limitations, internal control over financial reporting may not prevent or detect misstatements. Also, projections of any evaluation of effectiveness to future periods are subject to the risk that controls may become inadequate because of changes in conditions, or that the degree of compliance with the policies or procedures may deteriorate.

/s/ DELOITTE & TOUCHE LLP

Philadelphia, Pennsylvania
February 21, 2023

GLOBUS MEDICAL, INC. AND SUBSIDIARIES
CONSOLIDATED BALANCE SHEETS

(In thousands, except share and per share values)	December 31, 2022	December 31, 2021
ASSETS		
Current assets:		
Cash and cash equivalents	**$ 150,466**	$ 193,069
Short-term marketable securities	**295,592**	250,378
Accounts receivable, net of allowances of $4,724 and $4,962, respectively	**213,247**	164,436
Inventories	**298,981**	237,001
Prepaid expenses and other current assets	**20,997**	18,417
Income taxes receivable	**4,061**	1,215
Total current assets	**983,344**	864,516
Property and equipment, net of accumulated depreciation of $343,036 and $305,575, respectively	**243,729**	221,076
Long-term marketable securities	**495,852**	562,475
Intangible assets, net	**63,574**	68,660
Goodwill	**197,471**	179,708
Other assets	**43,311**	36,334
Deferred income taxes	**48,845**	24,494
Total assets	**$ 2,076,126**	$ 1,957,263
LIABILITIES AND EQUITY		
Current liabilities:		
Accounts payable	**$ 36,101**	$ 21,955
Accrued expenses	**94,705**	91,168
Income taxes payable	**990**	1,046
Business acquisition liabilities	**13,308**	11,770
Deferred revenue	**14,100**	12,025
Payable to broker	**—**	2,200
Total current liabilities	**159,204**	140,164
Business acquisition liabilities, net of current portion	**54,950**	58,755
Deferred income taxes	**1,779**	4,314
Other liabilities	**13,820**	12,642
Total liabilities	**229,753**	215,875
Commitments and contingencies (Note 15)		
Equity:		
Class A common stock; $0.001 par value. Authorized 500,000,000 shares; issued and outstanding 77,762,282 and 79,113,916 shares at December 31, 2022 and December 31, 2021, respectively	**78**	79
Class B common stock; $0.001 par value. Authorized 275,000,000 shares; issued and outstanding 22,430,097 and 22,430,097 shares at December 31, 2022 and December 31, 2021, respectively	**22**	22
Additional paid-in capital	**630,952**	553,787
Accumulated other comprehensive income/(loss)	**(24,630)**	(6,772)
Retained earnings	**1,239,951**	1,194,272
Total equity	**1,846,373**	1,741,388
Total liabilities and equity	**$ 2,076,126**	$ 1,957,263

See accompanying notes to consolidated financial statements.

GLOBUS MEDICAL, INC. AND SUBSIDIARIES
CONSOLIDATED STATEMENTS OF OPERATIONS AND COMPREHENSIVE INCOME

(In thousands, except per share amounts)	Year Ended December 31, 2022	2021	2020
Net sales	**$ 1,022,843**	$ 958,102	$ 789,042
Cost of goods sold	**263,725**	239,223	217,463
Gross profit	**759,118**	718,879	571,579
Operating expenses:			
Research and development	**73,015**	97,346	84,519
Selling, general and administrative	**432,117**	408,149	354,757
Provision for litigation	**2,341**	5,921	9
Amortization of intangibles	**17,735**	18,526	16,831
Acquisition related costs	**5,959**	16,984	4,030
Total operating expenses	**531,167**	546,926	460,146
Operating income/(loss)	**227,951**	171,953	111,433
Other income/(expense), net			
Interest income/(expense), net	**14,233**	9,297	13,952
Foreign currency transaction gain/(loss)	**(1,020)**	(1,423)	(279)
Other income/(expense)	**1,855**	580	793
Total other income/(expense), net	**15,068**	8,454	14,466
Income/(loss) before income taxes	**243,019**	180,407	125,899
Income tax provision	**52,850**	31,216	23,614
Net income/(loss)	**$ 190,169**	$ 149,191	$ 102,285
Other comprehensive income/(loss), net of tax:			
Unrealized gain/(loss) on marketable securities	**(14,040)**	(6,054)	1,402
Foreign currency translation gain/(loss)	**(3,818)**	(4,673)	5,451
Total other comprehensive income/(loss), net of tax	**(17,858)**	(10,727)	6,853
Comprehensive income/(loss)	**$ 172,311**	$ 138,464	$ 109,138
Earnings per share:			
Basic	**$ 1.89**	$ 1.48	$ 1.04
Diluted	**$ 1.85**	$ 1.44	$ 1.01
Weighted average shares outstanding:			
Basic	**100,469**	100,734	98,580
Diluted	**102,643**	103,623	100,971

See accompanying notes to consolidated financial statements.

GLOBUS MEDICAL, INC. AND SUBSIDIARIES
CONSOLIDATED STATEMENTS OF EQUITY

(In thousands)	Class A Common Stock Shares	Class A Common Stock $	Class B Common Stock Shares	Class B Common Stock $	Additional paid-in capital	Accumulated other comprehensive income/(loss)	Retained earnings	Total
Balance at December 31, 2021	79,114	$ 79	22,430	$ 22	$ 553,787	$ (6,772)	$ 1,194,272	$ 1,741,388
Stock-based compensation	—	—	—	—	8,353	—	—	8,353
Grant of restricted stock units	—	—	—	—	196	—	—	196
Exercise of stock options	184	—	—	—	7,746	—	—	7,746
Comprehensive income/(loss)	—	—	—	—	—	(10,395)	38,084	27,689
Balance at March 31, 2022	79,298	$ 79	22,430	$ 22	$ 570,082	$ (17,167)	$ 1,232,356	$ 1,785,372
Stock-based compensation	—	—	—	—	8,020	—	—	8,020
Grant of restricted stock units	—	—	—	—	220	—	—	220
Exercise of stock options	90	—	—	—	3,585	—	—	3,585
Comprehensive income/(loss)	—	—	—	—	—	(8,201)	54,590	46,389
Repurchase and retirement of common stock	(2,351)	(2)	—	—	—	—	(144,491)	(144,493)
Balance at June 30, 2022	77,037	$ 77	22,430	$ 22	$ 581,907	$ (25,368)	$ 1,142,455	$ 1,699,093
Stock-based compensation	—	—	—	—	8,434	—	—	8,434
Grant of restricted stock units	—	—	—	—	1,116	—	—	1,116
Exercise of stock options	364	—	—	—	14,895	—	—	14,895
Comprehensive income/(loss)	—	—	—	—	—	(6,858)	47,431	40,573
Balance at September 30, 2022	77,401	$ 77	22,430	$ 22	$ 606,352	$ (32,226)	$ 1,189,886	$ 1,764,111
Stock-based compensation	—	—	—	—	8,659	—	—	8,659
Grant of restricted stock units	—	—	—	—	453	—	—	453
Exercise of stock options	361	1	—	—	15,488	—	—	15,489
Comprehensive income/(loss)	—	—	—	—	—	7,596	50,065	57,661
Balance at December 31, 2022	77,762	$ 78	22,430	$ 22	$ 630,952	$ (24,630)	$ 1,239,951	$ 1,846,373

See accompanying notes to consolidated financial statements.

(In thousands)	Class A Common Stock Shares	Class A Common Stock $	Class B Common Stock Shares	Class B Common Stock $	Additional paid-in capital	Accumulated other comprehensive income/(loss)	Retained earnings	Total
Balance at December 31, 2020	77,284	$ 77	22,430	$ 22	$ 457,161	$ 3,955	$ 1,045,082	$ 1,506,297
Stock-based compensation	—	—	—	—	7,883	—	—	7,883
Grant of restricted stock units	—	—	—	—	163	—	—	163
Exercise of stock options	303	1	—	—	9,100	—	—	9,101
Comprehensive income/(loss)	—	—	—	—	—	(5,779)	45,329	39,550
Balance at March 31, 2021	77,587	$ 78	22,430	$ 22	$ 474,307	$ (1,824)	$ 1,090,411	$ 1,562,994
Stock-based compensation	—	—	—	—	7,788	—	—	7,788
Grant of restricted stock units	—	—	—	—	197	—	—	197
Exercise of stock options	716	1	—	—	26,496	—	—	26,497
Comprehensive income/(loss)	—	—	—	—	—	252	41,545	41,797
Balance at June 30, 2021	78,303	$ 79	22,430	$ 22	$ 508,788	$ (1,572)	$ 1,131,956	$ 1,639,273
Stock-based compensation	—	—	—	—	7,621	—	—	7,621
Grant of restricted stock units	—	—	—	—	1,311	—	—	1,311
Exercise of stock options	727	—	—	—	24,335	—	—	24,335
Comprehensive income/(loss)	—	—	—	—	—	(1,482)	47,211	45,729
Balance at September 30, 2021	79,030	$ 79	22,430	$ 22	$ 542,055	$ (3,054)	$ 1,179,167	$ 1,718,269
Stock-based compensation	—	—	—	—	7,962	—	—	7,962
Grant of restricted stock units	—	—	—	—	207	—	—	207
Exercise of stock options	84	—	—	—	3,563	—	—	3,563
Comprehensive income/(loss)	—	—	—	—	—	(3,718)	15,105	11,387
Balance at December 31, 2021	79,114	$ 79	22,430	$ 22	$ 553,787	$ (6,772)	$ 1,194,272	$ 1,741,388

See accompanying notes to consolidated financial statements.

GLOBUS MEDICAL, INC. AND SUBSIDIARIES
CONSOLIDATED STATEMENTS OF EQUITY (Continued)

(In thousands)	Class A Common Stock Shares	Class A Common Stock $	Class B Common Stock Shares	Class B Common Stock $	Additional paid-in capital	Accumulated other comprehensive income/(loss)	Retained earnings	Total
Balance at December 31, 2019	77,394	$ 77	22,431	$ 22	$ 357,320	$ (2,898)	$ 1,047,931	$ 1,402,452
Cumulative effects of adoption of accounting standards	—	—	—	—	—	—	(468)	(468)
Stock-based compensation	—	—	—	—	6,902	—	—	6,902
Exercise of stock options	190	1	—	—	5,762	—	—	5,763
Comprehensive income/(loss)	—	—	—	—	—	(3,368)	25,949	22,581
Repurchase and retirement of common stock	(1,920)	(2)	—	—	—	—	(73,862)	(73,864)
Balance at March 31, 2020	75,664	$ 76	22,431	$ 22	$ 369,984	$ (6,266)	$ 999,550	$ 1,363,366
Stock-based compensation	—	—	—	—	7,426	—	—	7,426
Exercise of stock options	434	—	(1)	—	10,201	—	—	10,201
Comprehensive income/(loss)	—	—	—	—	—	7,564	(20,837)	(13,273)
Repurchase and retirement of common stock	(771)	(1)	—	—	—	—	(30,804)	(30,805)
Balance at June 30, 2020	75,327	$ 75	22,430	$ 22	$ 387,611	$ 1,298	$ 947,909	$ 1,336,915
Stock-based compensation	—	—	—	—	7,007	—	—	7,007
Exercise of stock options	915	1	—	—	28,156	—	—	28,157
Comprehensive income/(loss)	—	—	—	—	—	909	44,216	45,125
Balance at September 30, 2020	76,242	$ 76	22,430	$ 22	$ 422,774	$ 2,207	$ 992,125	$ 1,417,204
Stock-based compensation	—	—	—	—	5,995	—	—	5,995
Grant of restricted stock units	—	—	—	—	191	—	—	191
Exercise of stock options	1,042	1	—	—	28,201	—	—	28,202
Comprehensive income/(loss)	—	—	—	—	—	1,748	52,957	54,705
Balance at December 31, 2020	77,284	$ 77	22,430	$ 22	$ 457,161	$ 3,955	$ 1,045,082	$ 1,506,297

See accompanying notes to consolidated financial statements.

GLOBUS MEDICAL, INC. AND SUBSIDIARIES
CONSOLIDATED STATEMENTS OF CASH FLOWS

(In thousands)	Year Ended December 31, 2022	2021	2020
Cash flows from operating activities:			
Net income	**$ 190,169**	$ 149,191	$ 102,285
Adjustments to reconcile net income to net cash provided by operating activities:			
Acquired in-process research and development	**150**	34,312	24,418
Depreciation and amortization	**68,252**	69,867	62,874
Amortization of premium (discount) on marketable securities	**5,389**	2,781	587
Write-down for excess and obsolete inventories, net	**6,400**	6,143	17,741
Stock-based compensation expense	**32,810**	30,586	27,073
Allowance for doubtful accounts	**(1)**	1,200	2,960
Change in fair value of business acquisition liabilities	**5,132**	16,807	2,674
Change in deferred income taxes	**(22,223)**	(17,615)	(4,338)
(Gain)/loss on disposal of assets, net	**299**	464	809
Payment of business acquisition related liabilities	**(2,647)**	(210)	(700)
(Increase)/decrease in:			
Accounts receivable	**(50,843)**	(25,895)	10,696
Inventories	**(61,745)**	(11,971)	(50,111)
Prepaid expenses and other assets	**(10,292)**	(6,178)	(11,088)
Increase/(decrease) in:			
Accounts payable	**14,418**	3,684	(6,352)
Accrued expenses and other liabilities	**6,087**	17,896	17,608
Income taxes payable/receivable	**(2,887)**	5,212	1,657
Net cash provided by/(used in) operating activities	**178,468**	276,274	198,793
Cash flows from investing activities:			
Purchases of marketable securities	**(419,534)**	(622,359)	(223,540)
Maturities of marketable securities	**312,221**	227,908	134,462
Sales of marketable securities	**102,433**	109,898	68,897
Purchases of property and equipment	**(74,047)**	(56,898)	(63,658)
Acquisition of businesses, net of cash acquired and purchases of intangible and other assets	**(31,435)**	(34,488)	(33,483)
Net cash provided by/(used in) investing activities	**(110,362)**	(375,939)	(117,322)
Cash flows from financing activities:			
Payment of business acquisition liabilities	**(7,185)**	(9,349)	(6,316)
Proceeds from exercise of stock options	**41,716**	63,496	72,322
Repurchase of common stock	**(144,493)**	—	(104,669)
Net cash provided by/(used in) financing activities	**(109,962)**	54,147	(38,663)
Effect of foreign exchange rates on cash	**(747)**	(810)	865
Net increase/(decrease) in cash and cash equivalents	(42,603)	(46,328)	43,673
Cash and cash equivalents at beginning of period	**193,069**	239,397	195,724
Cash and cash equivalents at end of period	**$ 150,466**	$ 193,069	$ 239,397
Supplemental disclosures of cash flow information:			
Income taxes paid	**$ 77,823**	$ 45,027	$ 25,437
Purchases of property and equipment included in accounts payable and accrued expenses	**$ 7,423**	$ 4,551	$ 4,210

See accompanying notes to consolidated financial statements.

GLOBUS MEDICAL, INC. AND SUBSIDIARIES
NOTES TO CONSOLIDATED FINANCIAL STATEMENTS

NOTE 1. BACKGROUND

(a) The Company

Globus Medical, Inc., together with its subsidiaries, is a medical device company that develops and commercializes healthcare solutions with a mission to improve the quality of life of patients with musculoskeletal disorders. We are primarily focused on implants that promote healing in patients with musculoskeletal disorders, including the use of a robotic guidance and navigation system and products to treat patients who have experienced orthopedic traumas.

We are an engineering-driven company with a history of rapidly developing and commercializing advanced products and procedures to assist surgeons in effectively treating their patients and to address new treatment options. With over 230 products launched, we offer a comprehensive portfolio of innovative and differentiated technologies that address a variety of musculoskeletal pathologies, anatomies, and surgical approaches.

We are headquartered in Audubon, Pennsylvania, and market and sell our products through our exclusive sales force in the United States, as well as within North, Central & South America, Europe, Asia, Africa and Australia. The sales force consists of direct sales representatives and distributor sales representatives employed by exclusive independent distributors.

The terms the “Company,” “Globus,” “we,” “us” and “our” refer to Globus Medical, Inc. and, where applicable, our consolidated subsidiaries.

(b) COVID-19 Pandemic Impact

In March 2020, the World Health Organization declared the novel strain of coronavirus (“COVID-19”) a global pandemic and recommended containment and mitigation measures worldwide. COVID-19 has significantly impacted the economic conditions in the U.S. and globally as federal, state and local governments react to the public health crisis, creating significant uncertainties in the economy.

Although the Company cannot reasonably estimate the length or severity of the impact that COVID-19 will have on its financial results, the Company may experience a material adverse impact on its sales, results of operations, and cash flows in 2023 should there be a resurgence impacting hospitals, surgical facilities, our internal operations, or our suppliers.

In response to these developments, the Company will continue to monitor liquidity and cash flow. The Company has the ability to borrow from its existing credit facility, if needed, although we do not expect to do so due to our cash, cash equivalents and short-term marketable securities balances.

NOTE 2. SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES

(a) Basis of Presentation

The accompanying consolidated financial statements have been prepared in conformity with U.S. generally accepted accounting principles (“U.S. GAAP”).

(b) Principles of Consolidation

The accompanying consolidated financial statements include the accounts of Globus and its wholly owned subsidiaries. All intercompany balances and transactions are eliminated in consolidation.

(c) Use of Estimates

The preparation of consolidated financial statements in conformity with U.S. GAAP requires management to make estimates and assumptions that affect the reported amounts of assets and liabilities and disclosures of contingent assets and liabilities at the date of the consolidated financial statements, and the reported amounts of revenues and expenses during the reporting period. We base our estimates, in part, on historical experience that management believes to be reasonable under the circumstances. Actual results could differ from those estimates. Estimates and assumptions are periodically reviewed and the effects of revisions are reflected in the consolidated financial statements in the period they are determined to be necessary.

Significant areas that require estimates include revenue recognition, intangible assets, business acquisition liabilities, allowance for doubtful accounts, stock-based compensation, reserves for excess and obsolete inventory, useful lives of assets, the outcome of litigation,

recoverability of intangible assets and income taxes. We are subject to risks and uncertainties due to changes in the healthcare environment, regulatory oversight, competition, and legislation that may cause actual results to differ from estimated results.

(d) Revenue Recognition

Revenue is recognized upon transfer of control of promised products or services to customers in an amount that reflects the consideration we expect to receive in exchange for those products or services. Sales and other taxes we collect concurrent with revenue-producing activities are excluded from revenue. For purposes of disclosure, we disaggregate our revenue into two categories, Musculoskeletal Solutions and Enabling Technologies. Our Musculoskeletal Solutions products consist primarily of the implantable devices, disposables, and unique instruments used in an expansive range of spine, orthopedic trauma, hip, knee and extremity procedures. The majority of our Musculoskeletal Solutions contracts have a single performance obligation and revenue is recognized at a point in time. Our Enabling Technologies products are advanced hardware and software systems, and related technologies, that are designed to enhance a surgeon's capabilities and streamline surgical procedures by making them less invasive, more accurate, and more reproducible to improve patient care. The majority of our Enabling Technologies product contracts contain multiple performance obligations, including maintenance and support, and revenue is recognized as we fulfill each performance obligation. When contracts have multiple performance obligations, we allocate the contract's transaction price to each performance obligation using our best estimate of the standalone selling price of each distinct good or service in the contract. Our policy is to classify shipping and handling costs billed to customers as sales and the related expenses as cost of goods sold.

Nature of Products and Services

A significant portion of our Musculoskeletal Solutions product revenue is generated from consigned inventory maintained at hospitals or with sales representatives. Revenue from the sale of consigned musculoskeletal products is recognized when we transfer control, which occurs at the time the product is used or implanted. For all other Musculoskeletal Solutions product transactions, we recognize revenue when we transfer title to the goods, provided there are no remaining performance obligations that can affect the customer's final acceptance of the sale.

Revenue from the sale of Enabling Technologies products is generally recognized when control transfers to the customer which occurs at the time the product is shipped or delivered. Any revenue related to the provision of maintenance and support is recognized as we satisfy the performance obligation. We use an observable price to determine the stand-alone selling price for each separate performance obligation.

Contract Balances

Timing of revenue recognition may differ from the timing of invoicing to customers. We record a receivable when revenue is recognized prior to invoicing, or deferred revenue when revenue is recognized subsequent to invoicing.

Deferred revenue is comprised mainly of unearned revenue related to the sales of certain Enabling Technologies products, which includes maintenance and support services. Maintenance and support services are generally invoiced annually, at the beginning of each contract period, and revenue is recognized ratably over the maintenance period. For the years ended December 31, 2022, 2021, and 2020, there was an immaterial amount of revenue recognized from previously deferred revenue.

(e) Concentrations of Credit Risk

Financial instruments, which potentially subject us to concentrations of credit risk, are primarily marketable securities and accounts receivable. Concentrations of credit risk with respect to accounts receivable are limited due to the large number of entities comprising our customer base. We perform ongoing credit evaluations of our customers and generally do not require collateral.

There was no customer that accounted for 10% or more of sales for the years ended December 31, 2022, 2021, and 2020, respectively.

(f) Cash, Cash Equivalents, and Restricted Cash

The Company considers all short-term, highly liquid investments with original maturities of 90 days or less at acquisition date to be cash equivalents. Cash equivalents, which consist of money market accounts, commercial paper and corporate debt securities are stated at fair value.

(g) Marketable Securities

Our marketable securities include municipal bonds, corporate debt securities, commercial paper, asset-backed securities, and securities of government, federal agency, and other sovereign obligations, and are classified as available-for-sale as of December 31, 2022 and 2021.

Short-term and long-term marketable securities are recorded at fair value on our consolidated balance sheets. Any change in fair value for available-for-sale securities, that do not result in recognition or reversal of an allowance for credit loss or write down, is recorded, net of taxes, as a component of accumulated other comprehensive income or loss on our consolidated balance sheets. Premiums and discounts are recognized over the life of the related security as an adjustment to yield using the straight-line method. Realized gains or losses from the sale of marketable securities are determined on a specific identification basis. Realized gains and losses, interest income and the amortization/accretion of premiums/discounts are included as a component of other income/(expense), net, on our consolidated statements of operations and comprehensive income. Interest receivable is recorded as a component of prepaid expenses and other current assets on our consolidated balance sheets.

We invest in securities that meet or exceed standards as defined in our investment policy. Our policy also limits the amount of credit exposure to any one issue, issuer or type of security. We review declines in the fair value of our securities to determine whether they are resulting from expected credit losses or other factors. If the assessment indicates a credit loss exists, we recognize any measured impairment as an allowance for credit loss in our consolidated statements of operations. Any other impairments not recorded through allowance for credit losses is recognized in our other comprehensive income.

(h) Fair Value Measurements

Assets and Liabilities That Are Measured at Fair Value on a Recurring Basis

Fair value is defined as the price that would be received for an asset or paid to transfer a liability (an exit price) in the principal or most advantageous market for the asset or the liability in an orderly transaction between market participants on the measurement date. Additionally, a fair value hierarchy was established that prioritizes the inputs to valuation techniques used to measure fair value. The hierarchy gives the highest priority to unadjusted quoted prices in active markets for identical assets and liabilities and the lowest priority to unobservable inputs. The level within the fair value hierarchy is based on the lowest level of any input that is significant to the fair value measurement.

Our assets and liabilities measured at fair value on a recurring basis are classified and disclosed in one of the following three categories:

Level 1—quoted prices (unadjusted) in active markets for identical assets and liabilities;

Level 2—observable inputs other than quoted prices in active markets for identical assets and liabilities; and

Level 3—unobservable inputs in which there is little or no market data available, which require the reporting entity to use significant unobservable inputs or valuation techniques.

Assets and Liabilities That Are Measured at Fair Value on a Nonrecurring Basis

The purchase price of business acquisitions is primarily allocated to the tangible and identifiable intangible assets acquired and liabilities assumed based on their estimated fair values on the acquisition date, with the excess recorded as goodwill. We utilize Level 3 inputs in the determination of the initial fair value.

Contingent consideration represents contingent milestone, performance and revenue-sharing payment obligations related to acquisitions and is measured at fair value, based on significant inputs that are not observable in the market, which represents a Level 3 measurement within the fair value hierarchy. The valuation of contingent consideration uses assumptions we believe would be made by a market participant. We assess these assumptions on an ongoing basis as additional data impacting the assumptions is obtained. The fair value of contingent consideration is recorded in business acquisition liabilities on our consolidated balance sheets, and changes in the fair value of contingent consideration is recognized in acquisition related costs in the consolidated statements of operations and comprehensive income. The fair value of contingent restricted stock unit (“RSU”) grants are recorded as additional paid-in capital in the consolidated balance sheet on the day of the grant due to the remote likelihood of forfeiture.

(i) Inventories

Inventories are stated at the lower of cost or net realizable value. Cost is determined on a first-in, first-out basis. The majority of our inventory is finished goods and we utilize both in-house manufacturing and third-party suppliers to produce our products. We periodically evaluate the carrying value of our inventories in relation to estimated forecasts of product demand, which takes into consideration the life cycle of product releases. When quantities on hand exceed estimated sales forecasts, we record a write-down for such excess inventories. Once inventory has been written down, it creates a new cost basis for inventory that is not subsequently written up.

(j) Property and Equipment

Property and equipment is recorded at cost less accumulated depreciation. Additions or improvements are capitalized, while repairs and maintenance are expensed as incurred. Depreciation is recognized using the straight-line method over the related useful lives of the assets.

When assets are sold or otherwise disposed of, the related property, equipment, and accumulated depreciation amounts are relieved from the accounts, and any gain or loss is recorded in the consolidated statements of operations and comprehensive income.

(k) Goodwill and Intangible Assets

Goodwill represents the excess of purchase price over the fair values of the identifiable assets acquired less the liabilities assumed in the acquisition of a business. Goodwill is tested for impairment at least annually or whenever events or circumstances indicate that a carrying amount may not be recoverable. Goodwill is tested for impairment at the reporting unit level by comparing the reporting unit's carrying amount to the fair value of the reporting unit. Fair values are estimated using an income and discounted cash flow approach. We perform our annual impairment test of goodwill in the fourth quarter of each year. We consider qualitative indicators of the fair value of a reporting unit when it is unlikely that a reporting unit has impaired goodwill. During the years ended December 31, 2022, 2021, and 2020, we did not record any impairment charges related to goodwill.

Intangible assets consist of purchased in-process research and development ("IPR&D"), developed technology, supplier network, patents, customer relationships, re-acquired rights, and non-compete agreements. Intangible assets with finite useful lives are amortized over the period of estimated benefit using the straight-line method and estimated useful lives ranging from one to twenty-one years. Intangible assets with finite useful lives are tested whenever events or circumstances indicate that a carrying amount of an asset (asset group) may not be recoverable. If an impairment is indicated, we measure the amount of the impairment loss as the amount by which the carrying amount exceeds the fair value of the asset. Fair value is generally determined using a discounted future cash flow analysis. There were no impairments of finite-lived intangible assets during the years ended December 31, 2022, 2021, and 2020.

IPR&D has an indefinite life and is not amortized until completion of the project at which time the IPR&D becomes an amortizable asset. Intangible assets with indefinite useful lives are tested for impairment annually or whenever events or circumstances indicate that a carrying amount of an asset (asset group) may not be recoverable. If the related project is not completed in a timely manner, we may have an impairment related to the IPR&D, calculated as the excess of the asset's carrying value over its fair value. There were no impairments of IPR&D during the years ended December 31, 2022, 2021, and 2020.

(l) Impairment of Long-Lived Assets

We periodically evaluate the recoverability of the carrying amount of long-lived assets, which include property and equipment, as well as whenever events or changes in circumstances indicate that the carrying amount of an asset group may not be fully recoverable. An impairment is assessed when the undiscounted future cash flows from the use and eventual disposition of an asset group are less than its carrying value. If an impairment is indicated, we measure the amount of the impairment loss as the amount by which the carrying amount exceeds the fair value of the asset group. Our fair value methodology is based on quoted market prices, if available. If quoted market prices are not available, an estimate of fair value is made based on prices of similar assets or other valuation techniques including present value techniques. During the years ended December 31, 2022, 2021, and 2020, we did not record any impairment charges related to long-lived assets.

(m) Cost of Goods Sold

Cost of goods sold consists primarily of costs from our manufacturing operations, costs of products purchased from third-party suppliers, reserves for excess and obsolete inventory, depreciation of surgical instruments and cases, royalties, shipping, inspection and related costs incurred in making our products available for sale or use.

(n) Research and Development

Research and development costs are expensed as incurred. Research and development costs include salaries, employee benefits, supplies, consulting services, clinical services and clinical trial costs, and facilities costs. Costs incurred in obtaining technology licenses and patents are charged immediately to research and development expense if the technology licensed has not reached technological feasibility and has no alternative future use.

(o) Stock-Based Compensation

The cost of employee and non-employee director awards is measured at the grant date fair value of the award and is recognized as expense over the requisite service period, which is generally the vesting period of the equity award. Compensation expense for awards includes the impact of forfeiture in the period when they occur.

We estimate the fair value of stock options utilizing the Black-Scholes option-pricing model. Inputs to the Black-Scholes model include our stock price, expected volatility, expected term, risk-free interest rate and expected dividends. Expected volatility is based on the historical volatility of the Company's common stock over the most recent period commensurate with the estimated expected term of the Company's stock options offering period which is derived from historical experience. The risk-free interest rate assumption is based on observed interest rates of U.S. Treasury securities appropriate for the expected terms of the stock options. The dividend yield assumption is based on the history and expectation of no dividend payouts. The fair value of restricted stock units is estimated on the day of grant based on the closing price of the Company's common stock.

(p) Provision for Litigation

We are involved in a number of proceedings, legal actions, and claims. Such matters are subject to many uncertainties, and the outcomes of these matters are not within our control and may not be known for prolonged periods of time. In some actions, the claimants seek damages, as well as other relief, including injunctions prohibiting us from engaging in certain activities, which, if granted, could require significant expenditures and/or result in lost revenues. We record a liability in the consolidated financial statements for these actions when a loss is considered probable and the amount can be reasonably estimated. If the reasonable estimate of a probable loss is a range, and no amount within the range is a better estimate than any other, the minimum amount of the range is accrued. If a loss is reasonably possible but not known or probable, and can be reasonably estimated, the estimated loss or range of loss is disclosed. In most cases, significant judgment is required to estimate the amount and timing of a loss to be recorded. We expense legal costs related to loss contingencies as incurred.

(q) Acquisition Related Costs

Acquisition related costs represents the change in fair value of business acquisition related contingent consideration; costs related to integrating recently acquired businesses including but not limited to costs to exit or convert contractual obligations, severance, and information system conversion; and specific costs related to the consummation of the acquisition process such as banker fees, legal fees, and other acquisition related professional fees.

(r) Foreign Currency Translation

The functional currency of our foreign subsidiaries is generally their local currency. Assets and liabilities of the foreign subsidiaries are translated at the period end currency exchange rate and revenues and expenses are translated at an average currency exchange rate for the period. The resulting foreign currency translation gains and losses are included as a component of accumulated other comprehensive income. Gains and losses arising from intercompany foreign transactions are included in other income, net on the consolidated statements of operations and comprehensive income.

(s) Income Taxes

Deferred tax assets and liabilities are recognized for the future tax consequences attributable to differences between the financial statement carrying amounts of existing assets and liabilities and their respective tax bases. Deferred tax assets and liabilities are measured using enacted tax rates expected to apply to taxable income in the year in which such items are expected to be recovered or settled. The effect on deferred tax assets and liabilities of a change in tax rates is recognized in the period that includes the enactment date. A valuation allowance is established to offset any deferred tax assets if, based upon available evidence, it is more likely than not that some or all of the deferred tax assets will not be realized.

Significant judgment is required in determining income tax provisions and in evaluating tax positions. We will establish additional provisions for income taxes when, despite the belief that tax positions are fully supportable, there remain certain positions that do not meet the minimum probability threshold that a tax position is more likely than not to be sustained upon examination by the taxing authority. In the normal course of business, we and our subsidiaries are examined by various federal, state, and foreign tax authorities. We regularly assess the potential outcomes of these examinations and any future examinations for the current or prior years in determining the adequacy of the provision for income taxes. We periodically assess the likelihood and amount of potential adjustments and adjust the income tax provision, the current tax liability, and deferred taxes in the period in which the facts that give rise to a revision become known.

(t) Recently Issued Accounting Pronouncements

None applicable.

(u) Recently Adopted Accounting Pronouncements

On March 12, 2020, the FASB issued ASU No. 2020-04, *Facilitation of the Effects of Reference Rate Reform on Financial Reporting*, which provides optional expedients and exceptions for applying generally accepted accounting principles to contract modifications and hedging relationships, subject to meeting certain criteria, that reference LIBOR or another reference rate expected to be discontinued. The ASU is effective for all entities as of March 12, 2020, and will apply, as later extended by ASU No. 2022-06, *Reference Rate Reform (Topic 848): Deferral of the Sunset Date of Topic 848*, through December 31, 2024. To date, we have had no impacts on our investment portfolio or our credit agreement with Citizens Bank, N.A. related to reference rate reform. We will continue to evaluate the impact this guidance could have on our consolidated financial statements and related disclosures.

In December 2019, the FASB issued ASU No. 2019-12, *Income Taxes (Topic 740): Simplifying the Accounting for Income Taxes* ("ASU 2019-12"), which is intended to simplify various aspects related to accounting for income taxes. ASU 2019-12 removes certain exceptions to the general principles in Topic 740 and also clarifies and amends existing guidance to improve consistent application. ASU 2019-12 is effective for fiscal years, and interim periods within those fiscal years, beginning after December 15, 2020, with early adoption permitted. We adopted ASU 2019-12 on January 1, 2021. This standard did not have a material impact on our financial position, results of operations and disclosures.

In June 2016, the Financial Accounting Standards Board (FASB) issued Accounting Standards Update (ASU) 2016-13, *Financial Instruments - Credit Losses (Topic 326): Measurement of Credit Losses on Financial Instruments.* ASU 2016-13 replaces the incurred loss impairment methodology for measuring and recognizing credit losses with a methodology that reflects expected credit losses and requires consideration of a broader range of reasonable and supportable information to inform credit loss estimates. This amendment is effective for fiscal years beginning after December 15, 2019. We adopted the updated guidance on January 1, 2020 on a prospective basis recording $0.5 million as a cumulative effect adjustment to retained earnings and as a result, prior period amounts were not adjusted. Adoption of the standard did not have a material impact on our financial position, results of operations, and disclosures.

NOTE 3. ASSET ACQUISITIONS AND BUSINESS COMBINATIONS

Asset Acquisitions

During the fourth quarter of 2021, the Company acquired substantially all the assets of Capstone Surgical Technologies, LLC ("Capstone"), which engages in the business of advanced drill and robotic surgery platforms. The purchase price consisted of $24.5 million of cash paid at closing, subject to net working capital and other post-closing adjustments, if applicable. The transaction also provides for additional consideration contingent upon the developed products obtaining approval from the U.S. Food and Drug Administration (the "FDA") of up to $15.0 million, and additional consideration contingent upon the achievement of certain performance obligations of up to $10.0 million. Contingent consideration is not recorded in an asset acquisition until the milestone is met.

Also during the fourth quarter of 2021, the Company acquired substantially all the assets of a company that engages in the development of technology for use in robotic surgery platforms which was not considered material to the consolidated financial statements during the periods presented. The purchase price consisted of $10.0 million of cash paid at closing and also provides for additional consideration contingent upon the achievement of certain performance obligations of $5.0 million. Contingent consideration is not recorded in an asset acquisition until the milestone is met.

During the second quarter of 2020, the Company acquired Synoste, a Finnish engineering company that specializes in the research and development of a limb lengthening system. The fair value of the net assets acquired was $25.3 million, and the consideration consisted of approximately $22.8 million of cash paid at closing plus $2.5 million of a contractual holdback obligation payable eighteen months from the closing date of the transaction, subject to net working capital and other post-closing adjustments, if applicable. During the fourth quarter of 2021, the contractual holdback and net working capital and other post-closing adjustments were settled for $2.7 million. The transaction also provides for additional consideration of $8.0 million contingent upon the developed product obtaining approval from the FDA within the third anniversary, or $4.0 million within the fourth anniversary of the acquisition closing date, respectively. Contingent consideration is not recorded in an asset acquisition until the milestone is met.

The Company accounted for all of these transactions as asset acquisitions as substantially all of the fair value of the assets acquired in each transaction was concentrated in a single identified asset, in-process research and development ("IPR&D") of the acquired technology, thus satisfying the requirements of the screen test in ASU 2017-1. At the date of the acquisitions, the Company determined that the development of the projects underway had not yet reached technological feasibility and that the research in process had no alternative future use. Accordingly,

the acquired IPR&D of $34.3 million and $24.4 million was charged to research and development expense in the consolidated statements of operations and comprehensive income for years ended 2021 and 2020, respectively.

Business Combinations

During the fourth quarter of 2022, the Company acquired the membership interests of Harvest Biologics LLC (the "Harvest Acquisition"), which engages in the business of selling systems that produce autologous biologics. The purchase price was a cash payment of $30 million, subject to post-closing adjustments, if applicable. The Company has included the financial results from the Harvest Acquisition in our consolidated financial statements from the acquisition date. At acquisition date, the preliminary fair value of the net assets acquired was $30.1 million. The purchase price consisted of approximately $30.0 million of cash paid at closing, plus $0.1 million of preliminary post-closing adjustments. The Company recorded identifiable net assets, based on their estimated fair values, for inventory of $3.0 million, goodwill of $14.2 million, customer relationships and other intangibles of $10.5 million with a weighted average useful life of 20 years, and developed technology of $2.4 million with a weighted average useful life of 8 years. The Company will finalize the purchase price allocation of the assets and liabilities acquired within one year from the date of acquisition.

During the second quarter of 2022, the Company completed one acquisition that was not considered material to the consolidated financial statements during the periods presented. This acquisition has been included in the condensed consolidated financial statements from the date of acquisition. The purchase price consisted of approximately $0.2 million of cash paid at closing and $4.4 million of contingent consideration payments, resulting in goodwill of $4.6 million based on the estimated fair values. The contingent payments for this acquisition are based upon achieving various performance milestones over a period of 10 years and are payable in a combination of cash and RSUs.

During 2021, the Company completed three acquisitions that were not considered material, individually or collectively, to the consolidated financial statements during the periods presented. Two acquisitions were completed in the third quarter, while the third acquisition was completed in the fourth quarter. These acquisitions have been included in the consolidated financial statements from the date of acquisition. The purchase price of the acquisition in the fourth quarter consisted of approximately $0.3 million of cash paid at closing and $13.0 million of contingent consideration payments, resulting in goodwill of $13.3 million based on the estimated fair values. The combined purchase price of the two acquisitions in the third quarter consisted of approximately $12.6 million of contingent consideration payments. The Company recorded other intangible assets of $1.6 million, with a weighted average useful life of 3.8 years, and goodwill of $11.0 million based on their estimated fair values. The contingent payments for all three acquisitions are based upon achieving various performance obligations over a period of 10 years and are payable in a combination of cash and RSUs.

During the fourth quarter of 2020, the Company completed two acquisitions that were not considered material, individually or collectively, to the overall consolidated financial statements during the periods presented. These acquisitions have been included in the consolidated financial statements from the date of acquisition. The combined purchase price consisted of approximately $1.5 million of cash paid at closing, plus $0.3 million of other liabilities and $33.2 million of contingent consideration payments. The contingent payments are based upon achieving various performance obligations over a period of 10 years, and are payable in a combination of cash and RSUs. The Company recorded other intangible assets of $8.8 million, with a weighted average useful life of 4.2 years, and goodwill of $26.2 million based on their fair values.

NOTE 4. NET SALES

The following table represents net sales by product category:

	Year Ended December 31,		
(In thousands)	**2022**	**2021**	**2020**
Musculoskeletal Solutions	$ 926,703	$ 876,780	$ 748,446
Enabling Technologies	96,140	81,322	40,596
Total net sales	$ 1,022,843	$ 958,102	$ 789,042

NOTE 5. MARKETABLE SECURITIES

The composition of our short-term and long-term marketable securities is as follows:

(In thousands)	December 31, 2022 Amortized Cost	Gross Unrealized Gains	Gross Unrealized Losses	Fair Value
Short-term:				
Municipal bonds	$ 83,279	$ 9	$ (1,680)	$ 81,608
Corporate debt securities	187,174	2	(3,438)	183,738
Commercial paper	5,583	—	(1)	5,582
Asset-backed securities	4,200	—	(181)	4,019
Government, federal agency, and other sovereign obligations	21,102	1	(458)	20,645
Total short-term marketable securities	$ 301,338	$ 12	$ (5,758)	$ 295,592
Long-term:				
Municipal bonds	$ 61,986	$ 44	$ (1,549)	$ 60,481
Corporate debt securities	268,524	72	(8,947)	259,649
Asset-backed securities	120,929	217	(2,795)	118,351
Government, federal agency, and other sovereign obligations	58,453	18	(1,100)	57,371
Total long-term marketable securities	$ 509,892	$ 351	$ (14,391)	$ 495,852

(In thousands)	December 31, 2021 Amortized Cost	Gross Unrealized Gains	Gross Unrealized Losses	Fair Value
Short-term:				
Municipal bonds	$ 66,379	$ 99	$ (11)	$ 66,467
Corporate debt securities	107,102	434	(65)	107,471
Commercial paper	38,252	2	(1)	38,253
Asset-backed securities	12,931	58	—	12,989
Government, federal agency, and other sovereign obligations	25,231	—	(33)	25,198
Total short-term marketable securities	$ 249,895	$ 593	$ (110)	$ 250,378
Long-term:				
Municipal bonds	$ 91,185	$ 4	$ (409)	$ 90,780
Corporate debt securities	324,492	351	(1,318)	323,525
Asset-backed securities	128,139	101	(578)	127,662
Government, federal agency, and other sovereign obligations	20,539	—	(31)	20,508
Total long-term marketable securities	$ 564,355	$ 456	$ (2,336)	$ 562,475

The short-term marketable securities have effective maturity dates of less than one year and the long-term marketable securities have effective maturity dates ranging from one to three years as of December 31, 2022 and 2021, respectively.

Purchases of marketable securities include amounts payable to brokers of $2.2 million as of December 31, 2021. Purchases of marketable securities included no amounts payable to brokers as of December 31, 2022.

NOTE 6. FAIR VALUE MEASUREMENTS

Assets and liabilities measured at fair value on a recurring basis as of December 31, 2022 and 2021, respectively included the following:

(In thousands)	Balance at December 31, 2022	Level 1	Level 2	Level 3
Assets:				
Cash equivalents	$ 17,655	$ 17,655	$ —	$ —
Municipal bonds	142,089	—	142,089	—
Corporate debt securities	443,387	—	443,387	—
Commercial paper	5,582	—	5,582	—
Asset-backed securities	122,370	—	122,369	—
Government, federal agency, and other sovereign obligations	78,016	—	78,016	—
Liabilities:				
Business acquisition liabilities	68,258	—	—	68,258

(In thousands)	Balance at December 31, 2021	Level 1	Level 2	Level 3
Assets:				
Cash equivalents	$ 26,684	$ 3,768	$ 22,916	$ —
Municipal bonds	157,247	—	157,247	—
Corporate debt securities	430,996	—	430,996	—
Commercial paper	38,253	—	38,253	—
Asset-backed securities	140,651	—	140,651	—
Government, federal agency, and other sovereign obligations	45,706	—	45,706	—
Liabilities:				
Business acquisition liabilities	70,525	—	—	70,525

Our marketable securities are classified as Level 2 within the fair value hierarchy, as we measure their fair value using quoted market prices for similar instruments and inputs such as actual trade data, benchmark yields, broker/dealer quotes and other similar data obtained from quoted market prices or independent pricing vendors.

Assets and Liabilities That Are Measured at Fair Value on a Nonrecurring Basis

Fair value of the revenue-based business acquisition liabilities was determined using a discounted cash flow model and an option pricing methodology. The significant inputs of such models are not observable in the market, such as certain financial metric growth rates, volatility and discount rates, market price risk adjustment, projections associated with the applicable milestone, the interest rate, and the related probabilities and payment structure in the contingent consideration arrangement. The following are the significant unobservable inputs used in the two valuation techniques:

Unobservable input	Range			Weighted Average*
Revenue risk premium	2.4%	-	4.9%	2.8%
Revenue volatility	14.0%	-	15.8%	14.8%
Discount rate	5.9%	-	8.5%	6.7%
Projected year of payment	2022	-	2032	

** The weighted average rates were calculated based on the relative fair value of each business acquisition liability.*

The change in the carrying value of the business acquisition liabilities during the years ended December 31, 2022 and 2021, respectively included the following:

	Year Ended December 31,	
(In thousands)	**2022**	**2021**
Beginning balance	$ 70,525	$ 37,270
Purchase price contingent consideration	4,414	25,662
Contingent cash payments	(9,787)	(6,753)
Contingent RSU grants	(1,986)	(1,877)
Changes in fair value of business acquisition liabilities	5,132	16,597
Contractual payable reclassification	(40)	(374)
Ending balance	$ 68,258	$ 70,525

NOTE 7. INVENTORIES

Inventories as of December 31, 2022 and 2021, respectively included the following:

	December 31,	
(In thousands)	**2022**	**2021**
Raw materials	$ 60,324	$ 41,819
Work in process	18,699	17,401
Finished goods	219,958	177,781
Total inventories	$ 298,981	$ 237,001

During years ended December 31, 2022, 2021, and 2020, net adjustments to cost of sales related to excess and obsolete inventory were $6.4 million, $6.1 million, and $17.7 million, respectively. The net adjustments for the years ended December 31, 2022, 2021, and 2020 reflect a combination of additional expense for excess and obsolete related provisions ($18.5 million, $20.2 million, and $27.4 million, respectively) offset by sales and disposals ($12.1 million, $14.1 million, and $9.7 million, respectively) of inventory for which an excess and obsolete provision was previously recorded.

NOTE 8. PROPERTY AND EQUIPMENT

Property and equipment as of December 31, 2022 and 2021, respectively included the following:

(In thousands)	Useful Life	December 31, 2022	December 31, 2021
Land	—	$ 8,277	$ 8,296
Buildings and improvements	31.5	51,510	44,672
Equipment	5-15	148,803	113,301
Instruments	5	312,055	285,762
Modules and cases	5	48,023	44,185
Other property and equipment	3-5	18,097	30,435
		586,765	526,651
Less: accumulated depreciation		(343,036)	(305,575)
Total		$ 243,729	$ 221,076

Instruments are hand-held devices used by surgeons to install implants during surgery. Modules and cases are used to store and transport the instruments and implants.

Depreciation expense related to property and equipment was as follows:

	Year Ended December 31,		
(In thousands)	2022	2021	2020
Depreciation	$ 50,517	$ 51,342	$ 46,043

NOTE 9. GOODWILL AND INTANGIBLE ASSETS

The change in the carrying amount of goodwill during the years ended December 31, 2022 and 2021, respectively included the following:

(In thousands)	
December 31, 2020	$ 156,716
Additions and adjustments	24,251
Foreign exchange	(1,259)
December 31, 2021	179,708
Additions and adjustments	18,799
Foreign exchange	(1,036)
December 31, 2022	$ 197,471

Intangible assets as of December 31, 2022 included the following:

		December 31, 2022		
(In thousands)	Weighted Average Amortization Period (in years)	Gross Carrying Amount	Accumulated Amortization	Intangible Assets, net
Supplier network	10.0	$ 4,000	$ (3,267)	$ 733
Customer relationships & other intangibles	8.7	62,324	(41,651)	20,673
Developed technology	8.0	75,087	(37,984)	37,103
Patents	16.1	8,885	(3,820)	5,065
Total intangible assets		$ 150,296	$ (86,722)	$ 63,574

Intangible assets as of December 31, 2021 included the following:

(In thousands)	Weighted Average Amortization Period (in years)	December 31, 2021 Gross Carrying Amount	Accumulated Amortization	Intangible Assets, net
Supplier network	10.0	$ 4,000	$ (2,867)	$ 1,133
Customer relationships & other intangibles	6.4	56,264	(37,842)	18,422
Developed technology	8.0	71,947	(28,545)	43,402
Patents	16.1	8,938	(3,235)	5,703
Total intangible assets		$ 141,149	$ (72,489)	$ 68,660

The following table summarizes amortization of intangible assets for future periods as of December 31, 2022:

(In thousands)	Annual Amortization
2023	$ 16,894
2024	14,095
2025	9,810
2026	6,366
2027	4,647
Thereafter	11,762
Total	$ 63,574

NOTE 10. ACCRUED EXPENSES

Accrued expenses as of December 31, 2022 and 2021, respectively included the following:

(In thousands)	December 31, 2022	2021
Compensation and other employee-related costs	$ 53,352	$ 52,407
Legal and other settlements and expenses	5,564	6,124
Accrued non-income taxes	10,029	6,415
Royalties	4,375	4,558
Rebates	10,501	8,725
Other	10,884	12,939
Total accrued expenses	$ 94,705	$ 91,168

NOTE 11. DEBT

Line of Credit

In August 2020, we entered into a credit agreement with Citizens Bank, N.A. (the “Credit Agreement”) that provides a revolving credit facility permitting borrowings up to $125.0 million (as amended, the “Revolving Credit Facility”), and has a termination date of August 2, 2023. The Revolving Credit Facility includes up to a $25.0 million sub limit for letters of credit. Revolving loans under the Credit Agreement will bear interest, at the Company’s option, at either a base rate or the Daily Bloomberg Short-Term Bank Yield (“BSBY”) (as defined in the Credit Agreement), plus, in each case, an applicable margin, as determined in accordance with the provisions of the Credit Agreement. The base rate will be the highest of: the rate of interest announced publicly by Citizens Bank, N.A. from time to time as its “prime rate”; the federal funds effective rate plus 1/2 of 1%; and the Daily BSBY Rate plus 1%. The applicable margin is subject to adjustment as provided in the Credit Agreement. The Credit Agreement contains financial and other customary covenants, including a maximum leverage ratio. As of December 31, 2022, we have not borrowed under the Revolving Credit Facility.

NOTE 12. EQUITY

Stock Repurchases

On March 11, 2020, the Company announced a share repurchase program, which authorized the Company to repurchase up to $200 million of the Company's Class A common stock. On March 4, 2022, the share repurchase program was expanded by authorizing the Company to repurchase an additional $200 million of the Company's Class A common stock. The repurchase program has no time limit and may be suspended for periods or discontinued at any time. As of December 31, 2022, the Company has remaining authorization to repurchase a total of $150.8 million of Class A common stock. The timing and actual number of shares repurchased will depend on various factors including price, corporate and regulatory requirements, debt covenant requirements, alternative investment opportunities and other market conditions. Funding of share repurchases is expected to come from operating cash flows and excess cash.

Shares repurchased by the Company are accounted for under the constructive retirement method, in which the shares repurchased, are immediately retired, as there is no plan to reissue the shares. The Company made an accounting policy election to charge the excess of repurchase price over par value entirely to retained earnings.

The following table summarizes the activity related to share repurchases:

(In thousands except for per share prices)

Period	Total number of shares repurchased	Average price paid per share	Dollar amount of shares repurchased [1]	Approximate dollar value of shares that may yet be purchased under the plan
January 1, 2020 - March 31, 2020	1,920	$ 38.49	$ 73,902	$ 126,098
April 1, 2020 - June 30, 2020	771	39.95	30,804	95,294
July 1, 2020 - September 30,2020	—	—	—	95,294
October 1, 2020 - December 31, 2020	—	—	—	95,294
January 1, 2021 - March 31, 2021	—	—	—	95,294
April 1, 2021 - June 30, 2021	—	—	—	95,294
July 1, 2021 - September 30, 2021	—	—	—	95,294
October 1, 2021 - December 31, 2021	—	—	—	95,294
January 1, 2022 - March 31, 2022	—	—	—	295,294
April 1, 2022 - June 30, 2022	2,351	61.45	144,493	150,801
July 1, 2022 - September 30, 2022	—	—	—	150,801
October 1, 2022 - December 31, 2022	—	—	—	$ 150,801
January 1, 2020 - December 31, 2022	5,042	$ 49.42	$ 249,199	

[1] *Inclusive of an immaterial amount of commission fees*

Common Stock

Our amended and restated Certificate of Incorporation provides for a total of 775,000,000 authorized shares of common stock. Of the authorized number of shares of common stock, 500,000,000 shares are designated as Class A common stock ("Class A Common") and 275,000,000 shares are designated as Class B common stock ("Class B Common").

The holders of Class A Common are entitled to one vote for each share of Class A Common held. Each share of our Class B common stock is convertible at any time at the option of the holder into one share of our Class A common stock. In addition, each share of our Class B common stock will convert automatically into one share of our Class A common stock upon any transfer, whether or not for value, except for permitted transfers. For more details relating to the conversion of our Class B common stock please see "Exhibit 4.2, Description of Securities of the Registrant" filed herein. The holders of Class B Common are entitled to 10 votes for each share of Class B Common held. The holders of Class A Common and Class B Common vote together as one class of common stock. Except for voting rights, the Class A Common and Class B Common have the same rights and privileges.

Accumulated Other Comprehensive Income (Loss)

The tables below present the changes in each component of accumulated other comprehensive income/(loss), including current period other comprehensive income/(loss) and reclassifications out of accumulated other comprehensive income/(loss) for the years ended December 31, 2022 and 2021, respectively:

(In thousands)	Unrealized loss on marketable securities, net of tax	Foreign currency translation adjustments	Accumulated other comprehensive loss
Accumulated other comprehensive income/(loss), net of tax, at December 31, 2021	$ (1,053)	$ (5,719)	$ (6,772)
Other comprehensive income/(loss) before reclassifications	(18,494)	(3,818)	(22,312)
Amounts reclassified from accumulated other comprehensive income/(loss), net of tax	4,454	—	4,454
Other comprehensive income/(loss), net of tax	(14,040)	(3,818)	(17,858)
Accumulated other comprehensive income/(loss), net of tax, at December 31, 2022	$ (15,093)	$ (9,537)	$ (24,630)

(In thousands)	Unrealized loss on marketable securities, net of tax	Foreign currency translation adjustments	Accumulated other comprehensive loss
Accumulated other comprehensive income/(loss), net of tax, at December 31, 2020	$ 5,001	$ (1,046)	$ 3,955
Other comprehensive income/(loss) before reclassifications	(7,922)	(4,673)	(12,595)
Amounts reclassified from accumulated other comprehensive income/(loss), net of tax	1,868	—	1,868
Other comprehensive income/(loss), net of tax	(6,054)	(4,673)	(10,727)
Accumulated other comprehensive income/(loss), net of tax, at December 31, 2021	$ (1,053)	$ (5,719)	$ (6,772)

Amounts reclassified from accumulated other comprehensive loss, net of tax, related to unrealized gains/losses on marketable securities were released to other income, net in our consolidated statements of operations and comprehensive income.

Earnings Per Common Share

The Company computes basic net income per share using the weighted-average number of common shares outstanding during the period. Diluted net income per share assumes the conversion, exercise or issuance of all potential common stock equivalents, unless the effect of inclusion would be anti-dilutive. For purposes of this calculation, common stock equivalents include the Company's stock options and unvested RSUs. The contingently issuable shares are included in basic net income per share as of the date that all necessary conditions have been satisfied and are included in the denominator for dilutive calculation for the entire period if such shares would be issuable as of the end of the reporting period assuming the end of the reporting period was the end of the contingency period.

The following table sets forth the computation of basic and diluted earnings per share:

	Year Ended December 31,		
(In thousands, except per share amounts)	2022	2021	2020
Numerator:			
Net income/(loss)	$ 190,169	$ 149,191	$ 102,285
Denominator for basic and diluted net income per share:			
Weighted average shares outstanding for basic	100,469	100,734	98,580
Dilutive stock options and RSUs	2,174	2,889	2,391
Weighted average shares outstanding for diluted	102,643	103,623	100,971
Earnings per share:			
Basic	$ 1.89	$ 1.48	$ 1.04
Diluted	$ 1.85	$ 1.44	$ 1.01
Anti-dilutive stock options and RSUs excluded from the calculation	3,851	2,139	5,454

NOTE 13. STOCK-BASED AWARDS

We have two stock plans: our 2012 Equity Incentive Plan (the "2012 Plan") and our 2021 Equity Incentive Plan (the "2021 Plan"), together with the 2012 Plan, the "Plans". The 2021 Plan is the only active stock plan. The purpose of the 2012 Plan was, and of the 2021 Plan is, to provide incentive to employees, directors, and consultants of Globus. The Plans are administered by the Board of Directors of Globus (the "Board") or its delegates. The number, type of option, exercise price, and vesting terms are determined by the Board or its delegates in accordance with the terms of the Plans. The options granted expire on a date specified by the Board, which is generally not more than ten years from the grant date. Options granted to employees generally vest in varying installments over a four-year period.

The 2012 Plan was approved by our Board in March 2012, and by our stockholders in June 2012. The 2012 Plan terminated as to new awards pursuant to its terms in 2022. Following effectiveness of the 2021 Plan, we have not issued any additional awards under the 2012 Plan; however, awards previously granted under the 2012 Plan remain outstanding and are administered by our Board under the terms and conditions of the 2012 Plan. Under the 2012 Plan, the aggregate number of shares of Class A Common stock that were able to be issued subject to options and other awards is equal to the sum of (i) 3,076,923 shares, (ii) any shares available for issuance under the 2008 Plan as of March 13, 2012, (iii) any shares underlying awards outstanding under the 2008 Plan as of March 13, 2012 that, on or after that date, are forfeited, terminated, expired or lapse for any reason, or are settled for cash without delivery of shares and (iv) starting January 1, 2013, an annual increase in the number of shares available under the 2012 Plan equal to up to 3% of the number of shares of our common and preferred stock outstanding at the end of the previous year, as determined by our Board. The number of shares that were able to be issued or transferred pursuant to incentive stock options under the 2012 Plan was limited to 10,769,230 shares. The shares of Class A Common covered by the 2012 Plan included authorized but unissued shares, treasury shares or shares of common stock purchased on the open market.

The 2021 Plan was approved by our Board in March 2021, and by our stockholders in June 2021. Under the 2021 Plan, as amended to date, the aggregate number of shares of Class A Common that were able to be issued subject to options and other awards is equal to the sum of (i) 4,000,000 shares, (ii) any shares available for issuance under the 2012 Plan as of June 3, 2021 and (iii) any shares underlying awards outstanding under the 2012 Plan or 2021 Plan as of June 3, 2021 that, on or after that date, are forfeited, terminated, expired or lapse for any reason, or are settled for cash without delivery of shares. The number of shares that could be issued or transferred pursuant to incentive stock options under the 2021 Plan is limited to 4,000,000 shares. The shares of Class A Common covered by the 2021 Plan include authorized but unissued shares, treasury shares or shares of common stock purchased on the open market.

As of December 31, 2022, pursuant to the 2021 Plan, there were 5,687,725 shares of Class A Common stock reserved and 2,634,899 shares of Class A Common stock available for future grants.

Stock Options

Stock option activity during the year ended December 31, 2022 is summarized as follows:

	Option Shares (thousands)	Weighted average exercise price	Weighted average remaining contractual life (years)	Aggregate intrinsic value (thousands)
Outstanding at December 31, 2021	9,463	$ 48.01		
Granted	2,736	64.06		
Exercised	(999)	41.78		
Forfeited	(862)	58.92		
Outstanding at December 31, 2022	10,338	$ 51.86	6.8	$ 234,207
Exercisable at December 31, 2022	5,556	$ 44.38	5.6	$ 166,449
Expected to vest at December 31, 2022	4,782	$ 60.54	8.2	$ 67,758

The total intrinsic value of stock options exercised was $26.3 million, $71.3 million, and $76.1 million, during the years ended December 31, 2022, 2021, and 2020, respectively.

The fair value of the options was estimated on the date of the grant using a Black-Scholes option pricing model with the following assumptions:

	Year Ended December 31,								
	2022			2021			2020		
Risk-free interest rate	1.46%	-	4.04%	0.40%	-	1.14%	0.23%	-	1.67%
Expected term (years)	4.7	-	9.9		4.8			4.9	
Expected volatility	33.0%	-	35.0%	33.0%	-	34.0%	28.0%	-	37.0%
Expected dividend yield		—%			—%			—%	

The weighted average grant date fair value of stock options granted during the years ended December 31, 2022, 2021, and 2020 was $22.10, $20.34, and $14.81 per share, respectively.

Restricted Stock Units

Restricted stock unit activity during the year ended December 31, 2022 is summarized as follows:

	Restricted Stock Units (thousands)	Weighted average grant date fair value per share	Weighted average remaining contractual life (years)
Outstanding at December 31, 2021	29	$ 72.54	
Granted	31	62.77	
Vested	—	—	
Forfeited	—	—	
Outstanding at December 31, 2022	60	$ 67.40	7.8

Stock-Based Compensation

Compensation expense related to stock options granted to employees and non-employees under the Plans and the intrinsic value of stock options exercised was as follows:

	Year Ended December 31,		
(In thousands)	2022	2021	2020
Stock-based compensation expense	$ 32,810	$ 30,586	$ 27,073
Net stock-based compensation capitalized into inventory	657	667	257
Total stock-based compensation cost	$ 33,467	$ 31,253	$ 27,330

As of December 31, 2022, there was $76.0 million of unrecognized compensation expense related to unvested employee stock options that vest over a weighted average period of three years.

NOTE 14. INCOME TAXES

The components of income before income taxes are as follows:

	Year Ended December 31,		
(In thousands)	2022	2021	2020
Domestic	$ 247,260	$ 184,819	$ 154,356
Foreign	(4,241)	(4,412)	(28,457)
Total	$ 243,019	$ 180,407	$ 125,899

The components of the provision for income taxes are as follows:

	Year Ended December 31,		
(In thousands)	2022	2021	2020
Current:			
Federal	$ 60,927	$ 37,436	$ 22,183
State	12,408	7,688	4,381
Foreign	1,845	3,741	991
	75,180	48,865	27,555
Deferred:			
Federal	(16,429)	(13,535)	(3,293)
State	(3,142)	(2,265)	(678)
Foreign	(2,759)	(1,849)	30
	(22,330)	(17,649)	(3,941)
Total	$ 52,850	$ 31,216	$ 23,614

A reconciliation of the statutory U.S. federal tax rate to our effective rate is as follows:

	Year Ended December 31,		
	2022	2021	2020
Statutory U.S. federal tax rate	21.0 %	21.0 %	21.0 %
State income taxes, net of federal benefit	3.0	2.7	3.5
Foreign taxes	0.7	1.6	0.6
Valuation allowance	(0.5)	0.1	1.7
Domestic production activities deduction	—	(0.3)	(0.3)
Tax credits	(1.3)	(1.5)	(2.6)
Stock-based compensation windfall	(1.2)	(6.6)	(9.5)
Nondeductible expenses	—	0.5	0.5
Other	—	(0.2)	—
IPR&D	—	—	3.9
Effective tax rate	21.7 %	17.3 %	18.8 %

Deferred income taxes reflect the tax effects of temporary differences between the basis of assets and liabilities recognized for financial reporting purposes and tax purposes. Significant components of our deferred income taxes are as follows:

	December 31,	
(In thousands)	2022	2021
Deferred tax assets:		
Inventory reserve	$ 29,649	$ 29,417
Accruals, reserves, and other currently not deductible	27,608	23,102
Stock-based compensation	20,554	16,167
Capitalized R&E	14,279	—
Net operating loss carryforwards	4,182	3,812
Total deferred tax assets	96,272	72,498
Valuation allowance	(5,488)	(6,594)
Total deferred tax assets, net of valuation allowance	90,784	65,904
Deferred tax liabilities:		
Depreciation and amortization	(43,718)	(45,724)
Total deferred tax liabilities	(43,718)	(45,724)
Net deferred tax assets/(liabilities)	$ 47,066	$ 20,180

In assessing the realizability of deferred tax assets, management considers whether it is more likely than not that some portion or all of the deferred tax assets will not be realized. The ultimate realization of deferred tax assets is dependent upon the generation of future taxable income during the periods in which those temporary differences become deductible. Based upon the level of historical taxable income and projections for future taxable income over the periods in which the deferred tax assets are deductible, management believes it is more likely than not that we will realize a portion of the benefits of these deductible differences at December 31, 2022 and 2021. The Company has established valuation allowances of $5.5 million and $6.6 million at December 31, 2022 and 2021, respectively, primarily related to the uncertainty of the utilization of certain deferred tax assets comprised of tax loss carryforwards in various jurisdictions. The decrease in the valuation allowance during fiscal year 2022 is primarily driven by foreign deferred tax assets that are expected to be realized. The amount of the deferred tax asset considered realizable, however, could be reduced in the near term if estimates of future taxable income during the carryforward period are reduced.

As of December 31, 2022 and 2021, we have NOL carryforwards of $20.2 million and $19.9 million, respectively, which, if unused, will expire in years 2023 through 2039.

A reconciliation of the beginning and ending amount of unrecognized tax benefits is as follows:

	Year Ended December 31,		
(In thousands)	2022	2021	2020
Unrecognized tax benefits at the beginning of the year	$ 1,052	$ 1,600	$ 2,399
Additions related to prior year tax positions	50	160	—
Reductions related to prior year tax positions	(116)	(708)	(799)
Unrecognized tax benefits at the end of the year	$ 986	$ 1,052	$ 1,600

The reductions related to prior year tax positions for the year ended December 31, 2022 of $0.1 million are primarily related to the resolution of certain foreign tax positions.

The impact of our unrecognized tax benefits to the effective income tax rate is as follows:

	December 31,		
(In thousands)	2022	2021	2020
Portion of total unrecognized tax benefits that, if recognized, would affect the effective income tax rate	$ 1,355	$ 1,471	$ 2,032

The Company intends to indefinitely reinvest its foreign earnings abroad to ensure sufficient working capital for further expansion of its existing operations outside the United States, therefore the Company has not recorded income taxes on the undistributed earnings of its foreign subsidiaries. The undistributed earnings of our foreign subsidiaries as of December 31, 2022 are immaterial. In the event we are required to repatriate funds from outside of the United States, such repatriation may be subject to local laws, customs, and tax consequences.

Interest and penalties are recorded in the statement of income as provision for income taxes. The total interest and penalties recorded in the statement of income was immaterial for the years ended December 31, 2022, 2021, and 2020. We do not expect a significant change in our uncertain tax benefits in the next twelve months. We are subject to federal income tax as well as income tax of multiple state and foreign jurisdictions. With few exceptions, we are no longer subject to income tax examination by tax authorities in major jurisdictions for years prior to 2016 as of December 31, 2022.

NOTE 15. COMMITMENTS AND CONTINGENCIES

We are involved in a number of proceedings, legal actions, and claims arising in the ordinary course of business. Such matters are subject to many uncertainties, and the outcomes of these matters are not within our control and may not be known for prolonged periods of time. In some actions, the claimants seek damages, as well as other relief, including injunctions prohibiting us from engaging in certain activities, which, if granted, could require significant expenditures and/or result in lost revenues. We record a liability in the consolidated financial statements for these actions when a loss is considered probable and the amount can be reasonably estimated. If the reasonable estimate of a probable loss is a range, and no amount in the range is a better estimate than any other, the minimum amount of the range is accrued. If a loss is reasonably possible but not known or probable, and can be reasonably estimated, the estimated loss or range of loss is disclosed. In most cases, significant judgment is required to estimate the amount and timing of a loss to be recorded. While it is not possible to predict the outcome for most of the matters discussed, we believe it is possible that costs associated with them could have a material adverse impact on our consolidated earnings, financial position or cash flows.

Moskowitz Family LLC Litigation

On November 20, 2019, Moskowitz Family LLC filed suit against us in the U.S. District Court for the Western District of Texas for patent infringement. Moskowitz, a non-practicing entity, alleges that Globus willfully infringes one or more claims of six patents by making, using, offering for sale or selling the COALITION®, COALITION MIS®, COALITION AGX®, CORBEL®, MONUMENT®, MAGNIFY®-S, HEDRON IATM, HEDRON IC®, INDEPENDENCE®, INDEPENDENCE MIS®, INDEPENDENCE MIS AGX®, FORTIFY® and XPAND® families, SABLE®, RISE®, RISE® INTRALIF, RISE®-L, ELSA®, ELSA® ATP, ALTERA®, ARIEL®, CALIBER® and CALIBER®-L products. Moskowitz seeks monetary damages and injunctive relief. On July 2, 2020, this suit was transferred from the U.S. District Court for the Western District of Texas to the U.S. District Court for the Eastern District of Pennsylvania. The outcome of this litigation cannot be determined, nor can we estimate a range of potential loss, therefore, we have not recorded a liability related to this litigation as of December 31, 2022.

NOTE 16. RETIREMENT BENEFIT PLANS

We sponsor a 401(k) Plan covering all eligible U.S. employees. Under the 401(k) Plan, we make nondiscretionary matching contributions at the rate of 100% of employee's contributions up to a maximum annual contribution of $6,000 per eligible employee, limited to 3% of the employee's compensation for the period.

Additionally, we contribute to various foreign retirement benefit plans required by local law or coordinated with government sponsored plans which cover many of our international employees. The benefits offered under these plans are reflective of local customs and practices in the countries concerned.

Company contributions to these retirement plans were as follows:

	Year Ended December 31,		
(In thousands)	2022	2021	2020
401(k) and other retirement plan contributions	$ 7,154	$ 6,588	$ 5,798

NOTE 17. SEGMENT AND GEOGRAPHIC INFORMATION

Operating segments are defined as components of an enterprise for which separate financial information is available and evaluated regularly by the chief operating decision maker, or decision-making group, in deciding how to allocate resources and in assessing performance. We manage our business globally within one operating segment. Segment information is consistent with how management reviews the business, makes investing and resource allocation decisions and assesses operating performance.

The following table represents total net sales by geographic area, based on the location of the customer for the years ended December 31, 2022, 2021 and 2020, respectively:

	Year Ended December 31,		
(In thousands)	2022	2021	2020
United States	$ 871,939	$ 819,571	$ 664,454
International	150,904	138,531	124,588
Total net sales	$ 1,022,843	$ 958,102	$ 789,042

NOTE 18. SUBSEQUENT EVENT

On February 8, 2023, the Company and its wholly-owned subsidiary, Zebra Merger Sub, Inc. ("Merger Sub"), entered into an Agreement and Plan of Merger (the "Merger Agreement") with NuVasive, Inc., a Delaware corporation ("NuVasive"). The Merger Agreement provides, among other things, that subject to the satisfaction or waiver of the conditions set forth in the Merger Agreement, Merger Sub will merge with and into NuVasive (the "Merger"), with NuVasive surviving the Merger as a wholly owned subsidiary of the Company. The transaction brings together these two technology companies in the musculoskeletal industry, which have a shared vision focused on innovation in a relentless pursuit of unmet clinical needs to improve patient care.

Under the Merger Agreement, at the effective time of the Merger, each share of common stock, par value $0.001 per share, of NuVasive ("NuVasive Common Stock") issued and outstanding immediately prior to the effective time (other than certain excluded shares as described in the Merger Agreement) will be cancelled and converted into the right to receive 0.75 fully paid and non-assessable shares of Class A common stock of Globus Medical, $0.001 par value per share (the "Globus Medical Class A Common Stock"), and the right to receive cash in lieu of fractional shares.

Following the close of the transaction, NuVasive shareholders will own approximately 28% of the combined company, and Globus Medical shareholders will own approximately 72%, on a fully diluted basis.

Either NuVasive or Globus Medical may terminate the Merger Agreement under certain circumstances described in the Merger Agreement, resulting in a termination fee payable to the other equal to $120 million or $75 million, depending on such circumstances. NuVasive will also be required to make a payment to Globus Medical equal to $60 million if the Merger Agreement is terminated because NuVasive's stockholders fail to adopt the Merger Agreement and at the time of such failure, NuVasive's board of directors has not changed its recommendation to its stockholders in favor of the Merger.

The transaction is expected to close in the middle of 2023, subject to approval by both companies' shareholders, regulatory approval, and other customary closing conditions.

For additional information about the Merger Agreement, please refer to our Form 8-K filed on February 9, 2023.

No Offer or Solicitation

This filing is not intended to and does not constitute an offer to subscribe for, buy or sell, or the solicitation of an offer to subscribe for, buy or sell, or a solicitation of any vote or approval in any jurisdiction, nor shall there be any sale, issuance or transfer of securities in any jurisdiction in which such offer, sale or solicitation would be unlawful prior to registration or qualification under the securities laws of any such jurisdiction. No offer of securities shall be made except by means of a prospectus meeting the requirements of Section 10 of the Securities Act of 1933, as amended, and otherwise in accordance with applicable law.

Important Information About the Transaction and Where To Find It

In connection with the proposed transaction, Globus Medical will file with the U.S. Securities and Exchange Commission ("SEC") a registration statement on Form S-4 that will include a joint proxy statement of Globus Medical and NuVasive and that will also constitute a prospectus of Globus Medical for shares of its class A common stock to be offered in the proposed transaction. Globus Medical and NuVasive may also file other documents with the SEC regarding the proposed transaction. This document is not a substitute for the joint proxy statement statement/prospectus or registration statement or any other document which Globus Medical or NuVasive may file with the SEC. INVESTORS AND SECURITY HOLDERS OF GLOBUS MEDICAL AND NUVASIVE ARE URGED TO READ THE REGISTRATION STATEMENT, WHICH WILL INCLUDE THE JOINT PROXY STATEMENT/PROSPECTUS, AND ANY OTHER RELEVANT DOCUMENTS THAT ARE FILED OR WILL BE FILED WITH THE SEC, AS WELL AS ANY AMENDMENTS OR SUPPLEMENTS TO THESE DOCUMENTS, CAREFULLY AND IN THEIR ENTIRETY BECAUSE THEY CONTAIN OR WILL CONTAIN IMPORTANT INFORMATION ABOUT THE PROPOSED TRANSACTION AND RELATED MATTERS. The registration statement, definitive joint proxy statement/ prospectus and other documents filed by Globus Medical and NuVasive with the SEC will be available free of charge at the SEC's website (www.sec.gov) and from Globus Medical and NuVasive. Requests for copies of the joint proxy statement/ prospectus and other documents filed by Globus Medical with the SEC may be made by contacting Keith Pfeil, Chief Financial Officer by phone at (610) 930-1800 or by email at kpfeil@globusmedical.com, and request for copies of the joint proxy statement/prospectus and other documents filed by NuVasive may be made by contacting Matt Harbaugh, Chief Financial Officer, by phone at (858) 210-2129 or by email at investorrelations@nuvasive.com.

Participants in the Solicitation

Globus Medical, NuVasive, their respective directors and certain of their executive officers and other employees may be deemed to be participants in the solicitation of proxies from Globus Medical's and NuVasive's shareholders in connection with the proposed transaction. Information about the directors and executive officers of Globus Medical and their ownership of Globus Medical stock is set forth in Globus Medical's annual report on Form 10-K for the fiscal year ended December 31, 2021, which was filed with the SEC on February 17, 2022 and its proxy statement for its 2022 annual meeting of stockholders, which was filed with the SEC on April 21, 2022. Information regarding NuVasive's directors and executive officers is contained in NuVasive's annual report on Form 10-K for the fiscal year ended December 31, 2021, which was filed with the SEC on February 23, 2022, and its proxy statement for its 2022 annual meeting of stockholders, which was filed with the SEC on March 30, 2022. Certain directors and executive officers of Globus Medical and NuVasive may have a direct or indirect interest in the transaction due to securities holdings, vesting of equity awards and rights to severance payments. Additional information regarding the persons who may, under the rules of the SEC, be deemed participants in the solicitation of Globus Medical's and NuVasive's shareholders in connection with the proposed transaction will be included in the joint proxy statement/prospectus. These documents can be obtained free of charge from the sources indicated above.

Cautionary Notes on Forward-Looking Statements

This Form 10-K contains "forward-looking statements" within the meaning of the federal securities laws, including Section 27A of the Securities Act of 1933, as amended, and Section 21E of the Securities Exchange Act of 1934, as amended. In this context, forward-looking statements often address expected future business and financial performance and financial condition, and often contain words such as "expect," "anticipate," "intend," "plan," "believe," "seek," "see," "will," "would," "may," "target," and similar expressions and variations or negatives of these words. Forward-looking statements by their nature address matters that are, to different degrees, uncertain, such as statements about the consummation of the proposed transaction and the anticipated benefits thereof. These and other forward-looking statements are not guarantees of future results and are subject to risks, uncertainties and assumptions that could cause actual results to differ materially from those expressed in any forward-looking statements, including the failure to consummate the proposed transaction or to make any filing or take other action required to consummate such transaction in a timely matter or at all. Important risk factors that may cause such a difference include, but are not limited to: (i) the proposed transaction may not be completed on anticipated terms and timing, (ii) a condition to closing of the transaction may not be satisfied, including obtaining shareholder and regulatory approvals, (iii) the anticipated tax treatment of the transaction may not be

obtained, (iv) the potential impact of unforeseen liabilities, future capital expenditures, revenues, costs, expenses, earnings, synergies, economic performance, indebtedness, financial condition and losses on the future prospects, business and management strategies for the management, expansion and growth of the combined business after the consummation of the transactions, (v) potential litigation relating to the proposed transaction that could be instituted against Globus Medical, NuVasive or their respective directors, (vi) potential adverse reactions or changes to business relationships resulting from the announcement or completion of the transactions, (vii) any negative effects of the announcement, pendency or consummation of the transactions on the market price of Globus Medical's or NuVasive's common stock and on Globus Medical's or NuVasive's businesses or operating results, (viii) risks associated with third party contracts containing consent and/or other provisions that may be triggered by the proposed transaction, (ix) the risks and costs associated with the integration of, and the ability of Globus Medical and NuVasive to integrate, their businesses successfully and to achieve anticipated synergies, (x) the risk that disruptions from the proposed transaction will harm Globus Medical's or NuVasive's business, including current plans and operations, (xi) the ability of Globus Medical or NuVasive to retain and hire key personnel and uncertainties arising from leadership changes, (xii) legislative, regulatory and economic developments, and (xiii) the other risks described in Globus Medical's and NuVasive's most recent annual reports on Form 10-K and quarterly reports on Form 10-Q.

These risks, as well as other risks associated with the proposed transaction, will be more fully discussed in the joint proxy statement/prospectus that will be included in the registration statement on Form S-4 that will be filed with the SEC in connection with the proposed transaction. While the list of factors presented here is, and the list of factors to be presented in the registration statement on Form S-4 are, considered representative, no such list should be considered to be a complete statement of all potential risks and uncertainties. Unlisted factors may present significant additional obstacles to the realization of forward-looking statements. Consequences of material differences in results as compared with those anticipated in the forward-looking statements could include, among other things, business disruption, operational problems, financial loss, legal liability to third parties and similar risks, any of which could have a material adverse effect on Globus Medical's or NuVasive's consolidated financial condition, results of operations, credit rating or liquidity. Neither Globus Medical nor NuVasive assumes any obligation to publicly provide revisions or updates to any forward looking statements, whether as a result of new information, future developments or otherwise, should circumstances change, except as otherwise required by securities and other applicable laws.

Item 9. Changes in and Disagreements with Accountants on Accounting and Financial Disclosure

None.

Item 9A. Controls and Procedures

Evaluation of Disclosure Controls and Procedures

Our disclosure controls and procedures (as defined in Rules 13a-15(e) and 15d-15(e) under the Securities Exchange Act of 1934, as amended) are designed to ensure that information required to be disclosed in the reports that we file or submit under the Exchange Act is recorded, processed, summarized and reported within the time periods specified in the rules and forms of the Securities and Exchange Commission and to ensure that information required to be disclosed is accumulated and communicated to management, including our principal executive officer and principal financial officer, to allow timely decisions regarding disclosure. The Chief Executive Officer and the Chief Financial Officer have reviewed the design and effectiveness of our disclosure controls and procedures as of December 31, 2022 and, based on their evaluation, have concluded that the disclosure controls and procedures were effective as of such date.

Management's Annual Report on Internal Control over Financial Reporting

Management of Globus Medical, Inc. ("Globus") is responsible for establishing and maintaining adequate internal control over financial reporting, as defined in Rule 13a-15(f) and Rule 15d-15(f) under the Exchange Act. Internal control over financial reporting is a process designed to provide reasonable, but not absolute, assurance regarding the reliability of financial reporting and the preparation of financial statements for external purposes in accordance with accounting principles generally accepted in the United States of America. A company's internal control over financial reporting includes those policies and procedures that pertain to the maintenance of records that, in reasonable detail, accurately and fairly reflect the transactions and dispositions of the assets of the company; provide reasonable assurance that transactions are recorded as necessary to permit preparation of financial statements in accordance with accounting principles generally accepted in the United States of America, and that receipts and expenditures of the company are being made only in accordance with authorizations of management and directors of the company; and provide reasonable assurance regarding prevention or timely detection of unauthorized acquisition, use, or disposition of the company's assets that could have a material effect on the financial statements.

Because of its inherent limitations, internal control over financial reporting may not prevent or detect misstatements. Also, projections of any evaluation of effectiveness to future periods are subject to the risk that controls may become inadequate because of changes in conditions, or that the degree of compliance with the policies or procedures may deteriorate.

Management evaluated the internal control over financial reporting of Globus as of December 31, 2022. In making this assessment, management used the criteria set forth by the Committee of Sponsoring Organizations of the Treadway Commission in Internal Control-Integrated Framework (2013) ("COSO").

Based on the foregoing and as a result of this assessment and based on the criteria in the COSO framework, management has concluded that, as of December 31, 2022, the internal control over financial reporting of Globus was effective.

Report of Independent Registered Public Accounting Firm

Deloitte & Touche LLP, our independent registered public accounting firm, has audited the effectiveness of our internal control over financial reporting as of December 31, 2022 as stated in their report that is included in Item 8 of this Form 10-K.

Changes in Internal Control over Financial Reporting

There was no change in our internal control over financial reporting identified in connection with the evaluation required by Rule 13a-15(d) and 15d-15(d) of the Exchange Act that occurred during our most recent fiscal quarter that has materially affected, or is reasonably likely to materially affect, our internal control over financial reporting.

Item 9B. Other Information

None.

PART III

Certain information required by Part III is omitted from this Annual Report and will be included in the definitive proxy statement for our 2023 annual meeting of stockholders, which will be filed within 120 days after the end of our fiscal year.

Item 9C. Disclosure Regarding Foreign Jurisdictions that Prevent inspections
Not applicable.

Item 10. Directors, Executive Officers and Corporate Governance

Code of Ethics

We have adopted a Code of Ethics for all employees, officers, directors, as well as a Code of Ethics specifically for our principal executive officer and senior financial officers, both of which are available on our website, *www.globusmedical.com*. We intend to disclose future amendments to, or waivers from, provisions of our Code of Ethics that apply to our Principal Executive Officer, Principal Financial Officer, Principal Accounting Officer, or Controller, or persons performing similar functions, within four business days of such amendment or waiver.

The other information required by this Item 10 will be set forth in the Company's proxy statement for its 2023 annual meeting of stockholders, which information is incorporated herein by reference.

Item 11. Executive Compensation

The information required by this Item 11 will be set forth in the Company's proxy statement for its 2023 annual meeting of stockholders, which information is incorporated herein by reference.

Item 12. Security Ownership of Certain Beneficial Owners and Management and Related Stockholder Matters

The information required by this Item 12 will be set forth in the Company's proxy statement for its 2023 annual meeting of stockholders, which information is incorporated herein by reference.

Item 13. Certain Relationships and Related Transactions, and Director Independence

The information required by this Item 13 will be set forth in the Company's proxy statement for its 2023 annual meeting of stockholders, which information is incorporated herein by reference.

Item 14. Principal Accountant Fees and Services

The information required by this Item 14 will be set forth in the Company's proxy statement for its 2023 annual meeting of stockholders, which information is incorporated herein by reference.

PART IV

Item 15. Exhibits and Financial Statement Schedules

(a) (1) Financial Statements

(a) (2) Financial Statement Schedules

SCHEDULE II. VALUATION ACCOUNTS AND QUALIFYING ACCOUNTS

Allowance for doubtful accounts:

(In thousands)	Beginning of period	Charged to expenses	Write-offs	End of period
Year ended December 31, 2020	$ 5,599	$ 2,960	$ (4,151)	$ 4,408
Year ended December 31, 2021	4,408	$ 1,200	$ (646)	$ 4,962
Year ended December 31, 2022	$ 4,962	$ (1)	$ (237)	$ 4,724

Deferred tax valuation allowance:

		Additions		Deductions	
(In thousands)	Beginning of period	Charged to expenses	Charged to other accounts	Other deductions	End of period
Year ended December 31, 2020	$ 2,846	2,132	1,509	—	6,487
Year ended December 31, 2021	6,487	$ 107	$ —	$ —	$ 6,594
Year ended December 31, 2022	$ 6,594	$ (1,106)	$ —	$ —	$ 5,488

(b) Exhibits, including those incorporated by reference

Exhibit No.	Item
3.1	Amended and Restated Certificate of Incorporation of Globus Medical, Inc. (incorporated by reference to Exhibit 3.1 of the Registrant's Amendment No. 5 to the Registration Statement on Form S-1 filed on August 2, 2012).
3.2	Certificate of Amendment of the Amended and Restated Certificate of Incorporation of Globus Medical, Inc., dated July 30, 2012 (incorporated by reference to Exhibit 3.2 of the Registrant's Amendment No. 5 to the Registration Statement on Form S-1 filed on August 2, 2012).
3.3	Certificate of Amendment of the Amended and Restated Certificate of Incorporation of Globus Medical, Inc., dated August 7, 2012 (incorporated by reference to Exhibit 3.1 of the Registrant's Form 10-Q/A filed on September 19, 2012).
3.4	Amended and Restated Bylaws of Globus Medical, Inc. effective as of May 1, 2019 (incorporated by reference to Exhibit 3.1 to our Form 10-Q/A filed on May 2, 2019).
3.5	Amendment to Bylaws effective as of July 31, 2021 (incorporated by reference to Exhibit 3.1 to our Form 10-Q filed on August 4, 2021).
4.1	Specimen Certificate for Class A Common Stock (incorporated by reference to Exhibit 4.1 of the Registrant's Amendment No. 3 to the Registration Statement on Form S-1 filed on July 16, 2012).
4.2*	Description of Securities of the Registrant.
10.1	Globus Medical, Inc. 2012 Equity Incentive Plan (incorporated by reference to Exhibit 10.7 of the Registrant's Amendment No. 1 to the Registration Statement on Form S-1 filed on May 8, 2012).
10.2	Form of Incentive Stock Option Grant Notice and Incentive Stock Option Agreement under 2012 Equity Incentive Plan (incorporated by reference to Exhibit 10.10 of the Registrant's Amendment No. 1 to the Registration Statement on Form S-1 filed on May 8, 2012).
10.3	Form of Nonqualified Stock Option Grant Notice and Nonqualified Stock Option Agreement under 2012 Equity Incentive Plan (incorporated by reference to Exhibit 10.11 of the Registrant's Amendment No. 1 to the Registration Statement on Form S-1 filed on May 8, 2012).
10.4	Form of Indemnification Agreement (incorporated by reference to Exhibit 10.18 of the Registrant's Amendment No. 1 to the Registration Statement on Form S-1 filed on May 8, 2012).
10.5	Form of No Competition and Non-Disclosure Agreement (incorporated by reference to Exhibit 10.19 of the Registrant's Amendment No. 1 to the Registration Statement on Form S-1 filed on May 8, 2012).
10.6	Executive Employment Agreement, dated May 3, 2016 by and between Globus Medical, Inc. and Daniel T. Scavilla (incorporated by reference to Exhibit 10.1 to our Form 10-Q filed on May 4, 2016).
10.7	Executive Employment Agreement, dated August 5, 2020 by and between Globus Medical, Inc. and Kelly Huller (incorporated by reference to Exhibit 10.1 to our Form 10-Q filed on August 5, 2020).
10.8	Executive Employment Agreement, dated August 5, 2020 by and between Globus Medical, Inc. and Keith Pfeil (incorporated by reference to Exhibit 10.2 to our Form 10-Q filed on August 5, 2020).
10.9	Credit Agreement, dated as of August 6, 2020, by and among Globus Medical, Inc. and Globus Medical North America, Inc., as borrowers, and Citizens Bank, N.A., as lender (incorporated by reference to Exhibit 10.1 to our Form 8-K filed on August 10, 2020).
10.10	First Amendment to Credit Agreement, dated as of August 4, 2021, by and among Globus Medical, Inc., Globus Medical North America, Inc., and Citizens Banks, N.A. (incorporated by reference to Exhibit 10.1 to our Form 10-Q filed on August 4, 2021).
10.11	Second Amendment to Credit Agreement, dated as of August 3, 2022, by and among Globus Medical, Inc., Globus Medical North America, Inc., and Citizens Bank, N.A. (incorporated by reference to Exhibit 10.1 to our Form 10-Q filed on August 4, 2022).
10.12	Globus Medical, Inc. 2021 Equity Incentive Plan, as amended (incorporated by reference to Exhibit 10.1 to our Form 8-K filed on June 3, 2022).
10.13	Globus Medical, Inc. 2021 Equity Incentive Plan Restricted Stock Unit Agreement (incorporated by reference to Exhibit 99.5 to our Form S-8 filed on December, 16, 2021).
10.14	Globus Medical, Inc. 2021 Equity Incentive Plan Nonqualified Stock Option Agreement (incorporated by reference to Exhibit 99.6 to our Form S-8 filed on December, 16, 2021).
10.15	Globus Medical, Inc. 2021 Equity Incentive Plan Restricted Stock Agreement (incorporated by reference to Exhibit 99.7 to our Form S-8 filed on December, 16, 2021).
10.16	Globus Medical, Inc. 2021 Equity Incentive Plan Incentive Stock Option Agreement (incorporated by reference to Exhibit 99.8 to our Form S-8 filed on December, 16, 2021).

21.1*	Subsidiaries of Globus Medical, Inc.
23.1*	Consent of independent registered public accounting firm – Deloitte & Touche LLP.
31.1*	Certification by Principal Executive Officer pursuant to Section 302 of the Sarbanes-Oxley Act of 2002.
31.2*	Certification by Principal Financial Officer pursuant to Section 302 of the Sarbanes-Oxley Act of 2002.
32**	Certifications pursuant to 18 U.S.C. Section 1350, as adopted pursuant to Section 906 of the Sarbanes-Oxley Act of 2002.
101.INS*	XBRL Instance Document
101.SCH*	XBRL Taxonomy Extension Schema Document
101.CAL*	XBRL Taxonomy Extension Calculation Linkbase Document
101.LAB*	XBRL Taxonomy Extension Label Linkbase Document
101.PRE*	XBRL Taxonomy Extension Presentation Linkbase Document
101.DEF*	XBRL Taxonomy Extension Definition Linkbase Document
104	The cover page from this Annual Report on Form 10-K, formatted as Inline XBRL.

*	Filed herein.
**	Furnished herein.

Item 16. Form 10-K Summary

None.

SIGNATURES

Pursuant to the requirements of Section 13 or 15(d) of the Securities Exchange Act of 1934, the Registrant has duly caused this report to be signed on its behalf by the undersigned, thereunto duly authorized.

GLOBUS MEDICAL, INC.

Dated: February 21, 2023

/s/ DANIEL T. SCAVILLA

Daniel T. Scavilla
Chief Executive Officer
President
(Principal Executive Officer)

Dated: February 21, 2023

/s/ KEITH PFEIL

Keith Pfeil
Chief Financial Officer

Chief Accounting Officer
Senior Vice President
(Principal Financial Officer)

Pursuant to the requirements of the Securities Exchange Act of 1934, this report has been signed by the following persons on behalf of the Registrant and in the capacities and on the dates indicated.

SIGNATURE	TITLE	DATE
/s/ DANIEL T. SCAVILLA **Daniel T. Scavilla**	President and Chief Executive Officer (Principal Executive Officer) and Director	February 21, 2023
/s/ KEITH PFEIL **Keith Pfeil**	Chief Financial Officer Chief Accounting Officer Senior Vice President (Principal Financial Officer)	February 21, 2023
/s/ DAVID C. PAUL **David C. Paul**	Executive Chairman and Director	February 21, 2023
/s/ DAVID D. DAVIDAR **David D. Davidar**	Director	February 21, 2023
/s/ ROBERT DOUGLAS **Robert Douglas**	Director	February 21, 2023
/s/ DANIEL T. LEMAITRE **Daniel T. Lemaitre**	Director	February 21, 2023
/s/ ANN D. RHOADS **Ann D. Rhoads**	Director	February 21, 2023
/s/ JAMES R. TOBIN **James R. Tobin**	Director	February 21, 2023
/s/ STEPHEN T. ZARRILLI **Stephen T. Zarrilli**	Director	February 21, 2023

EXHIBIT 4.2

DESCRIPTION OF THE REGISTRANT'S SECURITIES REGISTERED PURSUANT TO SECTION 12 OF THE SECURITIES EXCHANGE ACT OF 1934

As of December 31, 2022, Globus Medical, Inc. (the "Company", "our", "us", or "we") had one class of securities registered under Section 12 of the Securities Exchange Act of 1934, as amended (the "Exchange Act"): Class A common stock, par value $.001 per share. The Company's Class A common stock is listed on the New York Stock Exchange under the trading symbol "GMED".

DESCRIPTION OF COMMON STOCK

The following is a description of the rights of our Class A and Class B common stock and related provisions of the Company's Amended and Restated Certificate of Incorporation (the "Certificate"), Amended and Restated Bylaws (the "Bylaws"), and applicable Delaware law. This description is qualified in its entirety by, and should be read in conjunction with, the Certificate, Bylaws, and applicable Delaware law.

Authorized Capital Stock

The Company's authorized capital stock consists of 500,000,000 shares of Class A common stock and 275,000,000 shares of Class B common stock. The Company is authorized to issue up to 35,000,000 shares of preferred stock. As of December 31, 2022, the Company does not have any issued or outstanding shares of preferred stock.

Common Stock

Fully Paid and Nonassessable

All of the outstanding shares of the Company's common stock are fully paid and nonassessable.

Voting Rights

Holders of our Class A and Class B common stock have identical voting rights, except that holders of our Class A common stock are entitled to one vote per share and holders of our Class B common stock are entitled to 10 votes per share. Holders of shares of our Class A and Class B common stock will vote together as a single class on all matters (including the election of directors) submitted to a vote of stockholders, unless otherwise required by law or the Certificate. Delaware law could require either our Class A common stock or our Class B common stock to vote separately as a single class in the following circumstances:

- If we were to seek to amend the Certificate or increase or decrease the authorized number of shares of a class of stock, or to increase or decrease the par value of a class of stock, then that class would be required to vote separately to approve the proposed amendment; and
- If we were to seek to amend the Certificate in a manner that altered or changed the powers, preferences or special rights of a class of stock in a manner that affected them adversely, then that class would be required to vote separately to approve the proposed amendment.

We have not provided for cumulative voting for the election of directors in the Certificate. Our Board of Directors (the "Board") is divided into three classes, which are as nearly equal in number as possible, with each director elected at an annual stockholders' meeting serving a three-year term and one class being elected at each year's annual meeting of stockholders.

Dividend Rights

Subject to preferences that may apply to any shares of preferred stock outstanding at the time, if any, the holders of outstanding shares of Class A and Class B common stock are entitled to receive dividends out of funds legally available at the times and in the amounts that the Board may determine. Dividends may be paid in cash, in property, or in shares of the Company's capital stock. If dividends are paid in shares of stock or rights to purchase shares of stock, the holders of Class A common stock will receive shares of Class A common stock or rights to purchase shares of Class A common stock and the holders of Class B common stock will receive shares of Class B common stock or rights to purchase shares of Class B common stock.

Right to Receive Liquidation Distributions

Upon the Company's liquidation, dissolution, distribution of assets or winding-up, the assets legally available for distribution to stockholders would be distributable ratably among the holders of Class A and Class B common stock and any participating preferred stock outstanding at that time, if any, after payment of liquidation preferences, if any, on any outstanding shares of preferred stock and payment of other claims of creditors.

No Preemptive or Similar Rights

Neither Class A nor Class B common stock is entitled to preemptive rights, and neither is subject to redemption. There are no sinking fund provisions applicable to the Company's common stock.

Conversion

Our Class A common stock is not convertible into any other shares of our capital stock. Each share of our Class B common stock is convertible at any time at the option of the holder into one share of our Class A common stock. In addition, each share of our Class B common stock will convert automatically into one share of our Class A common stock upon any transfer, whether or not for value, except for permitted transfers. Class B common stockholders may transfer shares of Class B common stock in the following manner without having the shares of Class B common stock convert to Class A common stock:

- the granting of a proxy to officers or directors of the Company whether or not at the request of the Board in connection with actions to be taken at an annual or special meeting of stockholders;
- entering into a voting trust, agreement or arrangement (with or without granting a proxy) pursuant to which voting control is granted over such share to an officer or director of the Company that does not involve any payment of cash, securities, property or other consideration to the Class B stockholder other than the mutual promise to vote shares in a designated manner;
- a transfer by a stockholder who is an individual upon such stockholder's death pursuant to a will or the laws of descent and distribution;
- any transfer of convertible securities;
- any transfer to an affiliate; or
- any transfer by an individual stockholder to, or for the benefit of, any spouse or any ancestor, descendant, sibling, or child of a sibling of such stockholder or his or her spouse, or any transfer by a stockholder to a trust, limited partnership or limited liability company for the benefit of such individual stockholder or any such family member, or any transfer by such a trust, partnership or limited liability company to any such stockholder or family member.

With respect to each holder of one or more shares of our Class B common stock, each of such holder's shares of Class B common stock will automatically convert into one share of our Class A common stock if:

- such holder's shares of Class B common stock, together with the shares of Class B common stock then held by that holder's affiliates, represents less than 5% of the aggregate number of all outstanding shares of our common stock.

Once converted into Class A common stock, Class B common stock cannot be reissued.

Anti-Takeover Provisions of the Certificate, Bylaws, and Delaware Law

The provisions of Delaware law, our dual class structure, the Certificate and Bylaws may have the effect of delaying, deferring or discouraging another person from acquiring control of our company.

Delaware Law

We are governed by the provisions of Section 203 of the Delaware General Corporation Law. In general, Section 203 prohibits a public Delaware corporation from engaging in a "business combination" with an "interested stockholder" for a period of three years after the date of prescribed manner. A "business combination" includes mergers, asset sales or other transactions resulting in a financial benefit to the stockholder. An "interested stockholder" is a person who, together with affiliates and associates, owns, or within three years did own, 15% or more of the corporation's outstanding voting stock. These provisions may have the effect of delaying, deferring or preventing a change in our control.

Amended and Restated Certificate of Incorporation and Amended and Restated Bylaw Provisions

The Certificate and Bylaws provide for a dual class structure and include a number of other provisions that could deter hostile takeovers or delay or prevent changes in control of our management team, including the following:

Dual Class Structure

As discussed above, our Class B common stock has 10 votes per share, while our Class A common stock has one vote per share. David C. Paul, a director and our current Executive Chairman, and his affiliates, in the aggregate, beneficially own 100% of our outstanding Class B common stock, representing approximately 74.3% of the total voting power of our outstanding capital stock. Because of our dual class structure, the holders of our Class B common stock will continue to be able to control all matters submitted to our stockholders for approval even if they own significantly less than 50% of the shares of our outstanding common stock. This

concentrated control could discourage others from initiating any potential merger, takeover or other change of control transaction that other stockholders might view as beneficial. The Board is authorized, without stockholder approval, to issue additional authorized shares of our Class A and Class B common stock.

Board of Directors Vacancies

The Certificate and Bylaws authorize our board of directors or stockholders (at a duly convened meeting) to fill vacant directorships.

Classified Board

The Bylaws provide that the Board is classified into three classes of directors. This could delay a successful tender offeror from obtaining majority control of the Board, and the prospect of that delay might deter a potential offeror. In addition, stockholders are not permitted to cumulate their votes for the election of directors.

Stockholder Action; Special Meeting of Stockholders

The Bylaws provide that our stockholders may not take action by written consent, but may only take action at annual or special meetings of our stockholders. The Bylaws further provide that special meetings of our stockholders may be called only by a majority of our board of directors.

Advance Notice Requirements for Stockholder Proposals and Director Nominations

The Bylaws provide advance notice procedures for stockholders seeking to bring business before our annual meeting of stockholders, or to nominate candidates for election as directors at our annual meeting of stockholders. To be timely, a stockholder's notice must be delivered to, or mailed and received at, our principal executive offices not more than 90 nor less than 50 days prior to the meeting with respect to an annual meeting of stockholders, and not later than 10 business days after public announcement of a special meeting. The Bylaws also specify certain requirements regarding the form and content of a stockholder's notice. These provisions might preclude our stockholders from bringing matters before our annual meeting of stockholders or from making nominations for directors at our annual meeting of stockholders.

Preferred Stock

The Board has the authority, without further action by our stockholders, to issue up to 35,000,000 shares of undesignated preferred stock with rights and preferences, including voting, dividend, redemption, liquidation or preemptive rights, designated from time to time by the Board, which could be in preference or priority to the rights of holders of our Class A and Class B common stock. The Board may utilize such shares for a variety of corporate purposes, including future public offerings to raise additional capital, corporate acquisitions and employee benefit plans. Also, the existence of authorized but unissued shares of preferred stock would enable the Board to render more difficult or to discourage an attempt to obtain control of us by means of a merger, tender offer, proxy contest or other means. If we issue such shares without stockholder approval and in violation of limitations imposed by the New York Stock Exchange or any stock exchange on which our stock may then be trading, our stock could be delisted.

Listing

The Company's Class A common stock is listed on the New York Stock Exchange under the trading symbol "GMED".

EXHIBIT 21.1

Subsidiaries of Globus Medical, Inc.

The following is a list of our subsidiaries as of December 31, 2022. Certain subsidiaries are not named because they were not significant in the aggregate.

Subsidiary	Jurisdiction
Globus Medical North America, Inc.	Pennsylvania
Branch Medical Group, LLC	Delaware
Transplant Technologies of Texas, Ltd.	Texas
Human Biologics of Texas, Ltd.	Texas
Tissue Transplant Technology, Ltd.	Texas
Globus Medical India Private Limited	India
Globus Medical SARL	Switzerland
Globus Medical South Africa Pty Limited	South Africa
Globus Medical Poland Sp. z o.o.	Poland
Globus Medical Australia Pty Limited	Australia
Globus Medical UK Limited	United Kingdom
Globus Medical Belgium BVBA	Belgium
Globus Medical Germany GmbH	Germany
Globus Medical Denmark ApS	Denmark
Globus Medical Sweden AB	Sweden
Globus Medical France SARL	France
Globus Medical Netherlands B.V.	Netherlands
Globus Medical Austria GmbH	Austria
Globus Medical Japan GK	Japan
Globus Medical Singapore Pte. Ltd.	Singapore
Scient'X Australia Pty. Ltd.	Australia
Globus Medical Netherlands Biologics B.V.	Netherlands
Globus Medical Italy S.r.l.	Italy
Globus Medical Ireland, Ltd.	Ireland
Globus Medical GP, LLC	Delaware
Globus Medical Latin America, LLC	Delaware
Globus Medical Brasil Ltda.	Brazil
KB Medical S.A.	Switzerland
Nemaris, Inc.	Delaware
Globus Medical Finland Oy	Finland
Globus Medical Norway AS	Norway
Synoste Oy	Finland
Globus Medical Japan KK	Japan

EXHIBIT 23.1

Consent of Independent Registered Public Accounting Firm

We consent to the incorporation by reference in Registration Statement on Form S-8 (Nos. 333-261694, 333-198698 and 333-184196) of our reports dated February 21, 2023, relating to the financial statements and financial statement schedule of Globus Medical, Inc. and the effectiveness of Globus Medical, Inc.'s internal control over financial reporting appearing in this Annual Report on Form 10-K for the year ended December 31, 2022.

/s/ DELOITTE & TOUCHE LLP

Philadelphia, Pennsylvania
February 21, 2023

EXHIBIT 31.1

Certification By Principal Executive Officer
Pursuant to Section 302 of the Sarbanes-Oxley Act of 2002

I, Daniel T. Scavilla, certify that:

1. I have reviewed this Annual Report on Form 10-K of Globus Medical, Inc.;

2. Based on my knowledge, this report does not contain any untrue statement of a material fact or omit to state a material fact necessary to make the statements made, in light of the circumstances under which such statements were made, not misleading with respect to the period covered by this report;

3. Based on my knowledge, the financial statements, and other financial information included in this report, fairly present in all material respects the financial condition, results of operations, and cash flows of the registrant as of, and for, the periods presented in this report;

4. The registrant's other certifying officer and I are responsible for establishing and maintaining disclosure controls and procedures (as defined in Exchange Act Rules 13a-15(e) and 15d-15(e)) and internal control over financial reporting (as defined in Exchange Act Rules 13a-15(f) and 15d-15(f)) for the registrant and have:

   a) Designed such disclosure controls and procedures, or caused such disclosure controls and procedures to be designed under our supervision, to ensure that material information relating to the registrant, including its consolidated subsidiaries, is made known to us by others within those entities, particularly during the period in which this report is being prepared;

   b) Designed such internal control over financial reporting, or caused such internal control over financial reporting to be designed under our supervision, to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external purposes in accordance with generally accepted accounting principles;

   c) Evaluated the effectiveness of the registrant's disclosure controls and procedures and presented in this report our conclusions about the effectiveness of the disclosure controls and procedures, as of the end of the period covered by this report based on such evaluation; and

   d) Disclosed in this report any change in the registrant's internal control over financial reporting that occurred during the registrant's most recent fiscal quarter (the registrant's fourth fiscal quarter in the case of an annual report) that has materially affected, or is reasonably likely to materially affect, the registrant's internal control over financial reporting; and

5. The registrant's other certifying officer(s) and I have disclosed, based on our most recent evaluation of internal control over financial reporting, to the registrant's auditors and the audit committee of the registrant's board of directors (or persons performing the equivalent functions):

   a) All significant deficiencies and material weaknesses in the design or operation of internal control over financial reporting which are reasonably likely to adversely affect the registrant's ability to record, process, summarize, and report financial information; and

   b) Any fraud, whether or not material, that involves management or other employees who have a significant role in the registrant's internal control over financial reporting.

Date: February 21, 2023

/s/ **DANIEL T. SCAVILLA**

Daniel T. Scavilla
Chief Executive Officer
President
(Principal Executive Officer)

EXHIBIT 31.2

Certification By Principal Financial Officer
Pursuant to Section 302 of the Sarbanes-Oxley Act of 2002

I, Keith Pfeil, certify that:

1. I have reviewed this Annual Report on Form 10-K of Globus Medical, Inc.;

2. Based on my knowledge, this report does not contain any untrue statement of a material fact or omit to state a material fact necessary to make the statements made, in light of the circumstances under which such statements were made, not misleading with respect to the period covered by this report;

3. Based on my knowledge, the financial statements, and other financial information included in this report, fairly present in all material respects the financial condition, results of operations, and cash flows of the registrant as of, and for, the periods presented in this report;

4. The registrant's other certifying officer and I are responsible for establishing and maintaining disclosure controls and procedures (as defined in Exchange Act Rules 13a-15(e) and 15d-15(e)) and internal control over financial reporting (as defined in Exchange Act Rules 13a-15(f) and 15d-15(f)) for the registrant and have:

   a) Designed such disclosure controls and procedures, or caused such disclosure controls and procedures to be designed under our supervision, to ensure that material information relating to the registrant, including its consolidated subsidiaries, is made known to us by others within those entities, particularly during the period in which this report is being prepared;

   b) Designed such internal control over financial reporting, or caused such internal control over financial reporting to be designed under our supervision, to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external purposes in accordance with generally accepted accounting principles;

   c) Evaluated the effectiveness of the registrant's disclosure controls and procedures and presented in this report our conclusions about the effectiveness of the disclosure controls and procedures, as of the end of the period covered by this report based on such evaluation; and

   d) Disclosed in this report any change in the registrant's internal control over financial reporting that occurred during the registrant's most recent fiscal quarter (the registrant's fourth fiscal quarter in the case of an annual report) that has materially affected, or is reasonably likely to materially affect, the registrant's internal control over financial reporting; and

5. The registrant's other certifying officer(s) and I have disclosed, based on our most recent evaluation of internal control over financial reporting, to the registrant's auditors and the audit committee of the registrant's board of directors (or persons performing the equivalent functions):

   a) All significant deficiencies and material weaknesses in the design or operation of internal control over financial reporting which are reasonably likely to adversely affect the registrant's ability to record, process, summarize, and report financial information; and

   b) Any fraud, whether or not material, that involves management or other employees who have a significant role in the registrant's internal control over financial reporting.

Date: February 21, 2023

/s/ **KEITH PFEIL**

Keith Pfeil
Chief Financial Officer
Chief Accounting Officer
Senior Vice President
(Principal Financial Officer)

EXHIBIT 32

Certification Pursuant to 18 U.S.C. Section 1350, as Adopted Pursuant to Section 906 of The Sarbanes-Oxley Act of 2002

Pursuant to Section 906 of the Sarbanes-Oxley Act of 2002 (Section 1350 of Chapter 63 of Title 18 of the United States Code), Daniel T. Scavilla, Chief Executive Officer, and Keith Pfeil, Senior Vice President and Chief Financial Officer of Globus Medical, Inc. (the "Company"), each certifies with respect to the Annual Report of the Company on Form 10-K for the period ended December 31, 2022 (the "Report") that, to the best of his knowledge:

(1) The Report fully complies with the requirements of Section 13(a) or 15(d) of the Securities Exchange Act of 1934; and

(2) The information contained in the Report fairly presents, in all material respects, the financial condition and results of operations of the Company.

Date: February 21, 2023

/s/ **DANIEL T. SCAVILLA**

Daniel T. Scavilla
Chief Executive Officer
President
(Principal Executive Officer)

Date: February 21, 2023

/s/ **KEITH PFEIL**

Keith Pfeil
Chief Financial Officer
Chief Accounting Officer
Senior Vice President
(Principal Financial Officer)

The foregoing certification is being furnished solely pursuant to Section 906 of the Sarbanes-Oxley Act of 2002 (Section 1350 of Chapter 63 of Title 18 of the United States Code) and is not being filed as part of the Report or as a separate disclosure document.